APPENDIX A

Air Quality and Greenhouse Gas Technical Study

MILPITAS STRATFORD SCHOOL DEVELOPMENT PROJECT

Air Quality & Greenhouse Gas Technical Study

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IMPACT SCIENCES

AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

1.0   INTRODUCTION

This study describes the existing air quality and greenhouse gas (GHG) environment of the proposed Stratford School Project site located at 125 N. Milpitas Boulevard and evaluates the potential impacts to air quality and GHG as a result of Project implementation. This report has been prepared by Impact Sciences, Inc., in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). This analysis considers both the temporary air quality and GHG impacts that would result from Project construction and the long-term impacts associated with the operation of the Project.

1.1   Project Location

The Stratford School Project site is located on a 5.94-acre site within the northern portion of an existing commercial retail complex located at 125 N. Milpitas Boulevard in Milpitas, California. The Project site is on the west side of North Milpitas Boulevard between Beresford Ct. and Shadow Lake Court. The transit facility closest to the proposed Project site is the N. Milpitas Boulevard & Town Center Drive bus stop for the Alameda-Contra Costa (AC) Transit Bus Line 217 Mission San Jose – Milpitas.

1.2   Project Description

The proposed Project would redevelop an existing 44,087.9-square-foot, single-floor commercial building at 125 N. Milpitas Boulevard to the Stratford School that would accommodate 480 students in pre-school through first-grade school classes. The facility would include 20 classrooms and accessory spaces such as a multi-purpose hall, administrative offices, conference room, and a break room for teachers. The proposed Project will demolish and redo the interiors of the existing building with new paint, install new doors and windows on the existing exterior wall on the west side; and replace exterior glazing in existing openings, in addition to converting an existing dock to create outdoor space, and adding sidewalks and new trees within existing landscaped areas. The existing commercial retail complex will dedicate 4 existing parking spaces to the school and accommodate electric vehicle (EV) charging facilities. The Project site is surrounded by single-family residences to the north, east, and west as well as commercial land uses to the south.

2.0   AIR QUALITY

2.1   Air Quality Setting

San Francisco Bay Area Air Basin

San Francisco Bay Area Air Basin Characteristics

The City of Milpitas is located within the San Francisco Bay Area Air Basin (SFBAAB), the SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.[1]

Climate

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

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

Topography

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the SFBAAB. The greatest distortion occur when low-level inversions are present and the air beneath the inversion flow independently of air above the inversion, a condition that is common in the summer time.

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1   Bay Area Air Quality Management District. 2017. CEQA Guidelines. Available online at:
     https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Wind Patterns

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more directly from the west as they stream through the Golden Gate. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills.

In the winter, the SFBAAB frequently experiences story conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by drainage flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow patterns; air moves from the Central Valley towards the coast and back down toward the Bay from the smaller valleys within the SFBAAB.

Temperature

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons the temperatures at the coast can be 35ºF cooler than temperatures 15 to 20 miles inland. At night, this contrast usually decreases to less than 10º.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

Precipitation

The SFBAAB is characterized by moderately wet winters and dry summers. Winter rains account for about 75% of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the SFBAAB to another even within short distances. In general, total annual rainfall can reach 40 inches in the mountains, but it is often less than 16 inches in sheltered valleys.

During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and this pollution levels tend to be low. However, frequent dry periods do occur during the winter when mixing and ventilation are low and pollutant levels build up.

Air Pollutants of Concern

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the elderly, from illness or discomfort. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter (PM2.5), particulate matter ten microns or less in diameter (PM10), and lead (Pb). Note that reactive organic gases (ROGs), which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and nitrogen oxide (NO_x) are not classified as criteria pollutants. However, ROGs and NO_x are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O_3; therefore, NO_x and ROGs are relevant to the proposed Project and are of concern in the air basin and are listed below along with the criteria pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 1, Criteria Pollutants Summary of Common Sources and Effects**.

Table 1
Criteria Pollutants Summary of Common Sources and Effects

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuels is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO$_2$)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include moto vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O$_3$)	Formed by a chemical reaction between volatile organic compounds (VOC) and nitrous oxides (NOx) in the presence of sunlight. VOCs are also commonly referred to as reactive organic gases (ROGs). Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Particulate Matter (PM10 & PM2.5)	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO$_2$)	A colorless, nonflammable gas formed when fuel containing sulfur is burned; when gasoline is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant; aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.

Source: CAPCOA, Health Effects. Available: http://www.capcoa.org/health-effects/

Ambient Air Quality

Criteria Air Pollutant Monitoring Data

Ambient air quality in Milpitas can be characterized by ambient air quality measurements conducted at nearby air quality monitoring stations. Existing ambient air quality and historical trends and projections in the vicinity of Milpitas are documented by measurements made by the Bay Area Air Quality Management

District (BAAQMD), the air pollution regulatory agency in the SFBAAB regions maintains air quality monitoring stations which process ambient air quality measurements.

The purpose of the monitoring station is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Ozone and particulate matter (PM10 and PM2.5) are pollutants of particular concern in the SFBAAB. The monitoring station located closest to the proposed Project site and most representative of air quality near the Project site is the San Jose-Jackson Street Station located approximately 6.2 miles south of the Project site. Ambient air emission concentrations vary due to localized variations in emissions sources and climate and should be considered "generally" representative of ambient concentrations in the Milpitas area. The San Jose-Jackson Street station monitors O_3, PM2.5, PM10, and NO_2, see **Table 2, San Jose-Jackson Street Air Monitoring Station Ambient Pollutant Concentrations**.

Table 2
San Jose-Jackson Street Air Monitoring Station Ambient Pollutant Concentrations

Pollutant	Standards[1]	Year		
		2017	2018	2019
OZONE (O_3)				
Maximum 1-hour concentration monitored (ppm)		0.121	0.078	0.095
Maximum 8-hour concentration monitored (ppm)		0.098	0.061	0.081
Number of days exceeding state 1-hour standard	0.09 ppm	3	0	1
Number of days exceeding federal/state 8-hour standard	0.070 ppm	4	0	2
NITROGEN DIOXIDE (NO_2)				
Maximum 1-hour concentration monitored (ppm)		0.068	0.086	0.060
Annual average concentration monitored (ppm)		NA	0.012	0.010
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
FINE PARTICULATE MATTER (PM2.5)				
Maximum 24-hour concentration monitored ($\mu g/m^3$)		49.7	133.9	27.6
Annual average concentration monitored ($\mu g/m^3$)		9.5	12.7	9.0
Number of samples exceeding federal standard	35 $\mu g/m^3$	6	15	0
RESPIRABLE PARTICULATE MTTER (PM10)				
Maximum 24-hour concentration monitored ($\mu g/m^3$)		69.8	121.8	77.1
Annual average concentration monitored ($\mu g/m^3$)		21.3	23	23
Number of samples exceeding state standard	50 $\mu g/m^3$	6	4	4

Source: California Air Resources Board, "Air Quality Data Statistics," http://www.arb.ca.gov/adam/. 2021.
NA = not available

[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air ($\mu g/m^3$), or annual arithmetic mean (aam).*

[2] *The 8-hour federal O_3 standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.*

The attainment status for the SFBAAB region is included in **Table 3, Attainment Status of the San Francisco Bay Area Air Basin**. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SFBAAB region is designated as a nonattainment area for federal ozone and are designated as nonattainment for state ozone, PM10, and PM2.5 standards.

Table 3
Attainment Status of the San Francisco Bay Area Air Basin

Pollutant	State	Federal
Ozone (O₃)	Non-Attainment	Non-attainment
Particulate Matter (PM₁₀)	Non-Attainment	Unclassified
Particulate Matter (PM₂.₅)	Non-Attainment	Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO₂)	Attainment	Attainment
Sulfur Dioxide (SO₂)	Attainment	Attainment
Lead	Attainment	Attainment

Source: BAAQMD. 2017. Air Quality Standards and Attainment Status. Available online at: http://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status#ten, accessed January 12, 2021.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, such as petroleum refining and chrome-plating operations; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute affects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.[2]

To date, the California Air Resources Board (CARB) has designated 244 compounds as TACs. Additionally, CARB has implemented control measures for several compounds that pose high risks and show potential

[2]   Bay Area Air Quality Management District. 2017. *CEQA Guidelines*. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

for effective control. Most of the estimated health risks from TACs can be attributed to a relatively few compounds.[3]

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances, including 40 cancer-causing substances. Diesel exhaust is a complex mixture of particulates and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM very between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.[4]

Residential areas are sensitive receptors to air pollutants because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs.[5] As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

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[3] California Air Resources Board. *CARB Identified Toxic Air Contaminants*. Available online at: https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants.

[4] California Air Resources Board. *Sensitive Receptor Assessment*. Available online at: https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment.

[5] Office of Environmental Health Hazard Assessment and The American Lung Association of California. *Air Pollution and Children's Health*. Available online at: https://oehha.ca.gov/media/downloads/faqs/kidsair4-02.pdf.

2.2   Existing Setting

The Project site is currently a vacated 44,087.9 square-foot single story commercial building that was used as a home improvement store. Home improvement stores typically carry odorous products that release VOC emissions including paints, cleaning supplies, and fertilizers. Additionally, the store will generate truck trips from vendors and customer deliveries. The City of Milpitas already includes several hardware and home improvement stores, including a Home Depot located two miles south of the Project site. The existing air quality emissions and vehicle trips generated by the existing store are discussed in **Impact 2**.

2.3   Regulatory Framework

Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the U.S. Environmental Protection Agency (EPA) to establish NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designations. **Table 3** lists the federal attainment status of the SFBAAB for the criteria pollutants.

National Emissions Standards for Hazardous Air Pollutants Program

Under federal law, 187 substances are currently listed as hazardous air pollutants (HAPs). Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) program. The EPA is establishing regulatory schemes for specific source categories

and requires implementation of the Maximum Achievable Control Technologies (MACT) for major sources of HAPs in each source category. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and is aimed at HAPs that are a problem is California. The state has formally identified 244 substances as TACs and is adopting appropriate control measures for each. Once adopted at the state level, each air district will be required to adopt a measure that is equally or more stringent.

National Ambient Air Quality Standards

The federal CAA required the U.S. EPA to establish NAAQS. The NAAQS set primary standards and secondary standards for specific air pollutants**.** Primary standards define limits for the intention of protecting public health, which include sensitive populations such as asthmatics, children, and the elderly. Secondary Standards define limits to protect public welfare to include protection against decreased visibility, damage to animals, crops, vegetation, and buildings. A summary of the federal ambient air quality standards is shown in **Table 4, National Ambient Air Quality Standards**.

Table 4
National Ambient Air Quality Standards

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon Monoxide		Primary	8 hours	9 ppm
			1 hour	35 ppm
Lead		Primary and secondary	Rolling 3-month average	0.15 µg/m^3
Nitrogen dioxide		Primary	1 hour	100 ppb
		Primary and secondary	Annual	0.053 ppm
Ozone		Primary and secondary	8 hours	0.070 ppm
Particulate Matter	PM2.5	Primary	Annual	12 µg/m^3
		Secondary	Annual	15 µg/m^3
		Primary and secondary	24 hours	35 µg/m^3
	PM10	Primary and secondary	24 hours	150 µg/m^3
Sulfur dioxide		Primary	1 hour	75 ppb
		Secondary	3 hours	0.5 ppm

Source:
California Air Resources Board. May 2016. Ambient Air Quality Standards. Available online at:
https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed January 12, 2021.

State

California Clean Air Act of 1988

The California CAA of 1988 (CCAA) allows states to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. The CCAA, amended in 1992, requires all air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants and has also established state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles, for which there are no national standards. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California Ambient Air Quality Standards

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in **Table 5, California Ambient Air Quality Standards**.

Table 5
California Ambient Air Quality Standards

Pollutant		Averaging Time	Level
Carbon monoxide		8 hours	9 ppm
		1 hour	20 ppm
Lead		30-day average	1.5 μg/m³
Nitrogen dioxide		1 hour	0.180 ppm
		Annual	0.030 ppm
Ozone		8 hours	0.070 ppm
		1 hour	0.09 ppm
Particulate matter	PM2.5	Annual	12 μg/m³
	PM10	24 hours	50 μg/m³
		Annual	20 μg/m³
Sulfur dioxide		1 hour	0.25 ppm
		24 hours	0.04 ppm
Sulfates		24 hours	25 μg/m³
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source:
California Air Resources Board. May 2016. Ambient Air Quality Standards. Available online at:
https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed January 12, 2021.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register. The 2017 Clean Air Plan, *Spare the Air, Cool the Climate* is the SIP for SFBAAB. The 2017 Clean Air Plan is a regional blueprint for achieving air quality standards and healthful air in the SFBAAB. The 2017 Clean Air Plan focuses on two closely related goals: protecting public health and protecting the climate. Consistent with the GHG

reduction targets adopted by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40%below 1990 levels by 2030 and 80% below 1990 levels by 2050. The 2017 plan also addressed a multi-pollutant strategy to simultaneously reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as GHG's. The control strategy focuses on the following priorities: reduce emissions of criteria air pollutants and TACs from all key sectors; reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases; decrease demand for fossil fuels (gasoline, diesel, and natural gas); and decarbonize the energy system.[6]

California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)

The California Air Toxics Program is supplemented by the Air Toxics "Hot Spots" program, which became law (AB 2588, Statutes of 1987) in 1987. In 1992, the AB 2588 program was amended by Senate Bill 1731 to require facilities that pose a significant health risk to the community to perform a risk reduction audit and reduce their emissions through implementation of a risk management plan. Under this program, which is required under the Air Toxics "Hot Spots" Information and Assessment Act (Section 44363 of the California Health and Safety Code), facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks when present.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as hazardous air pollutants and by CARB as TACs. On August 27, 1998, CARB identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.[7]

In March 2015, the OEHHA adopted "The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" in accordance with the Health and Safety Code, Section 44300. The Final Guidance Manual incorporates the scientific basis from three earlier developed Technical Support Documents to assess risk from exposure to facility emissions. The 2015 OEHHA Final Guidance has key changes including greater age sensitivity for children, decreased exposure durations, and higher breathing

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[6] BAAQMD. *Clean Air Plan 2017*. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

[7] Diesel exhaust is included within pollutants subject to the hotspot program. Please refer to OEHHA's Air Toxics Hot Spot Program Risk Assessment Guidelines. https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

rate profiles. Because cancer risk could be up to three times greater using this new guidance, it may result in greater mitigation requirements, more agency backlog, and increased difficulty in getting air permits.

The CARB provides a computer program, the Hot Spots Analysis and Reporting Program (HARP), to assist in a coherent and consistent preparation of an HRA. HARP2, an update to HARP, was released in March 2015. HARP2 has a more refined risk characterization in HRA and CEQA documents and incorporates the 2015 OEHHA Final Guidance.

Regional

Bay Area Air Quality Management District

BAAQMD is the primary agency responsible for assuring that the NAAQS and CAAQS are attained and maintained in the Bay Area. BAAQMD's jurisdiction includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara counties, and the southern portions of Solano and Sonoma counties. The Air District's responsibilities in improving air quality in the region include: preparing plans for attaining and maintaining air quality standards; adopting and enforcing rules and regulations; issuing permits for stationary sources of air pollutants; inspecting stationary sources and responding to citizen complaints; monitors air quality and meteorological conditions; awarding grants to reduce mobile emissions; implementing public outreach campaigns; and assisting local governments in address climate change.

The BAAQMD recommends that all proposed projects implement the following Basic Construction Mitigation Measures:[8]

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

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 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.

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[8] Bay Area Air Quality Managements District. 2017. *CEQA Guidelines*. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

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. 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 Regulation [CCR]). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determine to be running in proper condition prior to operation.

8. 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.

Local

City of Milpitas Draft General Plan

The General Plan is a planning document that defines a long-term vision for the City over the next 20 years. The State of California requires every city and county in California to adopt a General Plan, and the City of Milpitas adopted its current General Plan in 1994.[9] In August 2020, the City released their Draft General Plan 2040 which includes a series of air quality policies aimed at reducing criteria air pollutant and GHG emissions.[10] Goals and policies relevant to the proposed Project include:

Goal CON-7   Implement a proactive approach to maintain and improve air quality within Milpitas and the region.

- *Policy CON 7-1.* Ensure that land use and transportation plans support air quality goals through a logical development pattern that focuses growth in and around existing urbanized areas, locates new housing near places of employment, encourages alternative modes of transportation, supports

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9   City of Milpitas. *General Plan Update Project.* Available online at: http://www.ci.milpitas.ca.gov/planning-documents/general-plan/.

10   City of Milpitas. 2020. *General Plan 2040.* Available online at: https://static1.squarespace.com/static/57277b461d07c02f9c2f5c2c/t/5f774ae6e2a5553d6a5b4f97/1601653499170/Milpitas-General-Plan-PublicReviewDraft-8202020.pdf.

efficient parking strategies, reduces vehicle miles traveled, and requires projects to mitigate significant air quality impacts.

- *Policy CON 7-2.* Minimize exposure of the public to toxic or harmful air emissions and odors through requiring an adequate buffer or setback distance between residential and other sensitive land uses and land uses that typically generate air pollutants, toxic air contaminants, or obnoxious fumes or odors, including but not limited to industrial, manufacturing, and processing facilities, high-volume roadways, and industrial rail lines. New sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, churches, and medical facilities shall be located away from existing point sources of air pollution such that excessive levels of exposure do not result in unacceptable health risks. Compliance shall be verified through the preparation of a Health Risk Assessment when deemed necessary by the Planning Director.

- *Policy CON 7-3.* Require projects which generate high levels of air pollutants, such as heavy industrial, manufacturing facilities and hazardous waste handling operations, to incorporate air quality mitigations in their design to reduce impacts to the greatest extent feasible.

- *Policy CON 7-4.* Require projects to adhere to the requirements of the BAAQMD.

- *Policy CON 7-5.* Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

- *Policy CON 7-6.* Coordinate with CARB and the BAAQMD to properly measure air quality emission sources and enforce the standards of the Clean Air Act.

- *Policy CON 7-7.* Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

- *Policy 7-8.* Consider the health risks associated with Toxic Air Contaminants (TACs) when reviewing development applications.

- *Policy CON 7-9.* Coordinate with Santa Clara County and nearby cities to implement regional GHG reduction plans and to consolidate efforts to reduce GHGs throughout the county as appropriate.

- *Policy CON 7-10.* Implement policies and action from the Land Use and Circulation Elements to provide mixed-use developments, locate high-density uses near transit facilities, provide neighborhood-serving retail uses convenient to residential neighborhoods, and other Transportation Demand Management (TDM) programs that would reduce vehicle trips and vehicle miles traveled, thus reducing air-pollutant emissions**.**

- *Policy CON 7-11.* Encourage improvements and design features that reduce vehicle delay such as bus turnouts, and synchronized traffic signals for new development to reduce excessive vehicle emissions caused by idling.

- *Policy CON 7-12.* Encourage and prioritize infrastructure investments and improvements that promote safe walking, bicycling and increased transit ridership.

- *Policy CON 7-13.* Implement energy policies and actions that have co-benefits of reduced air pollution and greenhouse gases by increasing energy efficiency, conservation, and the use of renewable resources.

2.4   Thresholds and Methodology

Thresholds of Significance

The impact analysis provided below is based on the application of the following California Environmental Quality Act (CEQA) Guidelines Appendix G, which indicates that a project would have a significant impact on air quality if it would:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

3) Expose sensitive receptors to substantial pollutant concentrations.

4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The *BAAQMD CEQA Air Quality Guidelines* ("BAAQMD Guidelines") set forth methodologies and quantitative significance thresholds that a lead agency may use to estimate and evaluate the significance of a project's air emissions, see **Table 6, Bay Area Air Quality Management District Regional Significance Thresholds**. The BAAQMD has also established significance thresholds for the excess health risks posed to nearby sensitive receptors, see **Table 7, Health Risk Significance Thresholds.**

Table 6
Bay Area Air Quality Management District Regional Significance Thresholds

Pollutant	Construction-Related	Operational-Related	
	Average Daily Emissions (lbs/day)	*Average Daily Emissions (lbs/day)*	*Maximum Annual Emissions (tpy)*
ROG	54	54	10
NOx	54	54	10
PM10	82 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 (1-hour average)	
Fugitive Dust	Best Management Practices	None	

Source: BAAQMD. CEQA Guidelines. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Table 7
Health Risk Significance Thresholds

Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influences)
Excess Cancer Risk	>10 per one million	>100 per one million
Hazard Index	>1.0	>10.0
Incremental Annual PM2.5	>0.3 ug/m3	>0.8 ug/m3

Source: BAAQMD. CEQA Guidelines. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Methodology

Air quality impacts were evaluated in accordance with the methodologies recommended by CARB and the BAAQMD. Where criteria air pollutant quantification was required, emissions modeled using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Average daily emissions from Project construction and operation were calculated, including both on-site and off-site activities.

Project construction and redevelopment activities will utilize heavy-duty construction equipment that will emit DPM. Even though construction will occur primarily within the building, due to the proximity of sensitive receptors, a health risk analysis (HRA) was prepared to evaluate the risk posed to these receptors based on emissions source strength, meteorological conditions, and receptor location. Pollutant concentrations will be estimated using the U.S. EPA AERMOD dispersion model and human health risks will be estimated using the Hotspots Analysis and Reporting Program (HARP2) Risk Assessment Standalone Tool (RAST).

2.5 Project Impacts and Mitigation Measures

Impact 1 **Would implementation of the proposed Project conflict with or obstruct implementation of any applicable air quality plan?** *(Less than Significant).*

The most recent clean air plan is the Bay Area 2017 Clean Air Plan that was adopted by BAAQMD in April 2017. The Plan includes control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. Projects that are consistent with the development of a regional or local air quality plan are considered not to conflict with the attainment of air quality standards identified in the plan.

Consistency with the air quality plan can be determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations or contribute to a new violation of the national ambient air quality standards. The BAAQMD CEQA Air Quality Guidelines include thresholds of significance that are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on BAAQMD's ability to reach attainment. Emissions that are above these thresholds have not been accommodated in the air quality plans and would not be consistent with the air quality plans. The proposed Project would not conflict with the latest Clean Air planning efforts since emissions would not exceed BAAQMD thresholds (see **Table 9** and **Table 10** in **Impact 2**). Therefore, the Project would not conflict with or obstruct implementation of the applicable air quality plan and no mitigation is necessary.

Impact 2   **Would implementation of the proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard?** *(Less than Significant).*

A project may have a significant impact if project-related emissions would exceed federal, State, or regional standards or thresholds, or if project-related emissions would substantially contribute to an existing or project air quality violation. To determine project significance, emissions were compared to the BAAQMD construction and operational air quality thresholds.

Regional Construction Significance Analysis

Construction associated with the proposed Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and NOx), PM10, and PM2.5. Construction-generated emissions are short term and of temporary duration, lasting only if construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the BAAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from interior demolition, construction, and motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the proposed Project is estimated to last approximately 8 months. The construction schedule used to estimate Project construction emissions is provided in **Table 8, Proposed Construction Schedule**.

Table 8
Proposed Construction Schedule

Phase	Start Date	End Date
Demolition	1/3/2022	1/17/2022
Building Construction	1/18/2022	7/29/2022
Paving	8/1/2022	8/15/2022
Architectural Coating	8/16/2022	8/31/2022

Source: Impact Sciences 2021, see Attachment A.

Construction-generated emissions associated with the proposed Project were calculated using the CARB-approved CalEEMod model. CalEEMod is designed to model construction and operational emissions for land use development projects. The model incorporates typical construction requirements such as construction equipment, demolition debris, and hauling trips. Construction of the proposed Project would involve minor interior wall demolition, paving for the playground on the western side of the building, constructing interior walls for the classrooms and accessory rooms, and painting the interior and exterior walls. The assumptions used within CalEEMod were based on model defaults as well as conservative estimates for a construction project that will primarily occur within an existing structure. It was conservatively estimated that the proposed Project would demolish at most 11,000 square feet of interior walls based on the perimeter and height of the building.[11] In addition, default construction equipment for the demolition, building construction, paving, and architectural coating phases of construction were assumed. However, since all building construction will be internal, cranes were removed from the model's default list as they would not be necessary to complete the Project. In addition, rubber-tired dozers during the construction phase were replaced with forklifts as rubber-tired dozers are typically used for earth and dirt moving that would not be required.

Predicted maximum daily construction-generated emissions for the proposed Project are summarized in **Table 9, Construction-Related Criteria Pollutant Emissions.**

Table 9
Construction-Related Criteria Pollutant Emissions

Construction Year	ROG	NOx	PM10 Exhaust	PM2.5 Exhaust
Average Annual Emissions (Tons/Year)	0.278	0.470	0.024	0.022
Average Daily Emissions (lbs/year)[1]	2.32	3.92	0.20	0.18
Thresholds (lbs/day)	**54**	**54**	**82**	**54**
Exceed Threshold?	*No*	*No*	*No*	*No*

Source: Impact Sciences, CalEEMod modeling, 2021. See Appendix A.
[1] Based on a 8-month construction schedule.

Regional Operational Significance Analysis

Operational air pollutant emissions would be generated primarily by automobile travel to drop off and pick up students from the Project site. Other sources of operational emissions include architectural coatings

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11 The building is assumed to be approximately 147 feet by 300 feet – consistent with the square footage of the Project. Therefore, the perimeter is approximately 894 feet. It was assumed that the building has an internal height of 12 feet, for a total of approximately 10,728 square feet that will be demolished. Therefore, modeling the Project assuming 11,000 square feet of demolished floor area provides a conservative estimate of the air quality emissions.

and maintenance products, consumer products, and energy use of the Project site, including the combustion of natural gas for heating. CalEEMod was used to estimate emissions from operation of the proposed Project assuming full build out and to estimate emissions from operation of the existing commercial building on the Project site. The net operational air quality emissions were compared against BAAQMD thresholds to determine project significance.

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 used by CalEEMod. The earliest year the Project could possibly be constructed and fully occupied would be 2022. Emissions associated with build-out later than 2022 would be lower as newer vehicles are required to meet increasingly more stringent emissions standards, while older, more polluting, vehicles are less utilized.

CalEEMod allows the use to enter specific vehicle trip generation rates. According to the Transportation Impact Analysis prepared by Hexagon Consulting, the proposed project will generate approximately 1,967 vehicle trips per day. However, the existing commercial retail building on the project site generates approximately 1,664 trips per day. As a result, the proposed project will generate a net increase of 303 trips per day.

The net long-term operational emissions attributable to the proposed project are summarized in **Table 10, Long-Term Operational Emissions**.

Table 10
Long-Term Operational Emissions

Emissions Source	ROG	NOx	PM10	PM2.5
Area Source (tons/year)	0.196	0.00004	0.00002	0.00002
Energy Source (tons/year)	0.004	0.040	0.003	0.003
Mobile Source (tons/year)	0.292	1.13	0.787	0.2159
Annual Project Operational Emissions (tons/year)	0.492	1.172	0.790	0.219
Existing Annual Operational Emissions (tons/year)	0.486	0.979	0.668	0.183
Net Annual Operational Emissions (tons/year)	0.006	0.193	0.12	0.036
Annual Thresholds (tons/year)	**10**	**10**	**15**	**10**
Exceed Thresholds?	*No*	*No*	*No*	*No*
Average Daily Emissions (pounds/day)[1]	2.69	6.42	4.33	1.20
Existing Average Daily Emissions (pounds/day)[1]	2.66	5.36	3.66	1.00
Net Average Daily Emissions (pounds/day)	0.03	1.06	0.67	0.20
Thresholds (lbs/day)[1]	**54**	**54**	**82**	**54**
Exceed Threshold?				

Source: Impact Sciences, CalEEMod modeling, 2021. See Appendix A.

[1] *Based on a 365-day operational schedule.*

As shown in **Table 9** and **Table 10**, neither the project's construction nor net operational emissions would exceed the BAAQMD's thresholds for any criteria air pollutants. Furthermore, as for cumulative construction and operational impacts, the proposed project will not produce cumulatively considerable emissions of nonattainment pollutants since the project will not exceed regional thresholds. As such, the proposed project will result in a less than significant impact.

Impact 3   **Would implementation of the proposed Project expose sensitive receptors to substantial pollutant concentrations?** *(Less than Significant).*

Construction

Temporary project impacts related to health risk can occur from project construction activity, which would generate dust and equipment exhaust that could affect nearby sensitive receptors. Construction of the proposed Project would include internal building construction, paving, application of architectural coatings, and interior finishing. Construction equipment and associated heavy-duty truck trips generate exhaust which contains diesel particulate matter (DPM), known as a toxic air contaminant (TAC).

Construction emissions were estimated from CalEEMod and dispersion modeling was conducted to predict the off-site concentration resulting from project construction, so that lifetime excess cancer risk and non-cancer health risk could be predicted. The HRA was conducted following methods in the Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual for Preparation of Health Risk Assessments and BAAQMD's CEQA Guidance. **Table 5** discloses the BAAQMD's significance thresholds for health risks.

The BAAQMD recommends evaluating health risk posed to sensitive receptors (which are defined as residences, day care centers, schools and elderly facilities) from DPM within 1,000 feet radius of a project site (BAAQMD 2017). There are many residential neighborhoods to the north, east, and west of the Project site. The closest sensitive receptors include:

- Silverlake Drive residences at the northern end of the Project limits.

- Meadowhaven Way residences at the western end of the Project limits.

- Woodward Drive residences approximately 215 feet east of the Project site.

The health risks were evaluated for a hypothetical maximally exposed individual (MEI) located near the Project site. The hypothetic MEI is an individual assumed to be located where the highest concentrations of air pollutants are predicted to occur as a result of project construction.

Cancer Risk. The CalEEMod model provided total annual PM2.5 exhaust emissions (assumed to be DPM) from off-road construction equipment used during project construction and exhaust emissions from on-road vehicles (haul trucks, vendor trucks, and worker vehicles). Fugitive dust PM2.5 emissions were also computed in CalEEMod and included in this analysis.

The US EPA AERMOD dispersion model was used to predict concentrations of DPM and PM2.5 at sensitive receptors within 1,000 feet of the Project site, as recommended by the BAAQMD (BAAQMD, 2017). To model emissions, a release height of 3 meters was chosen to represent the release height of construction equipment. Emissions from off-road construction equipment and on-road vehicle travel were distributed throughout the modeled area source. The modeling used the latest available 5-year meteorological data set (2009 to 2014) from the San Jose International Airport prepared for use with the AERMOD model by CARB. Annual DPM and PM2.5 concentrations from construction activities were calculated at nearby sensitive receptor locations within the default receptor height. The concentration of DPM at the nearest sensitive receptor, located on Silverlake Drive to the north of the Project site, estimated in AERMOD was utilized to calculate the cancer risk in accordance with OEHHA guidelines.

The current OEHHA guidance recommends that cancer risks be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, it recommends evaluating the risks for the third trimester of pregnancy to age zero (third trimester exposure), ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 30 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposure, an ASF of 3 for 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 kilograms of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposure, and 80th percentile breathing rates are used for child and adult exposure. These age-specific breathing rates are 361 L/kg-day for the third trimester receptor, 1,090 L/kg-day for the infant receptors, 572 L/kg-day for child receptors, and 261 L/kg-day for adult receptors. Additionally, age-specific fraction of time at home (FAH) values were used in this analysis. According to OEHHA, FAH values of 0.85 should be used for the third trimester and infant receptors, 0.72 for the child receptors, and 0.73 for adult receptors. Finally, it was assumed that each receptor would have an exposure duration of 350 days per year, consistent with OEHHA guidelines (OEHHA 2015). According to OEHHA, the cancer risk for a residential receptor is assumed to start in the third trimester of life.

The California Air Resources Board recommends the Hotspots Analysis and Reporting Program (HARP) to calculate the excess cancer risk. HARP incorporates OEHHA 2015 guidance to calculate the risk posed to receptors from facility operations.

During the eight months of construction, the maximum DPM concentration from construction activities would occur at a receptor adjacent to the north of the site. Third trimester and the first 0.42 years of infant exposure were conservatively assumed to occur at this residence through the construction period. Results of this assessment indicate that the maximum excess residential cancer risk posed to both the receptors over the approximately eight months of construction would be a total of 6.95 in one million and would not exceed BAAQMD thresholds. It should be noted that our health risk assumes that construction will occur outside. As a result, this assessment is overly conservative as most construction will occur within the existing structure and pollutants will be not carried by the wind to nearby residential receptors.

Non-Cancer Health Hazards. Sensitive groups can also develop non-cancer health risks from exposure to TACs. Non-cancer health risks are evaluated from the ratio of TAC concentrations generated by the Project and a reference exposure level (REL). A REL is the concentration of a given pollutant in the air at or below which no adverse health effects are anticipated for sensitive groups (OEHHA 2015). RELs are based on the most sensitive adverse effects reported in the medical and toxicological literature. The chronic inhalation REL for DPM is 5 $\mu g/m^3$ (OEHHA, 2019). The ratio of TAC generated by a project and the REL is referred

to as a hazard quotient/index (HI). According to the BAAQMD, the non-cancer health hazard would be significant if the HI exceeds 1.0.

The maximum computed HI based on the DPM concentration from construction activities of the proposed Project would be 0.020, which is substantially lower than the BAAQMD significance criterion.

PM2.5 Emissions. PM2.5 can result from both exhaust emissions and fugitive dust. According to the BAAQMD, the ambient PM2.5 would be significant if its annual average concentration exceeds 0.3 μ/m^3. As noted above, AERMOD was used to estimate the PM2.5 concentration at the nearest sensitive receptor based on emission estimates from CalEEMod.

Finally, the maximum concentration of PM2.5 resulting from construction activities associated with the proposed Project would be 0.122 $\mu g/m^3$. The results of the health risk are provided in **Table 11, Maximum Health Risk from Construction,** and demonstrate that Project construction would not exceed BAAQMD thresholds and the impact would be less than significant.

Table 11
Maximum Health Risk from Construction

Receptor	Lifetime Excess Cancer Risk (per million)	Annual PM2.5 (ug/m3)**	Hazard Index
Residential Receptor*	6.95	0.122	0.020
Significance Threshold	**10**	**0.3**	**1.0**
Exceed Threshold?	*No*	*No*	*No*

Source: Impact Sciences, 2021. Attachment A.
*Residential receptor accounts for the first 0.67 years of life (0.25 years during the third trimester and 0.42 years of the infant stage of life).
** The annual PM2.5 concentration is the sum of DPM and fugitive dust PM2.5 concentrations.

Operation

Project-operation impacts related to increased health risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors, or by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs.

The proposed Project does not include any stationary sources of TAC emissions and most project vehicles would operate on gasoline and not diesel, which is the primary source of TACs and DPM. Therefore, operation of the proposed Project would not generate TAC or PM2.5 emissions that could affect the health of the community near the Project site. Furthermore, the Project site does not lie within 1,000 feet of any

stationary sources or major roadways that would expose future students to TAC emissions.[12] As such, the proposed Project would not contribute to human health risk to nearby receptors during operation, and the Project would also not contribute to any cumulative human health risk impact.

Impact 4   **Would implementation of the proposed Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (*Less than Significant*).**

None of the proposed land uses are associated with equipment or activities that would emit nuisance odors. Furthermore, the Project would be required to comply with the BAAQMD's regulation of odorous substances, which places general limitation on odorous substances and emissions limitations on certain odorous compounds. The proposed school would replace a home improvement retail store and as such, would reduce the use of diesel-fueled delivery trucks and equipment, as well as any organic material associated with gardening material. This would result in a decrease in odorous substances on-site. As a result, the impact would be less than significant.

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[12]   BAAQMD. *Permitted Stationary Sources Risk and Hazards*. Available online at: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65.

3.0 GREENHOUSE GAS

3.1 Greenhouse Gas Setting

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).[13] Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;

- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHGs and other gases to the atmosphere from volcanic eruptions); and

- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.[14] Continuing changes to the global climate system and ecosystems, and to California, are projected to include:

- Rapidly diminishing sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[15]

- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and ice sheets;

- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;

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[13] US EPA. 2013. Overview of Greenhouse Gases. Available online at: https://www.epa.gov/ghgemissions/overview-greenhouse-gases. Accessed on January 12, 2021.

[14] Intergovernmental Panel on Climate Change. 2013. "Climate Change 2013: The Physical Science Basis." Available online at: http://www.climatechange2013.org/. Accessed January 13, 2021.

[15] Ibid.

- Changing levels in snowpack, river flow and sea levels indicating that climate change is already affecting California's water resources;[16]

- Dry seasons that start earlier and end later, evoking more frequent and intense wildland fires;[17] and

- Increasing demand for electricity due to rising temperatures.[18]

The natural process through which heat is retained in the troposphere[19] is called the "greenhouse effect." Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere as short-wave radiation. It travels through the atmosphere without warming it and is absorbed by the Earth's surface. When the Earth re-emits this radiation back toward space, the radiation changes to long wave radiation. GHGs are transparent to incoming short wave solar radiation but absorb outgoing long wave radiation. As a result, radiation that otherwise would escape back into space is now retained, warming the atmosphere. This phenomenon is known as the greenhouse effect.

Greenhouse Gas Compounds

California State law defines GHGs to include the following six compounds:

- **Carbon Dioxide** (CO_2) is released to the atmosphere when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned. CO_2 emissions from motor vehicles occur during operation of vehicles and operation of air conditioning systems.

- **Methane** (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment.

- **Nitrous Oxide** (N_2O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. N_2O emissions from motor vehicles generally occur directly from operation of vehicles.

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[16] California Environmental Protection Agency (Cal EPA). 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

[17] Ibid.

[18] California Environmental Protection Agency (Cal EPA). 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

[19] The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface from 6 to 7 miles).

- **Hydrofluorocarbons** (HFCs) are one of several high global warning potential (GWP) gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant) emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.

- **Perfluorocarbons** (PFCs) are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes. Emissions of PFCs are generally negligible from motor vehicles.

- **Sulfur Hexafluoride** (SF_6) is another high GWP gas that is not naturally occurring and is generated in a variety of industrial processes. Emissions of SF_6 are generally negligible from motor vehicles.

3.2   Existing Setting

The Project site is currently a vacated 44,087.9-square-foot, single story commercial building that was used as a home improvement store. Home improvement stores generate GHG emissions from a variety of sources including: customer and worker vehicle trips, operating on-site machinery such as forklifts, watering the gardening department, and lighting. The City of Milpitas already includes several hardware and home improvement stores, including a Home Depot located two miles south of the Project site. The existing GHG emissions generated by the existing store are disclosed in **Impact 1**.

3.3   Regulatory Framework

Federal

Paris Climate Agreement

The Paris Climate Agreement is an international treaty on climate change adopted on December 12, 2015. The goal of the agreement is to limit global warming to 1.5 degrees Celsius as compared to pre-industrial levels. Countries will aim to reach global peaking of GHG emissions as soon as possible to achieve a climate neutral world by mid-century. To achieve these reductions, the Paris Climate Agreement works on a 5-year cycle of increasingly ambitious climate action carried out by countries. Therefore, by 2020, countries were required to submit their plans for climate action, known as nationally determined contributions. Additionally, the Agreement provides a framework for financial, technical, and capacity building support to those countries who need it. Developed counties will take a lead in providing financial assistance to other countries since large scale investments are required for GHG mitigation and climate adaptation.[20]

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[20]   United Nations. *The Paris Agreement*. Available online at https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.

The United States joined 190 other countries in the Paris Climate Agreement under the Obama administration in September 2016.[21] Under the Trump administration, the former President announced his intention to withdraw from the Agreement in June 2017 and formally notified the United Nations in November 2019. However, the Agreement requires a year-long waiting period before a formal withdrawal will be recognized. As a result, the United States officially withdrew the Agreement in November 2020.[22] However, on January 20, 2021, President Biden accepted and rejoined the Paris Climate Agreement.[23]

State

The State of California has implemented a series of greenhouse gas plans and policies aimed at reducing state greenhouse gas emissions. Measures applicable to the Project are summarized below:

Executive Order (EO) S-03-05

On June 1, 2005, EO S-03-05 was issued by Governor Schwarzenegger to set statewide emissions reduction standards. The order required the state to reduce GHG emissions to 1990 levels by 2020 and reduce GHG emissions to 80% below 1990 levels by 2050. EO S-3-05 also calls for the Secretary of California Environmental Protection Agency (Cal/EPA) to be responsible for coordination of state agencies and progress reporting.

Assembly Bill (AB) 32

AB 32 (California Global Warming Solutions Act of 2006) was codified into law in 2006 and codified into law the 2020 GHG emissions targets set by EO S-03-05. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major sectors with penalties for noncompliance.

Senate Bill (SB) 32

SB 32 was signed into law in 2015 and sets into law the mandated reduction targets set in EO B-30-15, which required a reduction in GHG emissions to 40% below the 1990 levels by 2030.

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[21] The White House. *President Obama: The United States Formally Entered the Paris Agreement*. Available online at: https://obamawhitehouse.archives.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement.

[22] NPR. *U.S. Officially Leaving Paris Climate Agreement*. Available online at: https://www.npr.org/2020/11/03/930312701/u-s-officially-leaving-paris-climate-agreement.

[23] The White House. 2021. *Paris Climate Agreement*. Available online at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/.

CARB's 2017 Final Scoping Plan

CARB, in collaboration with over twenty state agencies, issued a Final Scoping Plan in 2017 to set a framework for the state to meet the overall reduction goals set in SB 32. The 2017 Scoping Plan identified key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 million metric tons of carbon dioxide equivalent (MMTCO$_2$e), and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO$_2$e beyond current policies and programs. Key elements of the 2017 Update include a proposed 20% reduction in GHG emissions from refineries and an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal.

Local

City of Milpitas Climate Action Plan

In 2013, the City of Milpitas adopted a Climate Action Plan (CAP) in 2013 toward the goal of a more sustainable community by reducing GHG emissions. The CAP looks at five key sectors (energy use, vehicle miles, waste production, water usage, and off-road activities) and incorporates best practices to produce a blueprint for achieving GHG emissions reductions in the City to comply with AB 32 and SB 375.[24]

3.4   Thresholds and Methodology

Thresholds of Significance

The impact analysis provided below is based on the application of the following *CEQA Guidelines* Appendix G, which indicates that a project would have a significant impact on GHG emissions if it would:

1)   Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2)   Conflict with an applicable plan, policy or regulations adopted for the purpose of reducing the emissions of greenhouse gas emissions.

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[24]   City of Milpitas. 2013. *Climate Action Plan*. Available online at:
    http://www.ci.milpitas.ca.gov/_pdfs/Climate_ActionPlan.pdf.

Methodology

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, the BAAQMD recommends quantification and disclosure of GHG construction emissions. Determining the significance of these construction-generated GHG emission impacts is recommended to be made in relation to meeting AB 32 GHG reduction goals, which requires the state to meet 1990 levels of GHG emissions by 2020.

Since GHG emissions are cumulative and construction emission are temporary and short term, it is common practice to amortize the total construction GHG emissions over 30 years to create an annual emissions rate that is combined with the operational GHG emissions for determining significance.

The BAAQMD *CEQA Air Quality Guidelines* provide numeric thresholds for GHG emissions during project operation. A proposed land use development project would not have a significant GHG impact, if operation of the project would meet one of the following thresholds:

- Compliance with a qualified GHG Reduction Strategy;

- Annual emissions less than 1,100 metric tons per year (MT/yr) of CO_2e; or

- 4.6 metric tons of CO_2e per service population[25] per year (MT CO_2e/SP/yr)

As stated above, the City of Milpitas has a CAP, adopted in May 2013, that established the goals and measures to reduce greenhouse gas emissions to meet AB 32 and SB 375 reduction goals.[26] The CAP does not have a specific GHG mass emissions threshold for project-level construction or operation. The City is currently in the process of updating the CAP.[27]

The BAAQMD's *CEQA Guidelines* do not recommend using quantified thresholds for projects that are in a jurisdiction with a qualified GHG reduction plan that addresses emissions associated with the period that the Project would operate. Since the Project will be operational after 2020, neither the City's CAP nor the BAAQMD's thresholds are applicable to the project. However, the Project is proposing to redevelop an existing home improvement store into a 480-student school. School land uses generally have lower emissions from area and waste sources than commercial land uses. Therefore, this assessment quantified

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[25] According to the BAAQMD's *CEQA Guidelines*, service population is determined by adding the number of residents to the number of jobs estimated for a given point in time.

[26] City of Milpitas. 2013. *Climate Action Plan*. Available online at: http://www.ci.milpitas.ca.gov/_pdfs/Climate_ActionPlan.pdf.

[27] City of Milpitas. 2013. *Climate Action Plan*. Available online at: http://www.ci.milpitas.ca.gov/climate-action-plan/.

the GHG emissions from the existing home improvement store and proposed school to demonstrate a net decrease in GHG emissions.

3.5   Project Impacts and Mitigation Measures

Impact 1   **Would implementation of the proposed Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?** *(Less than Significant).*

Using CalEEMod, Project GHG emissions throughout the construction phases were calculated from off-road equipment usage, hauling vehicles, delivery, and worker vehicle trips to and from the site. The total GHG construction emissions over the approximately 8-month construction duration of the proposed Project would be approximately 88.31 MT CO2e. As GHG emissions impact from construction activities would occur over a relatively short time span, it would contribute a relatively small portion of the lifetime GHG emission impact of the proposed Project. The total construction GHG emissions were divided by 30 to determine an annual construction emission rate estimate to be amortized over the Project's first 30 years of operational life, consistent with CEQA analysis across the state. Amortized over a 30-year period, the proposed Project is anticipated to emit approximately 2.94 MT CO2e/year.

BAAQMD-recommended CalEEMod was also used to calculate the annual GHG emissions generated by the proposed Project during operation of each of the Project phases. Sources of GHG emissions during operation include emissions from area sources, electricity, mobile sources, waste, and water. Amortized yearly construction emissions were added to operational GHG emissions to calculate the Project's total annual GHG emissions.

Emissions from area sources are based on land use sizes, GHG emission factors for fuel combustion, and the global warming potential (GWP) values for the GHGs emitted. Electricity usage emissions are based on the land uses, default demand factors for the land use, GHG emission factors for the utility provider, and the GWP values of the GHGs emitted. Mobile-source GHG emissions are determined based on the Project's estimated daily trip rate calculated in the Transportation Impact Assessment prepared for the proposed Project. Waste and water emissions are derived from the anticipated water usage and wastewater generated based on the Project's proposed land uses and the associated water demand factors.

As shown in **Table 12, Proposed Project Greenhouse Gas Emissions**, the proposed Project's net GHG operational emissions would be 113 MT CO2e/year lower as compared to the existing home improvement store.

Table 12
Proposed Project Greenhouse Gas Emissions

Emissions Source	Metric Tons of Carbon Dioxide Equivalent (per year)
Amortized Construction	2.94
Area Sources	0.009
Energy Sources	113
Mobile Sources	807
Waste Sources	44.1
Water Sources	6.48
Total GHG Emissions	**973.53**
Existing GHG Emissions	**1,086.5**
Net GHG Emissions	**-113**

Source: Impact Sciences, 2021. See Attachment A.

As shown in **Table 12**, the Project's combined long-term net operational emissions and amortized construction emissions would be approximately 113 MT CO2e/year lower than the existing home improvement store operating on the Project site. As a result, the impact is less than significant.

Impact 2 **Would implementation of the proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?** *(Less than Significant).*

The proposed Project would have a significant impact with respect to GHG emissions and global climate change if it would substantially conflict with the provisions of Section 15064.4(b) of the *State CEQA Guidelines*.

Pursuant to Appendix G of the *CEQA Guidelines*, a significant GHG impact is identified if the Project could conflict with applicable GHG reduction plans, policies, or regulations. Development projects would be subject to complying with SB 32. SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40% below 1990 levels. CARB issued the 2017 Final Scoping Plan to reflect the target set by Executive Order B-30-15 and codified by SB 32.[28] The 2017 Final Scoping Plan outlines the suite of policy

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[28] CARB *California's 2017 Climate Change Scoping Plan*. Available online at:
https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed February 20, 2020.

measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and obtain the statewide target.

The proposed Project would not conflict with or otherwise interfere with the statewide GHG reduction measures. The proposed Project would redevelop an existing commercial building to construct a preschool and elementary school near a residential neighborhood. As a result, the proposed Project is anticipated to reduce VMT in the City of Milpitas by encouraging nearby residents to send their children to the Stratford School instead of other preschools or elementary schools in the area. Further, as demonstrated above, the proposed Project would reduce GHG emissions as compared to the existing home improvement store. The Project would also be subject to local policies that may affect emissions of greenhouse gases including the City of Milpitas CAP. Even though the CAP is designed to reduce GHG emissions across the City into 2020, the CAP still provides applicable measures and action items individual projects can undertake to further reduce GHG emissions. The CAP identifies six main Action Areas with specific GHG reductions, including energy, water, transportation and land use, solid waste, and off-road equipment. Many of the measures within the CAP are aimed at residential developments, increasing regional transit access, or actions for the city to undertake. As a result, many of the CAP measures would not be applicable to a new school within a redeveloped building. However, as demonstrated in **Table 13, Consistency with the City's Climate Action Plan Measures**, the proposed Project would be consistent with the applicable CAP measures.

Table 13
Consistency with the City's Climate Action Plan Measures

Measure	Action	Consistency Analysis
Measure 1.8. Online Energy Monitoring	Encourage the use of smart-grid and Energy Star appliances.	Consistent. The proposed Project will be required to adhere to Title 24 Energy Standards which require Energy Star appliances be installed into new development.
Measure 4.1. Tiered Water Rates	Implement the water-efficient landscaping ordinance and the water conservation ordinance.	Consistent. The existing hardware supply store water both on-site landscaping and plants sold within the landscaping department of the store. The proposed Project will save water as compared to the existing site by removing the landscaping department and converting it into a playground. The proposed project will not add any additional on-site landscaping to the site.
Measure 9.2. Nonresidential Parking Requirements	Revise development standards to create incentives to reduce the minimum parking requirements for new nonresidential buildings in Milpitas.	Consistent. The proposed Project will utilize the existing parking lot that is shared with other commercial land uses. As a result, the proposed project will not
Measure 10.1: Parking for Low-emission Vehicles	Provide material to support developers in obtaining and providing charging stations	Consistent. The proposed Project will redevelop 4 parking stalls to EV charging stations.
Measure 10.1: Parking for Low-emission Vehicles	Pre-wire stalls for electric vehicle charging stations for 2% of new parking capacity.	Consistent. The proposed Project will redevelop 4 parking stalls to EV charging stations.

Measure	Action	Consistency Analysis
Measure 11.1 Waste Diversion	Work with regional partners to increase the diversion of solid waste to 75% as required under Assembly Bill (AB) 341.	Consistent. The proposed Project will be serviced by Republic Services which is required to divert waste consistent with all state and local policies.

Source: City of Milpitas. 2013. Milpitas Climate Action Plan.

Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases. The impact is less than significant.

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CalEEMod, AERMOD, and HARP2 Output Files

Existing Commercial Use
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Home Improvement Superstore	44.00	1000sqft	1.01	44,087.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational emissions only

Land Use - Adjusted land use to reflect size of building.

Construction Phase - Operational emissions only.

Off-road Equipment - Operational emissions only.

Trips and VMT - Operational emissions only.

Grading -

Vehicle Trips - According to the TIA, the existing site will generate 1,664 trips per day.

Existing Commercial Use - Santa Clara County, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	44,000.00	44,087.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	ST_TR	56.72	37.75
tblVehicleTrips	SU_TR	55.80	37.75
tblVehicleTrips	WD_TR	30.74	37.75

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					
2020	0.0000	0.0000	0.0000	0.0000	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					
2020	0.0000	0.0000	0.0000	0.0000	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**

	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
Percent Reduction	**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	0.1952	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004
Energy	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	142.6795	142.6795	6.3100e-003	1.3800e-003	143.2498
Mobile	0.2900	0.9743	2.5033	7.4700e-003	0.6609	6.2400e-003	0.6671	0.1769	5.8000e-003	0.1827	0.0000	685.6035	685.6035	0.0260	0.0000	686.2540
Waste						0.0000	0.0000		0.0000	0.0000	99.0434	0.0000	99.0434	5.8533	0.0000	245.3757
Water						0.0000	0.0000		0.0000	0.0000	1.0340	7.1643	8.1983	0.1065	2.5700e-003	11.6286
Total	**0.4858**	**0.9794**	**2.5080**	**7.5000e-003**	**0.6609**	**6.6300e-003**	**0.6675**	**0.1769**	**6.1900e-003**	**0.1831**	**100.0773**	**835.4480**	**935.5253**	**5.9921**	**3.9500e-003**	**1,086.5090**

2.2 Overall Operational

Mitigated 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	0.1952	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004
Energy	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	142.6795	142.6795	6.3100e-003	1.3800e-003	143.2498
Mobile	0.2900	0.9743	2.5033	7.4700e-003	0.6609	6.2400e-003	0.6671	0.1769	5.8000e-003	0.1827	0.0000	685.6035	685.6035	0.0260	0.0000	686.2540
Waste						0.0000	0.0000		0.0000	0.0000	99.0434	0.0000	99.0434	5.8533	0.0000	245.3757
Water						0.0000	0.0000		0.0000	0.0000	1.0340	7.1643	8.1983	0.1065	2.5700e-003	11.6286
Total	**0.4858**	**0.9794**	**2.5080**	**7.5000e-003**	**0.6609**	**6.6300e-003**	**0.6675**	**0.1769**	**6.1900e-003**	**0.1831**	**100.0773**	**835.4480**	**935.5253**	**5.9921**	**3.9500e-003**	**1,086.5090**

	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
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2020	1/2/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	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
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Existing Commercial Use - Santa Clara County, Annual

3.2 Site Preparation - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Preparation - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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 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
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.2900	0.9743	2.5033	7.4700e-003	0.6609	6.2400e-003	0.6671	0.1769	5.8000e-003	0.1827	0.0000	685.6035	685.6035	0.0260	0.0000	686.2540
Unmitigated	0.2900	0.9743	2.5033	7.4700e-003	0.6609	6.2400e-003	0.6671	0.1769	5.8000e-003	0.1827	0.0000	685.6035	685.6035	0.0260	0.0000	686.2540

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Home Improvement Superstore	1,661.00	1,661.00	1661.00	1,777,219	1,777,219
Total	1,661.00	1,661.00	1,661.00	1,777,219	1,777,219

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Home Improvement Superstore	9.50	7.30	7.30	23.40	57.60	19.00	32	20	48

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Home Improvement Superstore	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720

5.0 Energy Detail

Historical Energy Use: N

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	137.1037	137.1037	6.2000e-003	1.2800e-003	137.6409
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	137.1037	137.1037	6.2000e-003	1.2800e-003	137.6409
NaturalGas Mitigated	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5758	5.5758	1.1000e-004	1.0000e-004	5.6089
NaturalGas Unmitigated	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5758	5.5758	1.1000e-004	1.0000e-004	5.6089

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					
Home Improvement Superstore	104486	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5758	5.5758	1.1000e-004	1.0000e-004	5.6089
Total		**5.6000e-004**	**5.1200e-003**	**4.3000e-003**	**3.0000e-005**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**5.5758**	**5.5758**	**1.1000e-004**	**1.0000e-004**	**5.6089**

Mitigated

	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					
Home Improvement Superstore	104486	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5758	5.5758	1.1000e-004	1.0000e-004	5.6089
Total		**5.6000e-004**	**5.1200e-003**	**4.3000e-003**	**3.0000e-005**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**5.5758**	**5.5758**	**1.1000e-004**	**1.0000e-004**	**5.6089**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Home Improvement Superstore	471290	137.1037	6.2000e-003	1.2800e-003	137.6409
Total		**137.1037**	**6.2000e-003**	**1.2800e-003**	**137.6409**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Home Improvement Superstore	471290	137.1037	6.2000e-003	1.2800e-003	137.6409
Total		**137.1037**	**6.2000e-003**	**1.2800e-003**	**137.6409**

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
Category					tons/yr								MT/yr			
Mitigated	0.1952	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004
Unmitigated	0.1952	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004

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	0.0230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004
Total	**0.1952**	**0.0000**	**4.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.9000e-004**	**7.9000e-004**	**0.0000**	**0.0000**	**8.4000e-004**

6.2 Area by SubCategory

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
SubCategory						tons/yr								MT/yr		
Architectural Coating	0.0230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.4000e-004
Total	**0.1952**	**0.0000**	**4.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.9000e-004**	**7.9000e-004**	**0.0000**	**0.0000**	**8.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.1983	0.1065	2.5700e-003	11.6286
Unmitigated	8.1983	0.1065	2.5700e-003	11.6286

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Home Improvement Superstore	3.25919 / 1.99757	8.1983	0.1065	2.5700e-003	11.6286
Total		**8.1983**	**0.1065**	**2.5700e-003**	**11.6286**

7.2 Water by Land Use

Mitigated

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Home Improvement Superstore	3.25919 / 1.99757	8.1983	0.1065	2.5700e-003	11.6286
Total		**8.1983**	**0.1065**	**2.5700e-003**	**11.6286**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	99.0434	5.8533	0.0000	245.3757
Unmitigated	99.0434	5.8533	0.0000	245.3757

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Home Improvement Superstore	487.92	99.0434	5.8533	0.0000	245.3757
Total		**99.0434**	**5.8533**	**0.0000**	**245.3757**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Home Improvement Superstore	487.92	99.0434	5.8533	0.0000	245.3757
Total		**99.0434**	**5.8533**	**0.0000**	**245.3757**

9.0 Operational Offroad

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

Existing Commercial Use - Santa Clara County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stratford School, City of Milpitas
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	288.00	Student	0.37	22,000.00	0
Elementary School	192.00	Student	0.37	22,087.00	0

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 58

Climate Zone 4 **Operational Year** 2022

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MWhr) 641.35 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Stratford School, City of Milpitas - Santa Clara County, Annual

Project Characteristics -

Land Use - Land use sizes changed to reflect the size of the building on the project site.

Off-road Equipment - Cranes would not be required for an internal construction.

Off-road Equipment - Rubber Tired Dozers are typically associated with earth and rock movement. Construction takes place within an existing structure and would not require that type of machinery. Replaced with forklift that would be more typical with remodel.

Trips and VMT -

Demolition -

Architectural Coating -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix -

Vehicle Trips - According to the TIA, the proposed project will generate approximately 1,967 trips per day

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	12.00
tblConstructionPhase	NumDays	100.00	139.00
tblConstructionPhase	NumDays	10.00	11.00
tblConstructionPhase	NumDays	5.00	11.00
tblLandUse	LandUseSquareFeet	16,278.58	22,000.00
tblLandUse	LandUseSquareFeet	16,051.85	22,087.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	WD_TR	4.38	4.92
tblVehicleTrips	WD_TR	1.29	2.87

Stratford School, City of Milpitas - Santa Clara County, Annual

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	0.2788	0.4701	0.5658	9.9000e-004	0.0209	0.0237	0.0447	5.0200e-003	0.0220	0.0270	0.0000	87.8093	87.8093	0.0202	0.0000	88.3129
Maximum	**0.2788**	**0.4701**	**0.5658**	**9.9000e-004**	**0.0209**	**0.0237**	**0.0447**	**5.0200e-003**	**0.0220**	**0.0270**	**0.0000**	**87.8093**	**87.8093**	**0.0202**	**0.0000**	**88.3129**

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		
2022	0.2788	0.4701	0.5658	9.9000e-004	0.0209	0.0237	0.0447	5.0200e-003	0.0220	0.0270	0.0000	87.8092	87.8092	0.0202	0.0000	88.3129
Maximum	**0.2788**	**0.4701**	**0.5658**	**9.9000e-004**	**0.0209**	**0.0237**	**0.0447**	**5.0200e-003**	**0.0220**	**0.0270**	**0.0000**	**87.8092**	**87.8092**	**0.0202**	**0.0000**	**88.3129**

Stratford School, City of Milpitas - Santa Clara County, Annual

	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
Percent Reduction	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)
1	1-3-2022	4-2-2022	0.2059	0.2059
2	4-3-2022	7-2-2022	0.2021	0.2021
3	7-3-2022	9-30-2022	0.3238	0.3238
		Highest	0.3238	0.3238

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	0.1956	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003
Energy	4.3800e-003	0.0399	0.0335	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	112.5119	112.5119	3.9600e-003	1.4400e-003	113.0405
Mobile	0.2919	1.1320	2.8237	8.8000e-003	0.7796	7.7300e-003	0.7874	0.2087	7.2200e-003	0.2159	0.0000	805.8537	805.8537	0.0303	0.0000	806.6114
Waste						0.0000	0.0000		0.0000	0.0000	17.7820	0.0000	17.7820	1.0509	0.0000	44.0542
Water						0.0000	0.0000		0.0000	0.0000	0.3692	4.8783	5.2475	0.0381	9.4000e-004	6.4814
Total	0.4919	1.1719	2.8616	9.0400e-003	0.7796	0.0108	0.7904	0.2087	0.0103	0.2190	18.1512	923.2524	941.4036	1.1233	2.3800e-003	970.1966

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2.2 Overall Operational

Mitigated 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	0.1956	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003
Energy	4.3800e-003	0.0399	0.0335	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	112.5119	112.5119	3.9600e-003	1.4400e-003	113.0405
Mobile	0.2919	1.1320	2.8237	8.8000e-003	0.7796	7.7300e-003	0.7874	0.2087	7.2200e-003	0.2159	0.0000	805.8537	805.8537	0.0303	0.0000	806.6114
Waste						0.0000	0.0000		0.0000	0.0000	17.7820	0.0000	17.7820	1.0509	0.0000	44.0542
Water						0.0000	0.0000		0.0000	0.0000	0.3692	4.8783	5.2475	0.0381	9.4000e-004	6.4814
Total	0.4919	1.1719	2.8616	9.0400e-003	0.7796	0.0108	0.7904	0.2087	0.0103	0.2190	18.1512	923.2524	941.4036	1.1233	2.3800e-003	970.1966

	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
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Stratford School, City of Milpitas - Santa Clara County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	1/17/2022	5	11	
2	Building Construction	Building Construction	1/18/2022	7/29/2022	5	139	
3	Paving	Paving	8/1/2022	8/15/2022	5	11	
4	Architectural Coating	Architectural Coating	8/16/2022	8/31/2022	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 66,131; Non-Residential Outdoor: 22,044; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Forklifts	1	1.00	89	0.20
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	4	10.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	19.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

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					5.4100e-003	0.0000	5.4100e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-003	0.0300	0.0394	6.0000e-005		1.6200e-003	1.6200e-003		1.5500e-003	1.5500e-003	0.0000	5.3040	5.3040	9.2000e-004	0.0000	5.3270
Total	3.4000e-003	0.0300	0.0394	6.0000e-005	5.4100e-003	1.6200e-003	7.0300e-003	8.2000e-004	1.5500e-003	2.3700e-003	0.0000	5.3040	5.3040	9.2000e-004	0.0000	5.3270

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3.2 Demolition - 2022

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	1.8000e-004	6.1400e-003	1.4300e-003	2.0000e-005	4.2000e-004	2.0000e-005	4.4000e-004	1.2000e-004	2.0000e-005	1.3000e-004	0.0000	1.8572	1.8572	8.0000e-005	0.0000	1.8593
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	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3480	0.3480	1.0000e-005	0.0000	0.3482
Total	**3.4000e-004**	**6.2500e-003**	**2.5900e-003**	**2.0000e-005**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**2.4000e-004**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**2.2052**	**2.2052**	**9.0000e-005**	**0.0000**	**2.2075**

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					5.4100e-003	0.0000	5.4100e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-003	0.0300	0.0394	6.0000e-005		1.6200e-003	1.6200e-003		1.5500e-003	1.5500e-003	0.0000	5.3040	5.3040	9.2000e-004	0.0000	5.3270
Total	**3.4000e-003**	**0.0300**	**0.0394**	**6.0000e-005**	**5.4100e-003**	**1.6200e-003**	**7.0300e-003**	**8.2000e-004**	**1.5500e-003**	**2.3700e-003**	**0.0000**	**5.3040**	**5.3040**	**9.2000e-004**	**0.0000**	**5.3270**

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3.2 Demolition - 2022

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	1.8000e-004	6.1400e-003	1.4300e-003	2.0000e-005	4.2000e-004	2.0000e-005	4.4000e-004	1.2000e-004	2.0000e-005	1.3000e-004	0.0000	1.8572	1.8572	8.0000e-005	0.0000	1.8593
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	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3480	0.3480	1.0000e-005	0.0000	0.3482
Total	3.4000e-004	6.2500e-003	2.5900e-003	2.0000e-005	8.6000e-004	2.0000e-005	8.8000e-004	2.4000e-004	2.0000e-005	2.5000e-004	0.0000	2.2052	2.2052	9.0000e-005	0.0000	2.2075

3.3 Building Construction - 2022

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	0.0347	0.3429	0.4314	5.9000e-004		0.0198	0.0198		0.0182	0.0182	0.0000	51.9857	51.9857	0.0168	0.0000	52.4060
Total	0.0347	0.3429	0.4314	5.9000e-004		0.0198	0.0198		0.0182	0.0182	0.0000	51.9857	51.9857	0.0168	0.0000	52.4060

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3.3 Building Construction - 2022

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	1.4800e-003	0.0473	0.0125	1.3000e-004	3.2000e-003	1.0000e-004	3.3000e-003	9.3000e-004	9.0000e-005	1.0200e-003	0.0000	12.4812	12.4812	5.2000e-004	0.0000	12.4943
Worker	3.8000e-003	2.5300e-003	0.0278	9.0000e-005	0.0105	6.0000e-005	0.0105	2.7900e-003	6.0000e-005	2.8400e-003	0.0000	8.3547	8.3547	1.8000e-004	0.0000	8.3591
Total	**5.2800e-003**	**0.0498**	**0.0403**	**2.2000e-004**	**0.0137**	**1.6000e-004**	**0.0138**	**3.7200e-003**	**1.5000e-004**	**3.8600e-003**	**0.0000**	**20.8359**	**20.8359**	**7.0000e-004**	**0.0000**	**20.8535**

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	0.0347	0.3429	0.4314	5.9000e-004		0.0198	0.0198		0.0182	0.0182	0.0000	51.9856	51.9856	0.0168	0.0000	52.4060
Total	**0.0347**	**0.3429**	**0.4314**	**5.9000e-004**		**0.0198**	**0.0198**		**0.0182**	**0.0182**	**0.0000**	**51.9856**	**51.9856**	**0.0168**	**0.0000**	**52.4060**

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3.3 Building Construction - 2022

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	1.4800e-003	0.0473	0.0125	1.3000e-004	3.2000e-003	1.0000e-004	3.3000e-003	9.3000e-004	9.0000e-005	1.0200e-003	0.0000	12.4812	12.4812	5.2000e-004	0.0000	12.4943
Worker	3.8000e-003	2.5300e-003	0.0278	9.0000e-005	0.0105	6.0000e-005	0.0105	2.7900e-003	6.0000e-005	2.8400e-003	0.0000	8.3547	8.3547	1.8000e-004	0.0000	8.3591
Total	**5.2800e-003**	**0.0498**	**0.0403**	**2.2000e-004**	**0.0137**	**1.6000e-004**	**0.0138**	**3.7200e-003**	**1.5000e-004**	**3.8600e-003**	**0.0000**	**20.8359**	**20.8359**	**7.0000e-004**	**0.0000**	**20.8535**

3.4 Paving - 2022

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	3.5600e-003	0.0326	0.0387	6.0000e-005		1.6300e-003	1.6300e-003		1.5200e-003	1.5200e-003	0.0000	5.1683	5.1683	1.5100e-003	0.0000	5.2059
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.5600e-003**	**0.0326**	**0.0387**	**6.0000e-005**		**1.6300e-003**	**1.6300e-003**		**1.5200e-003**	**1.5200e-003**	**0.0000**	**5.1683**	**5.1683**	**1.5100e-003**	**0.0000**	**5.2059**

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3.4 Paving - 2022

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	2.8000e-004	1.9000e-004	2.0800e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6264	0.6264	1.0000e-005	0.0000	0.6267
Total	**2.8000e-004**	**1.9000e-004**	**2.0800e-003**	**1.0000e-005**	**7.9000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.6264**	**0.6264**	**1.0000e-005**	**0.0000**	**0.6267**

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	3.5600e-003	0.0326	0.0387	6.0000e-005		1.6300e-003	1.6300e-003		1.5200e-003	1.5200e-003	0.0000	5.1683	5.1683	1.5100e-003	0.0000	5.2059
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.5600e-003**	**0.0326**	**0.0387**	**6.0000e-005**		**1.6300e-003**	**1.6300e-003**		**1.5200e-003**	**1.5200e-003**	**0.0000**	**5.1683**	**5.1683**	**1.5100e-003**	**0.0000**	**5.2059**

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3.4 Paving - 2022

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	2.8000e-004	1.9000e-004	2.0800e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6264	0.6264	1.0000e-005	0.0000	0.6267
Total	**2.8000e-004**	**1.9000e-004**	**2.0800e-003**	**1.0000e-005**	**7.9000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.6264**	**0.6264**	**1.0000e-005**	**0.0000**	**0.6267**

3.5 Architectural Coating - 2022

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	0.2299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5345
Total	**0.2311**	**8.4500e-003**	**0.0109**	**2.0000e-005**		**4.9000e-004**	**4.9000e-004**		**4.9000e-004**	**4.9000e-004**	**0.0000**	**1.5320**	**1.5320**	**1.0000e-004**	**0.0000**	**1.5345**

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3.5 Architectural Coating - 2022

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	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1519	0.1519	0.0000	0.0000	0.1519
Total	**7.0000e-005**	**5.0000e-005**	**5.0000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1519**	**0.1519**	**0.0000**	**0.0000**	**0.1519**

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	0.2299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2300e-003	8.4500e-003	0.0109	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.5320	1.5320	1.0000e-004	0.0000	1.5344
Total	**0.2311**	**8.4500e-003**	**0.0109**	**2.0000e-005**		**4.9000e-004**	**4.9000e-004**		**4.9000e-004**	**4.9000e-004**	**0.0000**	**1.5320**	**1.5320**	**1.0000e-004**	**0.0000**	**1.5344**

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3.5 Architectural Coating - 2022

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	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1519	0.1519	0.0000	0.0000	0.1519
Total	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1519	0.1519	0.0000	0.0000	0.1519

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	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	0.2919	1.1320	2.8237	8.8000e-003	0.7796	7.7300e-003	0.7874	0.2087	7.2200e-003	0.2159	0.0000	805.8537	805.8537	0.0303	0.0000	806.6114
Unmitigated	0.2919	1.1320	2.8237	8.8000e-003	0.7796	7.7300e-003	0.7874	0.2087	7.2200e-003	0.2159	0.0000	805.8537	805.8537	0.0303	0.0000	806.6114

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	1,416.96	112.32	106.56	1,228,718	1,228,718
Elementary School	551.04	0.00	0.00	867,864	867,864
Total	1,968.00	112.32	106.56	2,096,582	2,096,582

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Day-Care Center	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Elementary School	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

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5.0 Energy Detail

Historical Energy Use: N

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	69.1290	69.1290	3.1300e-003	6.5000e-004	69.3999
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	69.1290	69.1290	3.1300e-003	6.5000e-004	69.3999
NaturalGas Mitigated	4.3800e-003	0.0399	0.0335	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	43.3829	43.3829	8.3000e-004	8.0000e-004	43.6407
NaturalGas Unmitigated	4.3800e-003	0.0399	0.0335	2.4000e-004		3.0300e-003	3.0300e-003		3.0300e-003	3.0300e-003	0.0000	43.3829	43.3829	8.3000e-004	8.0000e-004	43.6407

Stratford School, City of Milpitas - Santa Clara County, Annual

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					
Day-Care Center	405680	2.1900e-003	0.0199	0.0167	1.2000e-004		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	21.6486	21.6486	4.1000e-004	4.0000e-004	21.7773
Elementary School	407284	2.2000e-003	0.0200	0.0168	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7342	21.7342	4.2000e-004	4.0000e-004	21.8634
Total		**4.3900e-003**	**0.0399**	**0.0335**	**2.4000e-004**		**3.0300e-003**	**3.0300e-003**		**3.0300e-003**	**3.0300e-003**	**0.0000**	**43.3829**	**43.3829**	**8.3000e-004**	**8.0000e-004**	**43.6407**

Mitigated

	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					
Day-Care Center	405680	2.1900e-003	0.0199	0.0167	1.2000e-004		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	21.6486	21.6486	4.1000e-004	4.0000e-004	21.7773
Elementary School	407284	2.2000e-003	0.0200	0.0168	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7342	21.7342	4.2000e-004	4.0000e-004	21.8634
Total		**4.3900e-003**	**0.0399**	**0.0335**	**2.4000e-004**		**3.0300e-003**	**3.0300e-003**		**3.0300e-003**	**3.0300e-003**	**0.0000**	**43.3829**	**43.3829**	**8.3000e-004**	**8.0000e-004**	**43.6407**

Stratford School, City of Milpitas - Santa Clara County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	118580	34.4963	1.5600e-003	3.2000e-004	34.6315
Elementary School	119049	34.6327	1.5700e-003	3.2000e-004	34.7684
Total		**69.1290**	**3.1300e-003**	**6.4000e-004**	**69.3999**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	118580	34.4963	1.5600e-003	3.2000e-004	34.6315
Elementary School	119049	34.6327	1.5700e-003	3.2000e-004	34.7684
Total		**69.1290**	**3.1300e-003**	**6.4000e-004**	**69.3999**

6.0 Area Detail

6.1 Mitigation Measures Area

Stratford School, City of Milpitas - Santa Clara County, Annual

	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	0.1956	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003
Unmitigated	0.1956	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003

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	0.0230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003
Total	**0.1956**	**4.0000e-005**	**4.4200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**2.0000e-005**	**0.0000**	**9.1400e-003**

Stratford School, City of Milpitas - Santa Clara County, Annual

6.2 Area by SubCategory

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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.5800e-003	8.5800e-003	2.0000e-005	0.0000	9.1400e-003
Total	**0.1956**	**4.0000e-005**	**4.4200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**2.0000e-005**	**0.0000**	**9.1400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Stratford School, City of Milpitas - Santa Clara County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.2475	0.0381	9.4000e-004	6.4814
Unmitigated	5.2475	0.0381	9.4000e-004	6.4814

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0.698181 / 1.79532	3.1485	0.0229	5.6000e-004	3.8888
Elementary School	0.465454 / 1.19688	2.0990	0.0153	3.8000e-004	2.5925
Total		**5.2475**	**0.0381**	**9.4000e-004**	**6.4814**

Stratford School, City of Milpitas - Santa Clara County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0.698181 / 1.79532	3.1485	0.0229	5.6000e-004	3.8888
Elementary School	0.465454 / 1.19688	2.0990	0.0153	3.8000e-004	2.5925
Total		**5.2475**	**0.0381**	**9.4000e-004**	**6.4814**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	17.7820	1.0509	0.0000	44.0542
Unmitigated	17.7820	1.0509	0.0000	44.0542

Stratford School, City of Milpitas - Santa Clara County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	52.56	10.6692	0.6305	0.0000	26.4325
Elementary School	35.04	7.1128	0.4204	0.0000	17.6217
Total		**17.7820**	**1.0509**	**0.0000**	**44.0542**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	52.56	10.6692	0.6305	0.0000	26.4325
Elementary School	35.04	7.1128	0.4204	0.0000	17.6217
Total		**17.7820**	**1.0509**	**0.0000**	**44.0542**

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

AERMOD Output Files (PM2.5 Exhaust and Annual PM2.5)

```
**
***************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 2/8/2021
** File: C:\Lakes\AERMOD View\125 N Milpitas\125 N Milpitas.ADI
**
***************************************
**
**
***************************************
** AERMOD Control Pathway
***************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\125 N Milpitas\125 N Milpitas.isc
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   URBANOPT 79517 Milpitas_Population
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "125 N Milpitas.err"
CO FINISHED
**
***************************************
** AERMOD Source Pathway
***************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1        AREAPOLY     66166.034  4154486.535          4.000
** Source Parameters **
   SRCPARAM PAREA1         1.0722E-07     2.000          12
   AREAVERT PAREA1         66166.034 4154486.535 66164.812 4154490.507
   AREAVERT PAREA1         66190.784 4154501.202 66193.229 4154496.313
   AREAVERT PAREA1         66224.396 4154508.535 66221.952 4154513.119
   AREAVERT PAREA1         66246.091 4154520.452 66259.230 4154480.729
   AREAVERT PAREA1         66125.700 4154430.006 66108.894 4154470.035
   AREAVERT PAREA1         66133.339 4154479.507 66136.395 4154474.618
**
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
```

```
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "125 N Milpitas.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE C:\Users\kheck\Desktop\724945\724945.SFC
   PROFFILE C:\Users\kheck\Desktop\724945\724945.PFL
   SURFDATA 23293 2009 San_Jose_International_Airport
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 11.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "125 N Milpitas.AD\AN00GALL.PLT" 31
   SUMMFILE "125 N Milpitas.sum"
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 2/8/2021
** File: C:\Lakes\AERMOD View\125 N Milpitas\125 N Milpitas.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\125 N Milpitas\125 N Milpitas.isc
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   URBANOPT 79517 Milpitas_Population
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "125 N Milpitas.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1        AREAPOLY     66166.034  4154486.535          4.000
** Source Parameters **
   SRCPARAM PAREA1         1.0722E-07     2.000          12
   AREAVERT PAREA1         66166.034 4154486.535 66164.812 4154490.507
   AREAVERT PAREA1         66190.784 4154501.202 66193.229 4154496.313
   AREAVERT PAREA1         66224.396 4154508.535 66221.952 4154513.119
   AREAVERT PAREA1         66246.091 4154520.452 66259.230 4154480.729
   AREAVERT PAREA1         66125.700 4154430.006 66108.894 4154470.035
   AREAVERT PAREA1         66133.339 4154479.507 66136.395 4154474.618
**
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
```

```
**
***************************************
** AERMOD Receptor Pathway
***************************************
**
**
RE STARTING
   INCLUDED "125 N Milpitas.rou"
RE FINISHED
**
***************************************
** AERMOD Meteorology Pathway
***************************************
**
**
ME STARTING
   SURFFILE C:\Users\kheck\Desktop\724945\724945.SFC
   PROFFILE C:\Users\kheck\Desktop\724945\724945.PFL
   SURFDATA 23293 2009 San_Jose_International_Airport
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 11.0 METERS
ME FINISHED
**
***************************************
** AERMOD Output Pathway
***************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "125 N Milpitas.AD\AN00GALL.PLT" 31
   SUMMFILE "125 N Milpitas.sum"
OU FINISHED

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************
```

♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                          ***   09:58:15

                          PAGE   1
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                   ***   MODEL SETUP OPTIONS SUMMARY
  ***
 -
 -

**Model Is Setup For Calculation of Average CONCentration Values.

   -- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for   1 Source(s),
  for Total of   1 Urban Area(s):
  Urban Population =   79517.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates ANNUAL Averages Only

 **This Run Includes: 1 Source(s);   1 Source Group(s); and   466
Receptor(s)

                with: 0 POINT(s), including
                           0 POINTCAP(s) and   0 POINTHOR(s)
                and: 0 VOLUME source(s)
                and: 1 AREA type source(s)
                and: 0 LINE source(s)
                and: 0 OPENPIT source(s)
                and: 0 BUOYANT LINE source(s) with   0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
        Model Outputs Tables of ANNUAL Averages by Receptor
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE

Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   11.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                 Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: 125 N Milpitas.err

 **File for Summary of Results: 125 N Milpitas.sum

⌃ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                                  PAGE   2
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN

                                       *** AREAPOLY SOURCE DATA ***

             NUMBER EMISSION RATE   LOCATION OF AREA BASE   RELEASE   NUMBER
  INIT.   URBAN   EMISSION RATE
   SOURCE   PART. (GRAMS/SEC   X   Y   ELEV.   HEIGHT   OF VERTS.
    SZ   SOURCE SCALAR VARY
     ID   CATS. /METER**2) (METERS) (METERS) (METERS) (METERS)
 (METERS)   BY
 -
 -

 PAREA1   0 0.10722E-06   66166.0 4154486.5   4.0   2.00   12
    0.00   YES
⌃ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N

Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                                          PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                     *** SOURCE IDs DEFINING SOURCE GROUPS
***

  SRCGROUP ID   SOURCE IDs
  -----------   ----------

   ALL   PAREA1   ,
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                                          PAGE   4
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                     *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

             79517.   PAREA1   ,
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                                          PAGE   5
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                     *** DISCRETE CARTESIAN RECEPTORS ***
                                     (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

     (66313.3, 4154531.4,   4.0,   680.0,   0.0);   (66314.9,
4154502.6,   4.0,   680.0,   0.0);
     (66317.7, 4154473.3,   4.0,   680.0,   0.0);   (66325.5,
4154440.6,   4.0,   680.0,   0.0);
     (66316.9, 4154570.0,   4.0,   680.0,   0.0);   (66316.9,

```
4154590.0,        4.0,       680.0,        0.0);
     (  66316.9, 4154610.0,        4.0,       680.0,        0.0);        (  66316.9,
4154630.0,        4.0,       680.0,        0.0);
     (  66316.9, 4154650.0,        4.0,       680.0,        0.0);        (  66359.4,
4154488.6,        4.0,       680.0,        0.0);
     (  66384.4, 4154488.6,        4.0,       680.0,        0.0);        (  66359.4,
4154533.6,        4.0,       680.0,        0.0);
     (  66384.4, 4154533.6,        4.0,       680.0,        0.0);        (  66359.4,
4154578.6,        4.0,       680.0,        0.0);
     (  66384.4, 4154578.6,        4.0,       680.0,        0.0);        (  66359.4,
4154623.6,        4.0,       680.0,        0.0);
     (  66384.4, 4154623.6,        4.0,       680.0,        0.0);        (  66368.7,
4154451.1,        4.0,       680.0,        0.0);
     (  66404.6, 4154460.0,        4.0,       680.0,        0.0);        (  66411.8,
4154617.2,        4.0,       680.0,        0.0);
     (  66412.9, 4154580.7,        4.0,       680.0,        0.0);        (  66446.2,
4154610.0,        4.0,       680.0,        0.0);
     (  66445.1, 4154571.3,        4.0,       680.0,        0.0);        (  66479.4,
4154597.3,        4.0,       680.0,        0.0);
     (  66414.1, 4154542.5,        4.0,       680.0,        0.0);        (  66435.6,
4154504.8,        4.0,       680.0,        0.0);
     (  66447.3, 4154543.6,        4.0,       680.0,        0.0);        (  66482.7,
4154546.4,        4.0,       680.0,        0.0);
     (  66504.3, 4154586.2,        4.0,       680.0,        0.0);        (  66537.0,
4154582.9,        4.0,       680.0,        0.0);
     (  66475.5, 4154504.3,        4.0,       680.0,        0.0);        (  66517.0,
4154537.5,        4.0,       680.0,        0.0);
     (  66450.6, 4154470.5,        4.0,       680.0,        0.0);        (  66477.2,
4154479.9,        4.0,       680.0,        0.0);
     (  66516.5, 4154495.4,        4.5,       680.0,        0.0);        (  66535.9,
4154519.2,        4.5,       680.0,        0.0);
     (  66554.7, 4154544.1,        4.4,       680.0,        0.0);        (  66563.0,
4154569.1,        4.7,       680.0,        0.0);
     (  66600.1, 4154512.6,        5.0,       680.0,        0.0);        (  66594.0,
4154512.0,        5.0,       680.0,        0.0);
     (  66602.8, 4154502.1,        5.0,       680.0,        0.0);        (  66597.3,
4154500.4,        5.0,       680.0,        0.0);
     (  66588.4, 4154510.4,        5.0,       680.0,        0.0);        (  66583.5,
4154509.8,        5.0,       680.0,        0.0);
     (  66578.5, 4154508.2,        5.0,       680.0,        0.0);        (  66572.4,
4154506.5,        5.0,       680.0,        0.0);
     (  66564.1, 4154505.9,        5.0,       680.0,        0.0);        (  66565.2,
4154497.1,        5.0,       680.0,        0.0);
     (  66570.7, 4154497.1,        5.0,       680.0,        0.0);        (  66577.4,
4154498.2,        5.0,       680.0,        0.0);
     (  66582.4, 4154499.3,        5.0,       680.0,        0.0);        (  66589.6,
4154499.9,        5.0,       680.0,        0.0);
     (  66605.1, 4154575.7,        5.0,       680.0,        0.0);        (  66600.6,
4154570.2,        5.0,       680.0,        0.0);
     (  66596.2, 4154564.6,        5.0,       680.0,        0.0);        (  66592.3,
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4154556.9,       5.0,      680.0,       0.0);
     ( 66588.4, 4154549.7,        5.0,      680.0,       0.0);       ( 66584.0,
4154545.8,       5.0,      680.0,       0.0);
     ( 66590.1, 4154541.4,        5.0,      680.0,       0.0);       ( 66595.1,
4154539.7,       5.0,      680.0,       0.0);
     ( 66600.6, 4154545.8,        5.0,      680.0,       0.0);       ( 66602.8,
4154552.4,       5.0,      680.0,       0.0);
     ( 66607.3, 4154559.6,        5.0,      680.0,       0.0);       ( 66611.1,
4154567.4,       5.0,      680.0,       0.0);
     ( 66615.6, 4154572.9,        5.0,      680.0,       0.0);       ( 66628.3,
4154502.0,       5.0,      680.0,       0.0);
     ( 66637.7, 4154502.0,        5.2,      680.0,       0.0);       ( 66628.3,
4154507.0,       5.0,      680.0,       0.0);
     ( 66637.7, 4154507.0,        5.2,      680.0,       0.0);       ( 66624.4,
4154512.0,       5.0,      680.0,       0.0);
     ( 66637.7, 4154512.0,        5.1,      680.0,       0.0);       ( 66624.4,
4154517.0,       5.0,      680.0,       0.0);
     ( 66637.7, 4154517.0,        5.1,      680.0,       0.0);       ( 66624.4,
4154522.0,       5.0,      680.0,       0.0);
     ( 66636.1, 4154522.0,        5.0,      680.0,       0.0);       ( 66621.1,
4154527.0,       5.0,      680.0,       0.0);
     ( 66636.1, 4154527.0,        5.0,      680.0,       0.0);       ( 66621.1,
4154532.0,       5.0,      680.0,       0.0);
     ( 66636.1, 4154532.0,        5.0,      680.0,       0.0);       ( 66621.1,
4154537.0,       5.0,      680.0,       0.0);
     ( 66636.1, 4154537.0,        5.0,      680.0,       0.0);       ( 66081.9,
4154382.5,       4.0,      680.0,       0.0);
     ( 66090.7, 4154385.3,        4.0,      680.0,       0.0);       ( 66107.3,
4154381.4,       4.0,      680.0,       0.0);
     ( 66110.1, 4154374.7,        4.0,      680.0,       0.0);       ( 66115.7,
4154356.5,       4.0,      680.0,       0.0);
     ( 66120.6, 4154347.1,        4.0,      680.0,       0.0);       ( 66112.9,
4154366.4,       4.0,      680.0,       0.0);
     ( 66127.3, 4154338.8,        4.0,      680.0,       0.0);       ( 66097.9,
4154368.6,       4.0,      680.0,       0.0);
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♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                      ***   09:58:15

                         PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                             (METERS)


```
     ( 66099.6, 4154362.0,        4.0,      680.0,       0.0);       ( 66102.9,
4154354.8,       4.0,      680.0,       0.0);
     ( 66105.1, 4154348.2,        4.0,      680.0,       0.0);       ( 66108.4,
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4154341.5,         4.0,      680.0,        0.0);
      (  66068.6, 4154435.1,        4.0,      680.0,        0.0);        (  66074.7,
4154437.3,         4.0,      680.0,      0.0);
      (  66081.9, 4154439.0,        4.0,      680.0,        0.0);        (  66091.3,
4154441.7,         4.0,      680.0,      0.0);
      (  66096.8, 4154442.8,        4.0,      680.0,        0.0);        (  66081.3,
4154419.6,         4.0,      680.0,      0.0);
      (  66088.0, 4154421.8,        4.0,      680.0,        0.0);        (  66094.6,
4154425.1,         4.0,      680.0,      0.0);
      (  66101.8, 4154426.2,        4.0,      680.0,        0.0);        (  66045.9,
4154305.0,         4.0,      680.0,      0.0);
      (  66054.2, 4154308.3,        4.0,      680.0,        0.0);        (  66062.5,
4154312.7,         4.0,      680.0,      0.0);
      (  66071.9, 4154317.2,        4.0,      680.0,        0.0);        (  66047.6,
4154362.0,         4.0,      680.0,      0.0);
      (  66048.7, 4154355.4,        4.0,      680.0,        0.0);        (  66050.9,
4154348.2,         4.0,      680.0,      0.0);
      (  66054.2, 4154341.0,        4.0,      680.0,        0.0);        (  66058.1,
4154333.8,         4.0,      680.0,      0.0);
      (  66059.2, 4154327.7,        4.0,      680.0,        0.0);        (  66032.1,
4154360.3,         4.0,      680.0,      0.0);
      (  66034.3, 4154351.5,        4.0,      680.0,        0.0);        (  66037.6,
4154345.4,         4.0,      680.0,      0.0);
      (  66040.9, 4154339.3,        4.0,      680.0,        0.0);        (  66045.3,
4154331.0,         4.0,      680.0,      0.0);
      (  66047.6, 4154323.2,        4.0,      680.0,        0.0);        (  66052.0,
4154381.4,         4.0,      680.0,      0.0);
      (  66058.6, 4154381.4,        4.0,      680.0,        0.0);        (  66019.3,
4154369.8,         4.0,      680.0,      0.0);
      (  66025.4, 4154372.0,        4.0,      680.0,        0.0);        (  66032.1,
4154373.6,         4.0,      680.0,      0.0);
      (  66036.5, 4154375.3,        4.0,      680.0,        0.0);        (  66054.8,
4154421.8,         4.0,      680.0,      0.0);
      (  66047.6, 4154422.9,        4.0,      680.0,        0.0);        (  66040.9,
4154419.6,         4.0,      680.0,      0.0);
      (  66034.8, 4154417.9,        4.0,      680.0,        0.0);        (  66021.5,
4154415.1,         4.0,      680.0,      0.0);
      (  66013.8, 4154415.1,        4.0,      680.0,        0.0);        (  66005.5,
4154417.4,         4.0,      680.0,      0.0);
      (  65997.2, 4154419.6,        4.0,      680.0,        0.0);        (  66056.4,
4154489.3,         4.0,      680.0,      0.0);
      (  66058.6, 4154481.6,        4.0,      680.0,        0.0);        (  66061.4,
4154472.7,         4.0,      680.0,      0.0);
      (  66063.1, 4154463.3,        4.0,      680.0,        0.0);        (  66067.5,
4154455.0,         4.0,      680.0,      0.0);
      (  66028.2, 4154433.4,        4.0,      680.0,        0.0);        (  66034.3,
4154432.9,         4.0,      680.0,      0.0);
      (  66040.4, 4154435.1,        4.0,      680.0,        0.0);        (  66047.6,
4154436.2,         4.0,      680.0,      0.0);
      (  66000.5, 4154435.1,        4.0,      680.0,        0.0);        (  65967.8,
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4154569.6,         4.0,      680.0,        0.0);
     (  65970.0, 4154560.2,        4.0,      680.0,        0.0);          (  65996.1,
4154443.9,         4.0,      680.0,        0.0);
     (  65970.0, 4154548.6,        4.0,      680.0,        0.0);          (  65970.0,
4154538.1,         4.0,      680.0,        0.0);
     (  65970.0, 4154526.4,        4.0,      680.0,        0.0);          (  65971.2,
4154513.1,         4.0,      680.0,        0.0);
     (  65974.5, 4154501.0,        4.0,      680.0,        0.0);          (  65976.7,
4154491.0,         4.0,      680.0,        0.0);
     (  65980.0, 4154483.2,        4.0,      680.0,        0.0);          (  65984.4,
4154473.3,         4.0,      680.0,        0.0);
     (  65988.9, 4154463.9,        4.0,      680.0,        0.0);          (  65992.2,
4154453.9,         4.0,      680.0,        0.0);
     (  65932.4, 4154554.7,        4.0,      680.0,        0.0);          (  65943.5,
4154558.5,         4.0,      680.0,        0.0);
     (  65956.8, 4154553.6,        4.0,      680.0,        0.0);          (  65955.7,
4154540.3,         4.0,      680.0,        0.0);
     (  65956.8, 4154533.6,        4.0,      680.0,        0.0);          (  66027.6,
4154498.8,         4.0,      680.0,        0.0);
     (  66023.2, 4154506.5,        4.0,      680.0,        0.0);          (  66020.4,
4154516.5,         4.0,      680.0,        0.0);
     (  66017.7, 4154527.0,        4.0,      680.0,        0.0);          (  66014.9,
4154535.8,         4.0,      680.0,        0.0);
     (  66013.8, 4154545.3,        4.0,      680.0,        0.0);          (  66012.7,
4154554.1,         4.0,      680.0,        0.0);
     (  66011.0, 4154561.9,        4.0,      680.0,        0.0);          (  66009.9,
4154571.8,         4.0,      680.0,        0.0);
     (  66007.7, 4154583.5,        4.0,      680.0,        0.0);          (  66005.5,
4154595.6,         4.0,      680.0,        0.0);
     (  65999.9, 4154606.1,        4.0,      680.0,        0.0);          (  65963.4,
4154584.0,         4.0,      680.0,        0.0);
     (  65957.9, 4154594.5,        4.0,      680.0,        0.0);          (  65950.1,
4154606.7,         4.0,      680.0,        0.0);
     (  65951.2, 4154617.8,        4.0,      680.0,        0.0);          (  65953.4,
4154622.2,         4.0,      680.0,        0.0);
     (  65965.6, 4154625.5,        4.0,      680.0,        0.0);          (  65973.4,
4154623.3,         4.0,      680.0,        0.0);
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♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                               PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                             (METERS)


```
     (  65980.0, 4154621.7,        4.0,      680.0,        0.0);          (  65987.2,
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4154617.8,   4.0,   680.0,   0.0);
     (66040.9, 4154507.6,   4.0,   680.0,   0.0);   (66038.7,
4154514.2,   4.0,   680.0,   0.0);
     (66033.2, 4154523.7,   4.0,   680.0,   0.0);   (66030.9,
4154535.3,   4.0,   680.0,   0.0);
     (66028.7, 4154548.6,   4.0,   680.0,   0.0);   (66027.6,
4154560.2,   4.0,   680.0,   0.0);
     (66024.9, 4154571.8,   4.0,   680.0,   0.0);   (66021.0,
4154585.7,   4.0,   680.0,   0.0);
     (66016.6, 4154600.1,   4.0,   680.0,   0.0);   (66011.6,
4154612.8,   4.0,   680.0,   0.0);
     (65918.6, 4154566.8,   4.0,   680.0,   0.0);   (65926.9,
4154570.7,   4.0,   680.0,   0.0);
     (65935.2, 4154571.8,   4.0,   680.0,   0.0);   (65943.5,
4154575.7,   4.0,   680.0,   0.0);
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     (65919.1, 4154617.8,   4.0,   680.0,   0.0);   (65931.3,
4154614.5,   4.0,   680.0,   0.0);
     (65901.4, 4154631.1,   4.0,   680.0,   0.0);   (65908.6,
4154630.0,   4.0,   680.0,   0.0);
     (65915.8, 4154628.8,   4.0,   680.0,   0.0);   (65923.0,
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     (65930.2, 4154625.5,   4.0,   680.0,   0.0);   (65939.0,
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     (65947.9, 4154634.4,   4.0,   680.0,   0.0);   (65952.9,
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     (65957.9, 4154637.7,   4.0,   680.0,   0.0);   (65962.3,
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     (65986.1, 4154634.4,   4.0,   680.0,   0.0);   (65991.1,
4154630.5,   4.0,   680.0,   0.0);
     (66080.8, 4154521.4,   4.0,   680.0,   0.0);   (66076.9,
4154535.8,   4.0,   680.0,   0.0);
     (66073.6, 4154551.3,   4.0,   680.0,   0.0);   (66070.2,
4154567.9,   4.0,   680.0,   0.0);
     (66067.5, 4154582.9,   4.0,   680.0,   0.0);   (66063.1,
4154602.3,   4.0,   680.0,   0.0);
     (66060.8, 4154617.8,   4.0,   680.0,   0.0);   (66058.1,
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     (66055.9, 4154644.9,   4.0,   680.0,   0.0);   (66052.0,
4154659.3,   4.0,   680.0,   0.0);
     (66106.2, 4154529.2,   4.0,   680.0,   0.0);   (66100.2,
4154542.5,   4.0,   680.0,   0.0);
     (66096.3, 4154556.3,   4.0,   680.0,   0.0);   (66091.8,
4154572.9,   4.0,   680.0,   0.0);
     (66088.5, 4154586.8,   4.0,   680.0,   0.0);   (66085.8,
4154606.7,   4.0,   680.0,   0.0);
     (66083.0, 4154620.5,   4.0,   680.0,   0.0);   (66080.8,

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4154558.5,   4.0,   680.0,   0.0);
      (66145.0, 4154569.6,   4.0,   680.0,   0.0);   (66143.9,
4154584.0,   4.0,   680.0,   0.0);
      (66140.6, 4154598.4,   4.0,   680.0,   0.0);   (66138.4,
4154609.5,   4.0,   680.0,   0.0);
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4154637.2,   4.0,   680.0,   0.0);
      (66132.3, 4154651.0,   4.0,   680.0,   0.0);   (66130.6,
4154664.3,   4.0,   680.0,   0.0);
      (66136.1, 4154672.6,   4.0,   680.0,   0.0);   (66141.7,
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4154653.8,   4.0,   680.0,   0.0);
      (66155.0, 4154639.9,   4.0,   680.0,   0.0);   (66156.6,
4154624.4,   4.0,   680.0,   0.0);
      (66158.3, 4154612.2,   4.0,   680.0,   0.0);   (66162.7,
4154597.3,   4.0,   680.0,   0.0);
      (66162.2, 4154582.3,   4.0,   680.0,   0.0);   (66165.5,
4154570.2,   4.0,   680.0,   0.0);
      (66166.6, 4154560.8,   4.0,   680.0,   0.0);   (66169.4,
4154553.0,   4.0,   680.0,   0.0);
      (66211.3, 4154558.5,   4.0,   680.0,   0.0);   (66243.5,
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      (66211.3, 4154570.3,   4.0,   680.0,   0.0);   (66243.5,
4154570.3,   4.0,   680.0,   0.0);
      (66211.3, 4154582.0,   4.0,   680.0,   0.0);   (66243.5,
4154582.0,   4.0,   680.0,   0.0);
      (66211.3, 4154593.7,   4.0,   680.0,   0.0);   (66243.5,
4154593.7,   4.0,   680.0,   0.0);
      (66211.3, 4154605.5,   4.0,   680.0,   0.0);   (66243.5,
4154605.5,   4.0,   680.0,   0.0);
      (66211.3, 4154617.2,   4.0,   680.0,   0.0);   (66243.5,
4154617.2,   4.0,   680.0,   0.0);
      (66211.3, 4154628.9,   4.0,   680.0,   0.0);   (66243.5,
4154628.9,   4.0,   680.0,   0.0);
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                      ***   09:58:15

                                PAGE   8
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                        (METERS)

```
( 66211.3, 4154640.6,      4.0,    680.0,      0.0);       ( 66243.5,
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( 66211.3, 4154652.4,      4.0,    680.0,      0.0);       ( 66243.5,
4154652.4,      4.0,    680.0,    0.0);
( 66211.3, 4154664.1,      4.0,    680.0,      0.0);       ( 66243.5,
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( 66211.3, 4154675.8,      4.0,    680.0,      0.0);       ( 66243.5,
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( 66211.3, 4154687.6,      4.0,    680.0,      0.0);       ( 66243.5,
4154687.6,      4.0,    680.0,    0.0);
( 66074.1, 4154255.1,      4.0,    680.0,      0.0);       ( 66079.1,
4154259.0,      4.0,    680.0,    0.0);
( 66085.8, 4154262.9,      4.0,    680.0,      0.0);       ( 66092.9,
4154265.1,      4.0,    680.0,    0.0);
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( 66130.6, 4154281.7,      4.0,    680.0,      0.0);       ( 66140.6,
4154286.2,      4.0,    680.0,    0.0);
( 66110.3, 4154208.8,      4.3,    680.0,      0.0);       ( 66092.4,
4154205.4,      4.0,    680.0,    0.0);
( 66150.5, 4154208.8,      4.7,    680.0,      0.0);       ( 66097.6,
4154192.3,      4.0,    680.0,    0.0);
( 66142.5, 4154222.2,      4.2,    680.0,      0.0);       ( 66150.5,
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( 66110.3, 4154235.6,      4.0,    680.0,      0.0);       ( 66118.4,
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( 66142.5, 4154235.6,      4.0,    680.0,      0.0);       ( 66150.5,
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4154249.0,      4.0,    680.0,    0.0);
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( 66159.9, 4154229.1,      4.0,    680.0,      0.0);       ( 66162.2,
4154217.5,      4.4,    680.0,    0.0);
( 66166.6, 4154206.4,      4.8,    680.0,      0.0);       ( 66084.1,
4154219.7,      4.0,    680.0,    0.0);
( 66090.4, 4154219.7,      4.0,    680.0,      0.0);       ( 66096.6,
4154219.7,      4.0,    680.0,    0.0);
( 66102.9, 4154219.7,      4.0,    680.0,      0.0);       ( 66084.1,
4154231.9,      4.0,    680.0,    0.0);
( 66090.4, 4154231.9,      4.0,    680.0,      0.0);       ( 66096.6,
4154231.9,      4.0,    680.0,    0.0);
( 66102.9, 4154231.9,      4.0,    680.0,      0.0);       ( 66084.1,
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     ( 66102.9, 4154244.1,       4.0,      680.0,       0.0);          ( 66084.1,
4154256.3,       4.0,      680.0,       0.0);
     ( 66090.4, 4154256.3,       4.0,      680.0,       0.0);          ( 66096.6,
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     ( 66136.4, 4154149.3,       5.0,      680.0,       0.0);          ( 66151.4,
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     ( 66166.5, 4154149.3,       5.0,      680.0,       0.0);          ( 66106.2,
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     ( 66121.3, 4154159.3,       4.9,      680.0,       0.0);          ( 66136.4,
4154159.3,       5.0,      680.0,       0.0);
     ( 66151.4, 4154159.3,       5.0,      680.0,       0.0);          ( 66166.5,
4154159.3,       5.0,      680.0,       0.0);
     ( 66106.2, 4154169.3,       4.3,      680.0,       0.0);          ( 66121.3,
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     ( 66136.4, 4154169.3,       5.0,      680.0,       0.0);          ( 66151.4,
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     ( 66166.5, 4154169.3,       5.0,      680.0,       0.0);          ( 66106.2,
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4154179.3,       5.0,      680.0,       0.0);
     ( 66106.2, 4154189.3,       4.3,      680.0,       0.0);          ( 66121.3,
4154189.3,       4.8,      680.0,       0.0);
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4154181.0,       5.0,      680.0,       0.0);
     ( 66176.8, 4154174.3,       5.0,      680.0,       0.0);          ( 66179.6,
4154164.4,       5.0,      680.0,       0.0);
     ( 66179.0, 4154161.0,       5.0,      680.0,       0.0);          ( 66181.8,
4154151.1,       5.0,      680.0,       0.0);
     ( 66097.1, 4154211.4,       4.0,      680.0,       0.0);          ( 66099.9,
4154201.5,       4.1,      680.0,       0.0);
     ( 66143.9, 4154278.4,       4.0,      680.0,       0.0);          ( 66146.7,
4154272.9,       4.0,      680.0,       0.0);
     ( 66078.0, 4154244.1,       4.0,      680.0,       0.0);          ( 66157.7,
4154198.7,       5.0,      680.0,       0.0);
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                        PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                        *** DISCRETE CARTESIAN RECEPTORS ***

```
    ( 66115.7, 4154199.8,      4.6,     680.0,       0.0);      ( 66158.8,
4154241.9,       4.0,     680.0,      0.0);
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4154683.6,       4.0,     680.0,      0.0);
    ( 65937.0, 4154683.6,      4.0,     680.0,       0.0);      ( 65948.4,
4154690.3,       4.0,     680.0,      0.0);
    ( 65959.7, 4154690.3,      4.0,     680.0,       0.0);      ( 65970.0,
4154685.8,       4.0,     680.0,      0.0);
    ( 65981.4, 4154685.8,      4.0,     680.0,       0.0);      ( 65992.8,
4154678.1,       4.0,     680.0,      0.0);
    ( 65913.7, 4154703.0,      4.0,     680.0,       0.0);      ( 65925.1,
4154703.0,       4.0,     680.0,      0.0);
    ( 65935.9, 4154708.0,      4.0,     680.0,       0.0);      ( 65947.3,
4154708.0,       4.0,     680.0,      0.0);
    ( 65958.6, 4154708.0,      4.0,     680.0,       0.0);      ( 65970.0,
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    ( 65982.5, 4154703.6,      4.0,     680.0,       0.0);      ( 65993.9,
4154703.6,       4.0,     680.0,      0.0);
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    ( 66038.7, 4154669.3,      4.0,     680.0,       0.0);      ( 66007.7,
4154700.3,       4.0,     680.0,      0.0);
    ( 66021.0, 4154695.8,      4.0,     680.0,       0.0);      ( 66034.3,
4154690.9,       4.0,     680.0,      0.0);
    ( 66048.1, 4154688.6,      4.0,     680.0,       0.0);      ( 66063.1,
4154682.6,       4.0,     680.0,      0.0);
    ( 65899.2, 4154699.7,      4.0,     680.0,       0.0);      ( 65899.7,
4154674.2,       4.0,     680.0,      0.0);
    ( 65887.6, 4154693.6,      4.0,     680.0,       0.0);      ( 65886.4,
4154670.4,       4.0,     680.0,      0.0);
    ( 65873.2, 4154677.0,      4.0,     680.0,       0.0);      ( 65864.6,
4154697.3,       4.0,     680.0,      0.0);
    ( 65881.8, 4154705.1,      4.0,     680.0,       0.0);      ( 65858.5,
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    ( 65878.5, 4154717.3,      4.0,     680.0,       0.0);      ( 65850.7,
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    ( 65850.3, 4154749.0,      4.0,     680.0,       0.0);      ( 65877.3,
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4154756.7,   3.2,   680.0,   0.0);
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     (66116.1, 4154722.4,   3.3,   680.0,   0.0);   (66125.4,
4154722.4,   3.5,   680.0,   0.0);
     (66134.8, 4154717.4,   3.8,   680.0,   0.0);   (66144.1,
4154714.1,   3.9,   680.0,   0.0);
     (66151.2, 4154710.8,   4.0,   680.0,   0.0);   (66161.7,
4154707.5,   4.0,   680.0,   0.0);
     (66171.6, 4154703.6,   4.0,   680.0,   0.0);   (66181.4,
4154699.2,   4.0,   680.0,   0.0);
     (66191.9, 4154698.1,   4.0,   680.0,   0.0);   (66202.3,
4154691.4,   4.0,   680.0,   0.0);
     (66236.0, 4154699.2,   4.0,   680.0,   0.0);   (66106.8,
4154744.6,   3.0,   680.0,   0.0);
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4154740.1,   3.1,   680.0,   0.0);
     (66135.3, 4154740.1,   3.1,   680.0,   0.0);   (66143.6,
4154731.8,   3.3,   680.0,   0.0);
     (66154.0, 4154727.4,   3.4,   680.0,   0.0);   (66162.8,
4154725.2,   3.5,   680.0,   0.0);
     (66171.6, 4154720.8,   3.8,   680.0,   0.0);   (66182.0,
4154717.4,   3.9,   680.0,   0.0);

♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                        ***   09:58:15

                              PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

```
                                   *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                            (METERS)


     ( 66194.6, 4154713.6,      4.0,      680.0,      0.0);      ( 66210.6,
4154711.3,      4.0,      680.0,      0.0);
     ( 66222.2, 4154706.9,      4.0,      680.0,      0.0);      ( 65678.6,
4154862.0,      3.0,      680.0,      0.0);
     ( 65714.9, 4153989.9,      4.0,        4.0,      0.0);      ( 67105.1,
4154013.2,      9.0,      680.0,      0.0);
     ( 67112.0, 4154867.2,      7.2,      715.0,      0.0);      ( 66221.9,
4154539.7,      4.0,      680.0,      0.0);
     ( 66095.3, 4154492.7,      4.0,      680.0,      0.0);      ( 66160.2,
4154517.9,      4.0,      680.0,      0.0);
     ( 66129.2, 4154504.9,      4.0,      680.0,      0.0);      ( 66195.5,
4154530.1,      4.0,      680.0,      0.0);
     ( 66145.6, 4154512.4,      4.0,      680.0,      0.0);      ( 66178.3,
4154525.9,      4.0,      680.0,      0.0);
     ( 66111.6, 4154499.4,      4.0,      680.0,      0.0);      ( 66208.5,
4154536.8,      4.0,      680.0,      0.0);
```
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                       ***   09:58:15

                               PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                   *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***

                                            (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1 1 1 1 1

         NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON

WHAT IS INCLUDED IN THE DATA FILE.

                                       *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
CATEGORIES ***
                                                      (METERS/SEC)

                                         1.54,   3.09,   5.14,   8.23,
10.80,
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                       ***   09:58:15

                                   PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                       *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file: C:\Users\kheck\Desktop\724945\724945.SFC
                Met Version: 14134
   Profile file: C:\Users\kheck\Desktop\724945\724945.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   23293   Upper air station no.:   23230
              Name: SAN_JOSE_INTERNATIONAL_AIRPORT   Name:
OAKLAND/WSO_AP
              Year: 2009   Year: 2009

 First 24 hours of scalar data
 YR MO DY JDY HR   H0   U*   W*   DT/DZ ZICNV ZIMCH M-O LEN   Z0 BOWEN
ALBEDO REF WS   WD   HT REF TA   HT
- -
- - - - - - - - - - - - - - - - - - - -
 09 01 01   1 01 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.25   1.10
1.00   0.00   0.   10.0 282.5   2.0
 09 01 01   1 02 -13.4 0.236 -9.000 -9.000 -999. 275.   89.0 0.32   1.10
1.00   2.36   18.   10.0 282.5   2.0
 09 01 01   1 03   -7.9 0.139 -9.000 -9.000 -999. 128.   30.9 0.32   1.10
1.00   1.76   4.   10.0 282.0   2.0
 09 01 01   1 04 -12.4 0.217 -9.000 -9.000 -999. 242.   74.8 0.25   1.10
1.00   2.36   73.   10.0 281.4   2.0
 09 01 01   1 05 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.25   1.10
1.00   0.00   0.   10.0 282.0   2.0
 09 01 01   1 06   -9.7 0.170 -9.000 -9.000 -999. 168.   46.1 0.47   1.10

```
1.00    1.76  342.    10.0  281.4     2.0
 09 01 01    1 07  -13.5  0.236 -9.000 -9.000  -999.   275.      88.6  0.32   1.10
1.00    2.36    5.    10.0  281.4     2.0
 09 01 01    1 08  -19.7  0.345 -9.000 -9.000  -999.   486.     189.6  0.47   1.10
0.74    2.86  333.    10.0  280.9     2.0
 09 01 01    1 09   -8.3  0.363 -9.000 -9.000  -999.   526.     525.4  0.47   1.10
0.39    2.86  327.    10.0  280.9     2.0
 09 01 01    1 10    8.1  0.382  0.288  0.014   106.   566.    -625.1  0.47   1.10
0.27    2.86  351.    10.0  280.9     2.0
 09 01 01    1 11   17.6 -9.000 -9.000 -9.000   189.  -999.  -99999.0  0.25   1.10
0.23    0.00    0.    10.0  280.9     2.0
 09 01 01    1 12   23.0 -9.000 -9.000 -9.000   259.  -999.  -99999.0  0.25   1.10
0.21    0.00    0.    10.0  281.4     2.0
 09 01 01    1 13   23.9 -9.000 -9.000 -9.000   315.  -999.  -99999.0  0.25   1.10
0.21    0.00    0.    10.0  281.4     2.0
 09 01 01    1 14   48.5 -9.000 -9.000 -9.000   407.  -999.  -99999.0  0.25   1.10
0.22    0.00    0.    10.0  283.1     2.0
 09 01 01    1 15   69.5  0.319  0.953  0.016   453.   433.     -42.6  0.32   1.10
0.25    2.36   32.    10.0  283.1     2.0
 09 01 01    1 16   24.5 -9.000 -9.000 -9.000   460.  -999.  -99999.0  0.25   1.10
0.33    0.00    0.    10.0  283.1     2.0
 09 01 01    1 17 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
0.57    0.00    0.    10.0  283.1     2.0
 09 01 01    1 18 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  282.5     2.0
 09 01 01    1 19  -24.2  0.212 -9.000 -9.000  -999.   235.      35.9  0.47   1.10
1.00    2.36  324.    10.0  281.4     2.0
 09 01 01    1 20 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  281.4     2.0
 09 01 01    1 21 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.9     2.0
 09 01 01    1 22 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.9     2.0
 09 01 01    1 23 -999.0 -9.000 -9.000 -9.000  -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.4     2.0
 09 01 01    1 24   -9.7  0.170 -9.000 -9.000  -999.   168.      45.7  0.47   1.10
1.00    1.76  310.    10.0  280.4     2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01    10.0 1 -999.  -99.00   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc               ***          02/08/21
 *** AERMET - VERSION  14134 ***   ***
                       ***          09:58:15

                       PAGE   13
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  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL       ***
                              INCLUDING SOURCE(S):     PAREA1        ,

                                   *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        66313.29    4154531.41       0.01765                      66314.95
4154502.63       0.03500
        66317.72    4154473.28       0.05693                      66325.47
4154440.62       0.05433
        66316.90    4154570.04       0.00905                      66316.90
4154590.04       0.00692
        66316.90    4154610.04       0.00548                      66316.90
4154630.04       0.00450
        66316.90    4154650.04       0.00383                      66359.43
4154488.56       0.02371
        66384.43    4154488.56       0.01763                      66359.43
4154533.56       0.01118
        66384.43    4154533.56       0.00923                      66359.43
4154578.56       0.00663
        66384.43    4154578.56       0.00583                      66359.43
4154623.56       0.00422
        66384.43    4154623.56       0.00399                      66368.66
4154451.14       0.03172
        66404.64    4154460.00       0.01983                      66411.84
4154617.23       0.00386
        66412.95    4154580.69       0.00496                      66446.16
4154610.03       0.00354
        66445.06    4154571.28       0.00454                      66479.38
4154597.30       0.00332
        66414.05    4154542.49       0.00685                      66435.64
4154504.84       0.00904
        66447.27    4154543.59       0.00561                      66482.70
4154546.36       0.00458
        66504.29    4154586.22       0.00320                      66536.96
4154582.90       0.00288
        66475.51    4154504.29       0.00694                      66517.03
4154537.50       0.00418
        66450.59    4154470.52       0.01170                      66477.17
4154479.93       0.00872
```

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      66516.47    4154495.43         0.00590                          66535.85
4154519.24       0.00440
      66554.67    4154544.15         0.00340                          66562.98
4154569.06       0.00283
      66600.07    4154512.59         0.00347                          66593.98
4154512.04       0.00358
      66602.84    4154502.07         0.00368                          66597.30
4154500.41       0.00381
      66588.45    4154510.38         0.00370                          66583.46
4154509.82       0.00379
      66578.48    4154508.16         0.00392                          66572.39
4154506.50       0.00408
      66564.09    4154505.95         0.00425                          66565.19
4154497.09       0.00451
      66570.73    4154497.09         0.00439                          66577.37
4154498.20       0.00423
      66582.36    4154499.30         0.00410                          66589.55
4154499.86       0.00395
      66605.05    4154575.70         0.00237                          66600.63
4154570.17       0.00247
      66596.20    4154564.63         0.00258                          66592.32
4154556.88       0.00273
      66588.45    4154549.68         0.00289                          66584.02
4154545.81       0.00300
      66590.11    4154541.38         0.00302                          66595.09
4154539.72       0.00299
      66600.63    4154545.81         0.00283                          66602.84
4154552.45       0.00270
      66607.27    4154559.65         0.00256                          66611.14
4154567.40       0.00242
      66615.57    4154572.94         0.00232                          66628.27
4154502.03       0.00331
      66637.73    4154502.03         0.00319                          66628.27
4154507.03       0.00321
      66637.73    4154507.03         0.00310                          66624.39
4154512.03       0.00317
      66637.73    4154512.03         0.00301                          66624.39
4154517.03       0.00307
      66637.73    4154517.03         0.00292                          66624.39
4154522.03       0.00298
      66636.07    4154522.03         0.00286                          66621.07
4154527.03       0.00293
      66636.07    4154527.03         0.00278                          66621.07
4154532.03       0.00285
      66636.07    4154532.03         0.00270                          66621.07
4154537.03       0.00277
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                            INCLUDING SOURCE(S):   PAREA1   ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

     X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
          66636.07   4154537.03   0.00263   66081.88
4154382.49   0.00409
          66090.73   4154385.26   0.00490   66107.34
4154381.38   0.00693
          66110.11   4154374.74   0.00683   66115.65
4154356.47   0.00618
          66120.63   4154347.06   0.00616   66112.88
4154366.43   0.00657
          66127.27   4154338.75   0.00639   66097.93
4154368.65   0.00465
          66099.59   4154362.00   0.00449   66102.91
4154354.81   0.00448
          66105.13   4154348.16   0.00439   66108.45
4154341.52   0.00440
          66068.59   4154435.08   0.01187   66074.68
4154437.30   0.01411
          66081.88   4154438.96   0.01721   66091.29
4154441.73   0.02428
          66096.82   4154442.83   0.03040   66081.32
4154419.58   0.00865
          66087.97   4154421.80   0.01013   66094.61
4154425.12   0.01273
          66101.81   4154426.23   0.01567   66045.89
4154304.98   0.00139
          66054.20   4154308.30   0.00152   66062.50
4154312.73   0.00170
          66071.91   4154317.16   0.00196   66047.55
4154362.00   0.00231
          66048.66   4154355.36   0.00215   66050.87
4154348.16   0.00202
          66054.20   4154340.97   0.00194   66058.07
4154333.77   0.00189

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        66059.18    4154327.68        0.00182                      66032.05
4154360.34        0.00210
        66034.26    4154351.49        0.00190                      66037.59
4154345.40        0.00181
        66040.91    4154339.31        0.00174                      66045.34
4154331.00        0.00166
        66047.55    4154323.25        0.00159                      66051.98
4154381.38        0.00309
        66058.62    4154381.38        0.00322                      66019.32
4154369.76        0.00226
        66025.41    4154371.97        0.00238                      66032.05
4154373.63        0.00250
        66036.48    4154375.29        0.00261                      66054.75
4154421.80        0.00696
        66047.55    4154422.90        0.00666                      66040.91
4154419.58        0.00584
        66034.82    4154417.92        0.00536                      66021.53
4154415.15        0.00460
        66013.78    4154415.15        0.00434                      66005.48
4154417.37        0.00424
        65997.17    4154419.58        0.00412                      66056.41
4154489.34        0.03074
        66058.62    4154481.59        0.02981                      66061.39
4154472.73        0.02790
        66063.05    4154463.32        0.02397                      66067.48
4154455.01        0.02147
        66028.17    4154433.42        0.00687                      66034.26
4154432.87        0.00725
        66040.35    4154435.08        0.00815                      66047.55
4154436.19        0.00914
        66000.49    4154435.08        0.00540                      65967.83
4154569.62        0.01272
        65970.04    4154560.20        0.01285                      65996.06
4154443.94        0.00596
        65970.04    4154548.58        0.01255                      65970.04
4154538.06        0.01211
        65970.04    4154526.43        0.01145                      65971.15
4154513.14        0.01061
        65974.47    4154500.97        0.00993                      65976.69
4154491.00        0.00921
        65980.01    4154483.25        0.00876                      65984.44
4154473.28        0.00813
        65988.87    4154463.87        0.00750                      65992.19
4154453.91        0.00670
        65932.40    4154554.67        0.00913                      65943.47
4154558.54        0.01016
        65956.76    4154553.56        0.01126                      65955.65
4154540.27        0.01062
```
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   PAREA1   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                     **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         65956.76   4154533.63   0.01040   66027.62
4154498.75   0.01981
         66023.19   4154506.50   0.01958   66020.42
4154516.47   0.01984
         66017.66   4154526.99   0.01981   66014.89
4154535.84   0.01946
         66013.78   4154545.26   0.01931   66012.67
4154554.11   0.01898
         66011.01   4154561.86   0.01848   66009.91
4154571.83   0.01790
         66007.69   4154583.46   0.01700   66005.48
4154595.64   0.01601
         65999.94   4154606.15   0.01485   65963.40
4154584.01   0.01230
         65957.86   4154594.53   0.01173   65950.11
4154606.71   0.01100
         65951.22   4154617.78   0.01086   65953.44
4154622.21   0.01089
         65965.61   4154625.53   0.01151   65973.37
4154623.32   0.01207
         65980.01   4154621.66   0.01256   65987.21
4154617.78   0.01323
         66040.91   4154507.61   0.02581   66038.69
4154514.25   0.02547
         66033.16   4154523.66   0.02397   66030.94
4154535.29   0.02337
         66028.73   4154548.58   0.02239   66027.62
4154560.20   0.02146
         66024.85   4154571.83   0.02011   66020.98
4154585.67   0.01844

66016.55	4154600.06	0.01676	66011.57	
4154612.80	0.01530			
65918.56	4154566.85	0.00850	65926.86	
4154570.72	0.00917			
65935.17	4154571.83	0.00981	65943.47	
4154575.71	0.01053			
65900.29	4154620.55	0.00806	65908.04	
4154618.89	0.00844			
65919.11	4154617.78	0.00901	65931.29	
4154614.46	0.00971			
65901.39	4154631.07	0.00808	65908.59	
4154629.96	0.00841			
65915.79	4154628.85	0.00876	65922.99	
4154627.19	0.00913			
65930.18	4154625.53	0.00952	65939.04	
4154624.98	0.01001			
65947.90	4154634.39	0.01026	65952.88	
4154636.60	0.01044			
65957.86	4154637.71	0.01066	65962.29	
4154638.82	0.01084			
65975.58	4154638.27	0.01152	65980.01	
4154635.50	0.01189			
65986.10	4154634.39	0.01227	65991.08	
4154630.51	0.01276			
66080.77	4154521.45	0.04521	66076.89	
4154535.84	0.03862			
66073.57	4154551.35	0.03311	66070.25	
4154567.95	0.02824			
66067.48	4154582.90	0.02456	66063.05	
4154602.28	0.02049			
66060.84	4154617.78	0.01787	66058.07	
4154631.07	0.01589			
66055.86	4154644.91	0.01412	66051.98	
4154659.30	0.01252			
66106.24	4154529.20	0.05368	66100.15	
4154542.49	0.04377			
66096.27	4154556.33	0.03665	66091.84	
4154572.94	0.03007			
66088.52	4154586.78	0.02575	66085.75	
4154606.71	0.02091			
66082.98	4154620.55	0.01817	66080.77	
4154636.05	0.01563			
66076.34	4154648.78	0.01387	66071.91	
4154664.29	0.01209			
66147.76	4154547.47	0.05225	66146.10	
4154558.54	0.04334			
66144.99	4154569.62	0.03633	66143.88	
4154584.01	0.02923			
66140.56	4154598.40	0.02388	66138.35	
4154609.48	0.02064			

                              PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5 YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   PAREA1   ,

                                     *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                     **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
66136.13	4154623.87	0.01727	66133.92	4154637.16	0.01482
66132.26	4154651.00	0.01274	66130.60	4154664.29	0.01113
66136.13	4154672.59	0.01009	66141.67	4154672.59	0.00992
66148.31	4154668.71	0.01010	66150.53	4154653.77	0.01172
66154.96	4154639.93	0.01350	66156.62	4154624.42	0.01624
66158.28	4154612.24	0.01897	66162.71	4154597.30	0.02318
66162.15	4154582.35	0.02932	66165.47	4154570.17	0.03576
66166.58	4154560.76	0.04226	66169.35	4154553.01	0.04886
66211.31	4154558.54	0.03698	66243.54	4154558.54	0.02396
66211.31	4154570.27	0.02805	66243.54	4154570.27	0.01887
66211.31	4154582.00	0.02215	66243.54	4154582.00	0.01543
66211.31	4154593.73	0.01807	66243.54	4154593.73	0.01297
66211.31	4154605.46	0.01511	66243.54	4154605.46	0.01114
66211.31	4154617.19	0.01288	66243.54	4154617.19	0.00972

66211.31	4154628.92	0.01116		66243.54
4154628.92	0.00859			
66211.31	4154640.65	0.00979		66243.54
4154640.65	0.00768			
66211.31	4154652.38	0.00868		66243.54
4154652.38	0.00692			
66211.31	4154664.11	0.00777		66243.54
4154664.11	0.00629			
66211.31	4154675.84	0.00700		66243.54
4154675.84	0.00575			
66211.31	4154687.57	0.00636		66243.54
4154687.57	0.00528			
66074.13	4154255.15	0.00143		66079.11
4154259.03	0.00154			
66085.75	4154262.90	0.00170		66092.95
4154265.12	0.00189			
66118.97	4154275.64	0.00292		66123.95
4154278.41	0.00322			
66130.60	4154281.73	0.00366		66140.56
4154286.16	0.00443			
66110.33	4154208.76	0.00168		66092.35
4154205.44	0.00136			
66150.53	4154208.76	0.00262		66097.60
4154192.27	0.00135			
66142.49	4154222.16	0.00264		66150.53
4154222.16	0.00289			
66110.33	4154235.56	0.00197		66118.37
4154235.56	0.00217			
66126.41	4154235.56	0.00240		66134.45
4154235.56	0.00265			
66142.49	4154235.56	0.00292		66150.53
4154235.56	0.00321			
66126.41	4154248.96	0.00264		66134.45
4154248.96	0.00293			
66142.49	4154248.96	0.00325		66150.53
4154248.96	0.00359			
66126.41	4154262.36	0.00293		66134.45
4154262.36	0.00327			
66142.49	4154262.36	0.00364		66150.53
4154262.36	0.00404			
66159.94	4154229.13	0.00339		66162.15
4154217.51	0.00317			
66166.58	4154206.43	0.00304		66084.09
4154219.72	0.00134			
66090.36	4154219.72	0.00143		66096.63
4154219.72	0.00154			
66102.90	4154219.72	0.00165		66084.09
4154231.90	0.00142			
66090.36	4154231.90	0.00153		66096.63
4154231.90	0.00164			

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        66102.90   4154231.90        0.00176                        66084.09
4154244.08        0.00151
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♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   09:58:15

                         PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   PAREA1   ,

                                           *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        66090.36   4154244.08   0.00163   66096.63
4154244.08   0.00175
        66102.90   4154244.08   0.00189   66084.09
4154256.26   0.00161
        66090.36   4154256.26   0.00174   66096.63
4154256.26   0.00188
        66175.44   4154190.86   0.00294   66121.30
4154149.34   0.00137
        66136.36   4154149.34   0.00157   66151.42
4154149.34   0.00180
        66166.48   4154149.34   0.00206   66106.24
4154159.34   0.00125
        66121.30   4154159.34   0.00144   66136.36
4154159.34   0.00166
        66151.42   4154159.34   0.00191   66166.48
4154159.34   0.00219
        66106.24   4154169.34   0.00132   66121.30
4154169.34   0.00152
        66136.36   4154169.34   0.00175   66151.42
4154169.34   0.00203
        66166.48   4154169.34   0.00234   66106.24
4154179.34   0.00138
        66121.30   4154179.34   0.00160   66136.36
4154179.34   0.00186
        66151.42   4154179.34   0.00216   66166.48
4154179.34   0.00250
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| | | | |
|---|---|---|---|
| 66106.24 | 4154189.34 | 0.00145 | 66121.30 |
| 4154189.34 | 0.00169 | | |
| 66166.48 | 4154189.34 | 0.00267 | 66178.21 |
| 4154180.97 | 0.00281 | | |
| 66176.83 | 4154174.29 | 0.00265 | 66179.59 |
| 4154164.39 | 0.00254 | | |
| 66179.04 | 4154161.00 | 0.00247 | 66181.81 |
| 4154151.11 | 0.00238 | | |
| 66097.10 | 4154211.38 | 0.00148 | 66099.87 |
| 4154201.49 | 0.00145 | | |
| 66143.88 | 4154278.41 | 0.00430 | 66146.65 |
| 4154272.87 | 0.00424 | | |
| 66078.00 | 4154244.08 | 0.00141 | 66157.72 |
| 4154198.68 | 0.00262 | | |
| 66115.65 | 4154199.79 | 0.00169 | 66158.83 |
| 4154241.87 | 0.00373 | | |
| 65913.12 | 4154678.08 | 0.00780 | 65925.60 |
| 4154683.61 | 0.00802 | | |
| 65936.98 | 4154683.61 | 0.00832 | 65948.36 |
| 4154690.26 | 0.00838 | | |
| 65959.74 | 4154690.26 | 0.00865 | 65970.02 |
| 4154685.83 | 0.00907 | | |
| 65981.40 | 4154685.83 | 0.00932 | 65992.78 |
| 4154678.08 | 0.00998 | | |
| 65913.67 | 4154703.04 | 0.00721 | 65925.05 |
| 4154703.04 | 0.00745 | | |
| 65935.88 | 4154708.03 | 0.00752 | 65947.26 |
| 4154708.03 | 0.00772 | | |
| 65958.64 | 4154708.03 | 0.00792 | 65970.02 |
| 4154708.03 | 0.00809 | | |
| 65982.50 | 4154703.60 | 0.00847 | 65993.88 |
| 4154703.60 | 0.00862 | | |
| 66011.57 | 4154675.91 | 0.01051 | 66028.17 |
| 4154671.48 | 0.01112 | | |
| 66038.69 | 4154669.27 | 0.01144 | 66007.69 |
| 4154700.27 | 0.00895 | | |
| 66020.98 | 4154695.84 | 0.00933 | 66034.26 |
| 4154690.86 | 0.00974 | | |
| 66048.11 | 4154688.65 | 0.00994 | 66063.05 |
| 4154682.56 | 0.01040 | | |
| 65899.18 | 4154699.72 | 0.00697 | 65899.73 |
| 4154674.25 | 0.00748 | | |
| 65887.55 | 4154693.63 | 0.00681 | 65886.45 |
| 4154670.38 | 0.00714 | | |
| 65873.16 | 4154677.02 | 0.00668 | 65864.58 |
| 4154697.33 | 0.00622 | | |
| 65881.82 | 4154705.08 | 0.00649 | 65858.49 |
| 4154717.33 | 0.00583 | | |
| 65878.49 | 4154717.33 | 0.00620 | 65850.74 |
| 4154734.57 | 0.00546 | | |

```
        65869.08   4154734.57   0.00575   65858.49
4154757.33   0.00523
        65850.26   4154749.03   0.00525   65877.32
4154743.56   0.00571
```
↟ *** AERMOD - VERSION  18081 ***    *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc              ***        02/08/21
 *** AERMET - VERSION  14134 ***    ***
                        ***        09:58:15


                                    PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL        ***
                                    INCLUDING SOURCE(S):      PAREA1      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

      X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
        65874.62    4154762.94        0.00531                        65887.84
4154748.06        0.00576
        65887.91    4154766.88        0.00537                        65899.18
4154749.54        0.00586
        65915.21    4154755.63        0.00589                        65932.35
4154760.61        0.00590
        65949.49    4154760.61        0.00601                        65966.63
4154760.61        0.00610
        65983.77    4154760.61        0.00614                        66003.13
4154756.74        0.00629
        66019.16    4154749.54        0.00655                        66036.30
4154749.54        0.00648
        66054.55    4154741.79        0.00669                        66070.03
4154736.81        0.00677
        66087.17    4154735.15        0.00663                        65900.84
4154774.46        0.00532
        65916.32    4154779.44        0.00532                        65933.46
4154779.44        0.00541
        65950.60    4154779.44        0.00548                        65967.74
4154779.44        0.00552
        65984.88    4154779.44        0.00553                        66002.02
4154779.44        0.00550
        66017.50    4154773.90        0.00564                        66034.64
4154773.90        0.00555
```

```
      66047.35    4154766.71        0.00572                    66061.72
4154761.72      0.00577
      66076.65    4154757.85        0.00576                    66098.49
4154732.94      0.00657
      66090.73    4154752.31        0.00581                    66107.90
4154727.96      0.00668
      66116.12    4154722.42        0.00683                    66125.45
4154722.42      0.00667
      66134.78    4154717.44        0.00677                    66144.11
4154714.12      0.00676
      66151.23    4154710.79        0.00679                    66161.66
4154707.47      0.00673
      66171.55    4154703.60        0.00670                    66181.43
4154699.17      0.00667
      66191.87    4154698.06        0.00643                    66202.30
4154691.42      0.00645
      66235.99    4154699.17        0.00510                    66106.79
4154744.56      0.00590
      66116.12    4154744.56        0.00576                    66126.00
4154740.13      0.00580
      66135.33    4154740.13        0.00565                    66143.56
4154731.83      0.00587
      66153.99    4154727.40        0.00588                    66162.77
4154725.18      0.00581
      66171.55    4154720.75        0.00583                    66181.98
4154717.43      0.00575
      66194.64    4154713.56        0.00563                    66210.61
4154711.34      0.00533
      66222.15    4154706.91        0.00520                    65678.61
4154862.02      0.00281
      65714.88    4153989.87        0.00016                    67105.13
4154013.18      0.00206
      67112.04    4154867.20        0.00043                    66221.88
4154539.70      0.05977
      66095.26    4154492.74        0.07509                    66160.24
4154517.90      0.09897
      66129.22    4154504.90        0.09645                    66195.46
4154530.06      0.08494
      66145.57    4154512.45        0.09796                    66178.27
4154525.86      0.08945
      66111.61    4154499.45        0.08893                    66208.46
4154536.76      0.07109
```
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                          ***   09:58:15

                         PAGE 19
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **

                          NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR,
ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -
- - - - - - - - - - - - - - - - - - -

ALL   1ST HIGHEST VALUE IS   0.09897 AT (66160.24,   4154517.90,
4.00,   680.00,   0.00) DC
         2ND HIGHEST VALUE IS   0.09796 AT (66145.57,   4154512.45,
4.00,   680.00,   0.00) DC
         3RD HIGHEST VALUE IS   0.09645 AT (66129.22,   4154504.90,
4.00,   680.00,   0.00) DC
         4TH HIGHEST VALUE IS   0.08945 AT (66178.27,   4154525.86,
4.00,   680.00,   0.00) DC
         5TH HIGHEST VALUE IS   0.08893 AT (66111.61,   4154499.45,
4.00,   680.00,   0.00) DC
         6TH HIGHEST VALUE IS   0.08494 AT (66195.46,   4154530.06,
4.00,   680.00,   0.00) DC
         7TH HIGHEST VALUE IS   0.07509 AT (66095.26,   4154492.74,
4.00,   680.00,   0.00) DC
         8TH HIGHEST VALUE IS   0.07109 AT (66208.46,   4154536.76,
4.00,   680.00,   0.00) DC
         9TH HIGHEST VALUE IS   0.05977 AT (66221.88,   4154539.70,
4.00,   680.00,   0.00) DC
        10TH HIGHEST VALUE IS   0.05693 AT (66317.72,   4154473.28,
4.00,   680.00,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas\125 N
Milpitas.isc   ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                      ***   09:58:15

                                  PAGE 20
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** Message Summary : AERMOD Model Execution ***

```
  --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            1 Warning Message(s)
A Total of        13130 Informational Message(s)

A Total of        43872 Hours Were Processed

A Total of        11611 Calm Hours Identified

A Total of         1519 Missing Hours Identified (  3.46 Percent)


    ******** FATAL ERROR MESSAGES ********
            ***  NONE  ***


    ********   WARNING MESSAGES   ********
MX W481   43873        MAIN: Data Remaining After End of Year. Number of Hours=
      48

    **********************************
    *** AERMOD Finishes Successfully ***
    **********************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 2/8/2021
** File: C:\Lakes\AERMOD View\125 N Milpitas_TOTAL PM2\125 N Milpitas_TOTAL PM2.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\125 N Milpitas_TOTAL PM2\125 N Milpitas_TOTAL P
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   URBANOPT 79517 Milpitas_Population
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "125 N Milpitas_TOTAL PM2.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1        AREAPOLY    66166.034  4154486.535          4.000
** Source Parameters **
   SRCPARAM PAREA1         1.3164E-07     2.000         12
   AREAVERT PAREA1         66166.034 4154486.535 66164.812 4154490.507
   AREAVERT PAREA1         66190.784 4154501.202 66193.229 4154496.313
   AREAVERT PAREA1         66224.396 4154508.535 66221.952 4154513.119
   AREAVERT PAREA1         66246.091 4154520.452 66259.230 4154480.729
   AREAVERT PAREA1         66125.700 4154430.006 66108.894 4154470.035
   AREAVERT PAREA1         66133.339 4154479.507 66136.395 4154474.618
**
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
```

```
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "125 N Milpitas_TOTAL PM2.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE C:\Users\kheck\Desktop\724945\724945.SFC
   PROFFILE C:\Users\kheck\Desktop\724945\724945.PFL
   SURFDATA 23293 2009 San_Jose_International_Airport
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 11.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "125 N MILPITAS_TOTAL PM2.AD\AN00GALL.PLT" 31
   SUMMFILE "125 N Milpitas_TOTAL PM2.sum"
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 2/8/2021
** File: C:\Lakes\AERMOD View\125 N Milpitas_TOTAL PM2\125 N Milpitas_TOTAL PM2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\125 N Milpitas_TOTAL PM2\125 N Milpitas_TOTAL P
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   URBANOPT 79517 Milpitas_Population
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "125 N Milpitas_TOTAL PM2.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1        AREAPOLY    66166.034   4154486.535           4.000
** Source Parameters **
   SRCPARAM PAREA1          1.3164E-07     2.000          12
   AREAVERT PAREA1          66166.034 4154486.535 66164.812 4154490.507
   AREAVERT PAREA1          66190.784 4154501.202 66193.229 4154496.313
   AREAVERT PAREA1          66224.396 4154508.535 66221.952 4154513.119
   AREAVERT PAREA1          66246.091 4154520.452 66259.230 4154480.729
   AREAVERT PAREA1          66125.700 4154430.006 66108.894 4154470.035
   AREAVERT PAREA1          66133.339 4154479.507 66136.395 4154474.618
**
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
```

```
**
***************************************
** AERMOD Receptor Pathway
***************************************
**
**
RE STARTING
   INCLUDED "125 N Milpitas_TOTAL PM2.rou"
RE FINISHED
**
***************************************
** AERMOD Meteorology Pathway
***************************************
**
**
ME STARTING
   SURFFILE C:\Users\kheck\Desktop\724945\724945.SFC
   PROFFILE C:\Users\kheck\Desktop\724945\724945.PFL
   SURFDATA 23293 2009 San_Jose_International_Airport
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 11.0 METERS
ME FINISHED
**
***************************************
** AERMOD Output Pathway
***************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "125 N MILPITAS_TOTAL PM2.AD\AN00GALL.PLT" 31
   SUMMFILE "125 N Milpitas_TOTAL PM2.sum"
OU FINISHED

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

♠ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***           02/08/21
 *** AERMET - VERSION  14134 ***    ***
                        ***           10:58:33

                                    PAGE    1
 *** MODELOPTs:     RegDFAULT  CONC  ELEV  URBAN


                                    ***      MODEL SETUP OPTIONS SUMMARY
  ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - -
```

**Model Is Setup For Calculation of Average CONCentration Values.

    -- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for   1 Source(s),
  for Total of   1 Urban Area(s):
  Urban Population =   79517.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates ANNUAL Averages Only

 **This Run Includes: 1 Source(s);   1 Source Group(s); and   466
Receptor(s)

                with: 0 POINT(s), including
                           0 POINTCAP(s) and   0 POINTHOR(s)
                and: 0 VOLUME source(s)
                and: 1 AREA type source(s)
                and: 0 LINE source(s)
                and: 0 OPENPIT source(s)
                and: 0 BUOYANT LINE source(s) with   0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
        Model Outputs Tables of ANNUAL Averages by Receptor
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE

Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   11.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                 Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: 125 N Milpitas_TOTAL PM2.err

 **File for Summary of Results: 125 N Milpitas_TOTAL PM2.sum

⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                           ***   10:58:33

                                   PAGE   2
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN

                                          *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA BASE   RELEASE NUMBER
  INIT.   URBAN   EMISSION RATE
   SOURCE   PART. (GRAMS/SEC   X   Y   ELEV.   HEIGHT OF VERTS.
   SZ   SOURCE SCALAR VARY
     ID   CATS. /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- -

 PAREA1   0   0.13164E-06   66166.0 4154486.5   4.0   2.00   12
    0.00   YES
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL

PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   10:58:33

                                      PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                        *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID   SOURCE IDs
 -----------   ----------

  ALL   PAREA1   ,
 ♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   10:58:33

                                      PAGE   4
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

            79517.   PAREA1   ,
 ♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                         ***   10:58:33

                                      PAGE   5
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

    (66313.3, 4154531.4,   4.0,   680.0,   0.0);   (66314.9,
4154502.6,   4.0,   680.0,   0.0);
    (66317.7, 4154473.3,   4.0,   680.0,   0.0);   (66325.5,
4154440.6,   4.0,   680.0,   0.0);
    (66316.9, 4154570.0,   4.0,   680.0,   0.0);   (66316.9,

4154590.0,   4.0,   680.0,   0.0);
        (66316.9, 4154610.0,   4.0,   680.0,   0.0);   (66316.9,
4154630.0,   4.0,   680.0,   0.0);
        (66316.9, 4154650.0,   4.0,   680.0,   0.0);   (66359.4,
4154488.6,   4.0,   680.0,   0.0);
        (66384.4, 4154488.6,   4.0,   680.0,   0.0);   (66359.4,
4154533.6,   4.0,   680.0,   0.0);
        (66384.4, 4154533.6,   4.0,   680.0,   0.0);   (66359.4,
4154578.6,   4.0,   680.0,   0.0);
        (66384.4, 4154578.6,   4.0,   680.0,   0.0);   (66359.4,
4154623.6,   4.0,   680.0,   0.0);
        (66384.4, 4154623.6,   4.0,   680.0,   0.0);   (66368.7,
4154451.1,   4.0,   680.0,   0.0);
        (66404.6, 4154460.0,   4.0,   680.0,   0.0);   (66411.8,
4154617.2,   4.0,   680.0,   0.0);
        (66412.9, 4154580.7,   4.0,   680.0,   0.0);   (66446.2,
4154610.0,   4.0,   680.0,   0.0);
        (66445.1, 4154571.3,   4.0,   680.0,   0.0);   (66479.4,
4154597.3,   4.0,   680.0,   0.0);
        (66414.1, 4154542.5,   4.0,   680.0,   0.0);   (66435.6,
4154504.8,   4.0,   680.0,   0.0);
        (66447.3, 4154543.6,   4.0,   680.0,   0.0);   (66482.7,
4154546.4,   4.0,   680.0,   0.0);
        (66504.3, 4154586.2,   4.0,   680.0,   0.0);   (66537.0,
4154582.9,   4.0,   680.0,   0.0);
        (66475.5, 4154504.3,   4.0,   680.0,   0.0);   (66517.0,
4154537.5,   4.0,   680.0,   0.0);
        (66450.6, 4154470.5,   4.0,   680.0,   0.0);   (66477.2,
4154479.9,   4.0,   680.0,   0.0);
        (66516.5, 4154495.4,   4.5,   680.0,   0.0);   (66535.9,
4154519.2,   4.5,   680.0,   0.0);
        (66554.7, 4154544.1,   4.4,   680.0,   0.0);   (66563.0,
4154569.1,   4.7,   680.0,   0.0);
        (66600.1, 4154512.6,   5.0,   680.0,   0.0);   (66594.0,
4154512.0,   5.0,   680.0,   0.0);
        (66602.8, 4154502.1,   5.0,   680.0,   0.0);   (66597.3,
4154500.4,   5.0,   680.0,   0.0);
        (66588.4, 4154510.4,   5.0,   680.0,   0.0);   (66583.5,
4154509.8,   5.0,   680.0,   0.0);
        (66578.5, 4154508.2,   5.0,   680.0,   0.0);   (66572.4,
4154506.5,   5.0,   680.0,   0.0);
        (66564.1, 4154505.9,   5.0,   680.0,   0.0);   (66565.2,
4154497.1,   5.0,   680.0,   0.0);
        (66570.7, 4154497.1,   5.0,   680.0,   0.0);   (66577.4,
4154498.2,   5.0,   680.0,   0.0);
        (66582.4, 4154499.3,   5.0,   680.0,   0.0);   (66589.6,
4154499.9,   5.0,   680.0,   0.0);
        (66605.1, 4154575.7,   5.0,   680.0,   0.0);   (66600.6,
4154570.2,   5.0,   680.0,   0.0);
        (66596.2, 4154564.6,   5.0,   680.0,   0.0);   (66592.3,

```
4154556.9,        5.0,       680.0,        0.0);
     (  66588.4, 4154549.7,       5.0,       680.0,        0.0);            (  66584.0,
4154545.8,        5.0,       680.0,        0.0);
     (  66590.1, 4154541.4,       5.0,       680.0,        0.0);            (  66595.1,
4154539.7,        5.0,       680.0,        0.0);
     (  66600.6, 4154545.8,       5.0,       680.0,        0.0);            (  66602.8,
4154552.4,        5.0,       680.0,        0.0);
     (  66607.3, 4154559.6,       5.0,       680.0,        0.0);            (  66611.1,
4154567.4,        5.0,       680.0,        0.0);
     (  66615.6, 4154572.9,       5.0,       680.0,        0.0);            (  66628.3,
4154502.0,        5.0,       680.0,        0.0);
     (  66637.7, 4154502.0,       5.2,       680.0,        0.0);            (  66628.3,
4154507.0,        5.0,       680.0,        0.0);
     (  66637.7, 4154507.0,       5.2,       680.0,        0.0);            (  66624.4,
4154512.0,        5.0,       680.0,        0.0);
     (  66637.7, 4154512.0,       5.1,       680.0,        0.0);            (  66624.4,
4154517.0,        5.0,       680.0,        0.0);
     (  66637.7, 4154517.0,       5.1,       680.0,        0.0);            (  66624.4,
4154522.0,        5.0,       680.0,        0.0);
     (  66636.1, 4154522.0,       5.0,       680.0,        0.0);            (  66621.1,
4154527.0,        5.0,       680.0,        0.0);
     (  66636.1, 4154527.0,       5.0,       680.0,        0.0);            (  66621.1,
4154532.0,        5.0,       680.0,        0.0);
     (  66636.1, 4154532.0,       5.0,       680.0,        0.0);            (  66621.1,
4154537.0,        5.0,       680.0,        0.0);
     (  66636.1, 4154537.0,       5.0,       680.0,        0.0);            (  66081.9,
4154382.5,        4.0,       680.0,        0.0);
     (  66090.7, 4154385.3,       4.0,       680.0,        0.0);            (  66107.3,
4154381.4,        4.0,       680.0,        0.0);
     (  66110.1, 4154374.7,       4.0,       680.0,        0.0);            (  66115.7,
4154356.5,        4.0,       680.0,        0.0);
     (  66120.6, 4154347.1,       4.0,       680.0,        0.0);            (  66112.9,
4154366.4,        4.0,       680.0,        0.0);
     (  66127.3, 4154338.8,       4.0,       680.0,        0.0);            (  66097.9,
4154368.6,        4.0,       680.0,        0.0);
```
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                      ***   10:58:33

                           PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                              *** DISCRETE CARTESIAN RECEPTORS ***
                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                    (METERS)


```
     (  66099.6, 4154362.0,       4.0,       680.0,        0.0);            (  66102.9,
4154354.8,        4.0,       680.0,        0.0);
     (  66105.1, 4154348.2,       4.0,       680.0,        0.0);            (  66108.4,
```

4154341.5,   4.0,   680.0,   0.0);
      (66068.6, 4154435.1,   4.0,   680.0,   0.0);   (66074.7,
4154437.3,   4.0,   680.0,   0.0);
      (66081.9, 4154439.0,   4.0,   680.0,   0.0);   (66091.3,
4154441.7,   4.0,   680.0,   0.0);
      (66096.8, 4154442.8,   4.0,   680.0,   0.0);   (66081.3,
4154419.6,   4.0,   680.0,   0.0);
      (66088.0, 4154421.8,   4.0,   680.0,   0.0);   (66094.6,
4154425.1,   4.0,   680.0,   0.0);
      (66101.8, 4154426.2,   4.0,   680.0,   0.0);   (66045.9,
4154305.0,   4.0,   680.0,   0.0);
      (66054.2, 4154308.3,   4.0,   680.0,   0.0);   (66062.5,
4154312.7,   4.0,   680.0,   0.0);
      (66071.9, 4154317.2,   4.0,   680.0,   0.0);   (66047.6,
4154362.0,   4.0,   680.0,   0.0);
      (66048.7, 4154355.4,   4.0,   680.0,   0.0);   (66050.9,
4154348.2,   4.0,   680.0,   0.0);
      (66054.2, 4154341.0,   4.0,   680.0,   0.0);   (66058.1,
4154333.8,   4.0,   680.0,   0.0);
      (66059.2, 4154327.7,   4.0,   680.0,   0.0);   (66032.1,
4154360.3,   4.0,   680.0,   0.0);
      (66034.3, 4154351.5,   4.0,   680.0,   0.0);   (66037.6,
4154345.4,   4.0,   680.0,   0.0);
      (66040.9, 4154339.3,   4.0,   680.0,   0.0);   (66045.3,
4154331.0,   4.0,   680.0,   0.0);
      (66047.6, 4154323.2,   4.0,   680.0,   0.0);   (66052.0,
4154381.4,   4.0,   680.0,   0.0);
      (66058.6, 4154381.4,   4.0,   680.0,   0.0);   (66019.3,
4154369.8,   4.0,   680.0,   0.0);
      (66025.4, 4154372.0,   4.0,   680.0,   0.0);   (66032.1,
4154373.6,   4.0,   680.0,   0.0);
      (66036.5, 4154375.3,   4.0,   680.0,   0.0);   (66054.8,
4154421.8,   4.0,   680.0,   0.0);
      (66047.6, 4154422.9,   4.0,   680.0,   0.0);   (66040.9,
4154419.6,   4.0,   680.0,   0.0);
      (66034.8, 4154417.9,   4.0,   680.0,   0.0);   (66021.5,
4154415.1,   4.0,   680.0,   0.0);
      (66013.8, 4154415.1,   4.0,   680.0,   0.0);   (66005.5,
4154417.4,   4.0,   680.0,   0.0);
      (65997.2, 4154419.6,   4.0,   680.0,   0.0);   (66056.4,
4154489.3,   4.0,   680.0,   0.0);
      (66058.6, 4154481.6,   4.0,   680.0,   0.0);   (66061.4,
4154472.7,   4.0,   680.0,   0.0);
      (66063.1, 4154463.3,   4.0,   680.0,   0.0);   (66067.5,
4154455.0,   4.0,   680.0,   0.0);
      (66028.2, 4154433.4,   4.0,   680.0,   0.0);   (66034.3,
4154432.9,   4.0,   680.0,   0.0);
      (66040.4, 4154435.1,   4.0,   680.0,   0.0);   (66047.6,
4154436.2,   4.0,   680.0,   0.0);
      (66000.5, 4154435.1,   4.0,   680.0,   0.0);   (65967.8,

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4154569.6,        4.0,       680.0,        0.0);
     (  65970.0, 4154560.2,        4.0,       680.0,        0.0);         (  65996.1,
4154443.9,        4.0,       680.0,        0.0);
     (  65970.0, 4154548.6,        4.0,       680.0,        0.0);         (  65970.0,
4154538.1,        4.0,       680.0,        0.0);
     (  65970.0, 4154526.4,        4.0,       680.0,        0.0);         (  65971.2,
4154513.1,        4.0,       680.0,        0.0);
     (  65974.5, 4154501.0,        4.0,       680.0,        0.0);         (  65976.7,
4154491.0,        4.0,       680.0,        0.0);
     (  65980.0, 4154483.2,        4.0,       680.0,        0.0);         (  65984.4,
4154473.3,        4.0,       680.0,        0.0);
     (  65988.9, 4154463.9,        4.0,       680.0,        0.0);         (  65992.2,
4154453.9,        4.0,       680.0,        0.0);
     (  65932.4, 4154554.7,        4.0,       680.0,        0.0);         (  65943.5,
4154558.5,        4.0,       680.0,        0.0);
     (  65956.8, 4154553.6,        4.0,       680.0,        0.0);         (  65955.7,
4154540.3,        4.0,       680.0,        0.0);
     (  65956.8, 4154533.6,        4.0,       680.0,        0.0);         (  66027.6,
4154498.8,        4.0,       680.0,        0.0);
     (  66023.2, 4154506.5,        4.0,       680.0,        0.0);         (  66020.4,
4154516.5,        4.0,       680.0,        0.0);
     (  66017.7, 4154527.0,        4.0,       680.0,        0.0);         (  66014.9,
4154535.8,        4.0,       680.0,        0.0);
     (  66013.8, 4154545.3,        4.0,       680.0,        0.0);         (  66012.7,
4154554.1,        4.0,       680.0,        0.0);
     (  66011.0, 4154561.9,        4.0,       680.0,        0.0);         (  66009.9,
4154571.8,        4.0,       680.0,        0.0);
     (  66007.7, 4154583.5,        4.0,       680.0,        0.0);         (  66005.5,
4154595.6,        4.0,       680.0,        0.0);
     (  65999.9, 4154606.1,        4.0,       680.0,        0.0);         (  65963.4,
4154584.0,        4.0,       680.0,        0.0);
     (  65957.9, 4154594.5,        4.0,       680.0,        0.0);         (  65950.1,
4154606.7,        4.0,       680.0,        0.0);
     (  65951.2, 4154617.8,        4.0,       680.0,        0.0);         (  65953.4,
4154622.2,        4.0,       680.0,        0.0);
     (  65965.6, 4154625.5,        4.0,       680.0,        0.0);         (  65973.4,
4154623.3,        4.0,       680.0,        0.0);
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                     PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN

                                 *** DISCRETE CARTESIAN RECEPTORS ***
                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                        (METERS)

     (65980.0, 4154621.7,   4.0,   680.0,   0.0);   (65987.2,

4154617.8,   4.0,   680.0,   0.0);
      (66040.9, 4154507.6,   4.0,   680.0,   0.0);   (66038.7,
4154514.2,   4.0,   680.0,   0.0);
      (66033.2, 4154523.7,   4.0,   680.0,   0.0);   (66030.9,
4154535.3,   4.0,   680.0,   0.0);
      (66028.7, 4154548.6,   4.0,   680.0,   0.0);   (66027.6,
4154560.2,   4.0,   680.0,   0.0);
      (66024.9, 4154571.8,   4.0,   680.0,   0.0);   (66021.0,
4154585.7,   4.0,   680.0,   0.0);
      (66016.6, 4154600.1,   4.0,   680.0,   0.0);   (66011.6,
4154612.8,   4.0,   680.0,   0.0);
      (65918.6, 4154566.8,   4.0,   680.0,   0.0);   (65926.9,
4154570.7,   4.0,   680.0,   0.0);
      (65935.2, 4154571.8,   4.0,   680.0,   0.0);   (65943.5,
4154575.7,   4.0,   680.0,   0.0);
      (65900.3, 4154620.5,   4.0,   680.0,   0.0);   (65908.0,
4154618.9,   4.0,   680.0,   0.0);
      (65919.1, 4154617.8,   4.0,   680.0,   0.0);   (65931.3,
4154614.5,   4.0,   680.0,   0.0);
      (65901.4, 4154631.1,   4.0,   680.0,   0.0);   (65908.6,
4154630.0,   4.0,   680.0,   0.0);
      (65915.8, 4154628.8,   4.0,   680.0,   0.0);   (65923.0,
4154627.2,   4.0,   680.0,   0.0);
      (65930.2, 4154625.5,   4.0,   680.0,   0.0);   (65939.0,
4154625.0,   4.0,   680.0,   0.0);
      (65947.9, 4154634.4,   4.0,   680.0,   0.0);   (65952.9,
4154636.6,   4.0,   680.0,   0.0);
      (65957.9, 4154637.7,   4.0,   680.0,   0.0);   (65962.3,
4154638.8,   4.0,   680.0,   0.0);
      (65975.6, 4154638.3,   4.0,   680.0,   0.0);   (65980.0,
4154635.5,   4.0,   680.0,   0.0);
      (65986.1, 4154634.4,   4.0,   680.0,   0.0);   (65991.1,
4154630.5,   4.0,   680.0,   0.0);
      (66080.8, 4154521.4,   4.0,   680.0,   0.0);   (66076.9,
4154535.8,   4.0,   680.0,   0.0);
      (66073.6, 4154551.3,   4.0,   680.0,   0.0);   (66070.2,
4154567.9,   4.0,   680.0,   0.0);
      (66067.5, 4154582.9,   4.0,   680.0,   0.0);   (66063.1,
4154602.3,   4.0,   680.0,   0.0);
      (66060.8, 4154617.8,   4.0,   680.0,   0.0);   (66058.1,
4154631.1,   4.0,   680.0,   0.0);
      (66055.9, 4154644.9,   4.0,   680.0,   0.0);   (66052.0,
4154659.3,   4.0,   680.0,   0.0);
      (66106.2, 4154529.2,   4.0,   680.0,   0.0);   (66100.2,
4154542.5,   4.0,   680.0,   0.0);
      (66096.3, 4154556.3,   4.0,   680.0,   0.0);   (66091.8,
4154572.9,   4.0,   680.0,   0.0);
      (66088.5, 4154586.8,   4.0,   680.0,   0.0);   (66085.8,
4154606.7,   4.0,   680.0,   0.0);
      (66083.0, 4154620.5,   4.0,   680.0,   0.0);   (66080.8,

4154636.0,   4.0,   680.0,   0.0);
      (66076.3, 4154648.8,   4.0,   680.0,   0.0);   (66071.9,
4154664.3,   4.0,   680.0,   0.0);
      (66147.8, 4154547.5,   4.0,   680.0,   0.0);   (66146.1,
4154558.5,   4.0,   680.0,   0.0);
      (66145.0, 4154569.6,   4.0,   680.0,   0.0);   (66143.9,
4154584.0,   4.0,   680.0,   0.0);
      (66140.6, 4154598.4,   4.0,   680.0,   0.0);   (66138.4,
4154609.5,   4.0,   680.0,   0.0);
      (66136.1, 4154623.9,   4.0,   680.0,   0.0);   (66133.9,
4154637.2,   4.0,   680.0,   0.0);
      (66132.3, 4154651.0,   4.0,   680.0,   0.0);   (66130.6,
4154664.3,   4.0,   680.0,   0.0);
      (66136.1, 4154672.6,   4.0,   680.0,   0.0);   (66141.7,
4154672.6,   4.0,   680.0,   0.0);
      (66148.3, 4154668.7,   4.0,   680.0,   0.0);   (66150.5,
4154653.8,   4.0,   680.0,   0.0);
      (66155.0, 4154639.9,   4.0,   680.0,   0.0);   (66156.6,
4154624.4,   4.0,   680.0,   0.0);
      (66158.3, 4154612.2,   4.0,   680.0,   0.0);   (66162.7,
4154597.3,   4.0,   680.0,   0.0);
      (66162.2, 4154582.3,   4.0,   680.0,   0.0);   (66165.5,
4154570.2,   4.0,   680.0,   0.0);
      (66166.6, 4154560.8,   4.0,   680.0,   0.0);   (66169.4,
4154553.0,   4.0,   680.0,   0.0);
      (66211.3, 4154558.5,   4.0,   680.0,   0.0);   (66243.5,
4154558.5,   4.0,   680.0,   0.0);
      (66211.3, 4154570.3,   4.0,   680.0,   0.0);   (66243.5,
4154570.3,   4.0,   680.0,   0.0);
      (66211.3, 4154582.0,   4.0,   680.0,   0.0);   (66243.5,
4154582.0,   4.0,   680.0,   0.0);
      (66211.3, 4154593.7,   4.0,   680.0,   0.0);   (66243.5,
4154593.7,   4.0,   680.0,   0.0);
      (66211.3, 4154605.5,   4.0,   680.0,   0.0);   (66243.5,
4154605.5,   4.0,   680.0,   0.0);
      (66211.3, 4154617.2,   4.0,   680.0,   0.0);   (66243.5,
4154617.2,   4.0,   680.0,   0.0);
      (66211.3, 4154628.9,   4.0,   680.0,   0.0);   (66243.5,
4154628.9,   4.0,   680.0,   0.0);
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                        ***   10:58:33

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                              *** DISCRETE CARTESIAN RECEPTORS ***
                           (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                      (METERS)

```
      (  66211.3, 4154640.6,      4.0,      680.0,       0.0);        (  66243.5,
4154640.6,       4.0,      680.0,      0.0);
      (  66211.3, 4154652.4,      4.0,      680.0,       0.0);        (  66243.5,
4154652.4,       4.0,      680.0,      0.0);
      (  66211.3, 4154664.1,      4.0,      680.0,       0.0);        (  66243.5,
4154664.1,       4.0,      680.0,      0.0);
      (  66211.3, 4154675.8,      4.0,      680.0,       0.0);        (  66243.5,
4154675.8,       4.0,      680.0,      0.0);
      (  66211.3, 4154687.6,      4.0,      680.0,       0.0);        (  66243.5,
4154687.6,       4.0,      680.0,      0.0);
      (  66074.1, 4154255.1,      4.0,      680.0,       0.0);        (  66079.1,
4154259.0,       4.0,      680.0,      0.0);
      (  66085.8, 4154262.9,      4.0,      680.0,       0.0);        (  66092.9,
4154265.1,       4.0,      680.0,      0.0);
      (  66119.0, 4154275.6,      4.0,      680.0,       0.0);        (  66123.9,
4154278.4,       4.0,      680.0,      0.0);
      (  66130.6, 4154281.7,      4.0,      680.0,       0.0);        (  66140.6,
4154286.2,       4.0,      680.0,      0.0);
      (  66110.3, 4154208.8,      4.3,      680.0,       0.0);        (  66092.4,
4154205.4,       4.0,      680.0,      0.0);
      (  66150.5, 4154208.8,      4.7,      680.0,       0.0);        (  66097.6,
4154192.3,       4.0,      680.0,      0.0);
      (  66142.5, 4154222.2,      4.2,      680.0,       0.0);        (  66150.5,
4154222.2,       4.2,      680.0,      0.0);
      (  66110.3, 4154235.6,      4.0,      680.0,       0.0);        (  66118.4,
4154235.6,       4.0,      680.0,      0.0);
      (  66126.4, 4154235.6,      4.0,      680.0,       0.0);        (  66134.4,
4154235.6,       4.0,      680.0,      0.0);
      (  66142.5, 4154235.6,      4.0,      680.0,       0.0);        (  66150.5,
4154235.6,       4.0,      680.0,      0.0);
      (  66126.4, 4154249.0,      4.0,      680.0,       0.0);        (  66134.4,
4154249.0,       4.0,      680.0,      0.0);
      (  66142.5, 4154249.0,      4.0,      680.0,       0.0);        (  66150.5,
4154249.0,       4.0,      680.0,      0.0);
      (  66126.4, 4154262.4,      4.0,      680.0,       0.0);        (  66134.4,
4154262.4,       4.0,      680.0,      0.0);
      (  66142.5, 4154262.4,      4.0,      680.0,       0.0);        (  66150.5,
4154262.4,       4.0,      680.0,      0.0);
      (  66159.9, 4154229.1,      4.0,      680.0,       0.0);        (  66162.2,
4154217.5,       4.4,      680.0,      0.0);
      (  66166.6, 4154206.4,      4.8,      680.0,       0.0);        (  66084.1,
4154219.7,       4.0,      680.0,      0.0);
      (  66090.4, 4154219.7,      4.0,      680.0,       0.0);        (  66096.6,
4154219.7,       4.0,      680.0,      0.0);
      (  66102.9, 4154219.7,      4.0,      680.0,       0.0);        (  66084.1,
4154231.9,       4.0,      680.0,      0.0);
      (  66090.4, 4154231.9,      4.0,      680.0,       0.0);        (  66096.6,
4154231.9,       4.0,      680.0,      0.0);
      (  66102.9, 4154231.9,      4.0,      680.0,       0.0);        (  66084.1,
```

4154244.1,   4.0,   680.0,   0.0);
     (66090.4, 4154244.1,   4.0,   680.0,   0.0);   (66096.6,
4154244.1,   4.0,   680.0,   0.0);
     (66102.9, 4154244.1,   4.0,   680.0,   0.0);   (66084.1,
4154256.3,   4.0,   680.0,   0.0);
     (66090.4, 4154256.3,   4.0,   680.0,   0.0);   (66096.6,
4154256.3,   4.0,   680.0,   0.0);
     (66175.4, 4154190.9,   5.0,   680.0,   0.0);   (66121.3,
4154149.3,   4.9,   680.0,   0.0);
     (66136.4, 4154149.3,   5.0,   680.0,   0.0);   (66151.4,
4154149.3,   5.0,   680.0,   0.0);
     (66166.5, 4154149.3,   5.0,   680.0,   0.0);   (66106.2,
4154159.3,   4.4,   680.0,   0.0);
     (66121.3, 4154159.3,   4.9,   680.0,   0.0);   (66136.4,
4154159.3,   5.0,   680.0,   0.0);
     (66151.4, 4154159.3,   5.0,   680.0,   0.0);   (66166.5,
4154159.3,   5.0,   680.0,   0.0);
     (66106.2, 4154169.3,   4.3,   680.0,   0.0);   (66121.3,
4154169.3,   4.8,   680.0,   0.0);
     (66136.4, 4154169.3,   5.0,   680.0,   0.0);   (66151.4,
4154169.3,   5.0,   680.0,   0.0);
     (66166.5, 4154169.3,   5.0,   680.0,   0.0);   (66106.2,
4154179.3,   4.3,   680.0,   0.0);
     (66121.3, 4154179.3,   4.8,   680.0,   0.0);   (66136.4,
4154179.3,   5.0,   680.0,   0.0);
     (66151.4, 4154179.3,   5.0,   680.0,   0.0);   (66166.5,
4154179.3,   5.0,   680.0,   0.0);
     (66106.2, 4154189.3,   4.3,   680.0,   0.0);   (66121.3,
4154189.3,   4.8,   680.0,   0.0);
     (66166.5, 4154189.3,   5.0,   680.0,   0.0);   (66178.2,
4154181.0,   5.0,   680.0,   0.0);
     (66176.8, 4154174.3,   5.0,   680.0,   0.0);   (66179.6,
4154164.4,   5.0,   680.0,   0.0);
     (66179.0, 4154161.0,   5.0,   680.0,   0.0);   (66181.8,
4154151.1,   5.0,   680.0,   0.0);
     (66097.1, 4154211.4,   4.0,   680.0,   0.0);   (66099.9,
4154201.5,   4.1,   680.0,   0.0);
     (66143.9, 4154278.4,   4.0,   680.0,   0.0);   (66146.7,
4154272.9,   4.0,   680.0,   0.0);
     (66078.0, 4154244.1,   4.0,   680.0,   0.0);   (66157.7,
4154198.7,   5.0,   680.0,   0.0);
⬆ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                       ***   10:58:33

                     PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                     *** DISCRETE CARTESIAN RECEPTORS ***

```
    ( 66115.7, 4154199.8,      4.6,     680.0,        0.0);        ( 66158.8,
4154241.9,        4.0,      680.0,       0.0);
    ( 65913.1, 4154678.1,      4.0,     680.0,        0.0);        ( 65925.6,
4154683.6,        4.0,      680.0,       0.0);
    ( 65937.0, 4154683.6,      4.0,     680.0,        0.0);        ( 65948.4,
4154690.3,        4.0,      680.0,       0.0);
    ( 65959.7, 4154690.3,      4.0,     680.0,        0.0);        ( 65970.0,
4154685.8,        4.0,      680.0,       0.0);
    ( 65981.4, 4154685.8,      4.0,     680.0,        0.0);        ( 65992.8,
4154678.1,        4.0,      680.0,       0.0);
    ( 65913.7, 4154703.0,      4.0,     680.0,        0.0);        ( 65925.1,
4154703.0,        4.0,      680.0,       0.0);
    ( 65935.9, 4154708.0,      4.0,     680.0,        0.0);        ( 65947.3,
4154708.0,        4.0,      680.0,       0.0);
    ( 65958.6, 4154708.0,      4.0,     680.0,        0.0);        ( 65970.0,
4154708.0,        4.0,      680.0,       0.0);
    ( 65982.5, 4154703.6,      4.0,     680.0,        0.0);        ( 65993.9,
4154703.6,        4.0,      680.0,       0.0);
    ( 66011.6, 4154675.9,      4.0,     680.0,        0.0);        ( 66028.2,
4154671.5,        4.0,      680.0,       0.0);
    ( 66038.7, 4154669.3,      4.0,     680.0,        0.0);        ( 66007.7,
4154700.3,        4.0,      680.0,       0.0);
    ( 66021.0, 4154695.8,      4.0,     680.0,        0.0);        ( 66034.3,
4154690.9,        4.0,      680.0,       0.0);
    ( 66048.1, 4154688.6,      4.0,     680.0,        0.0);        ( 66063.1,
4154682.6,        4.0,      680.0,       0.0);
    ( 65899.2, 4154699.7,      4.0,     680.0,        0.0);        ( 65899.7,
4154674.2,        4.0,      680.0,       0.0);
    ( 65887.6, 4154693.6,      4.0,     680.0,        0.0);        ( 65886.4,
4154670.4,        4.0,      680.0,       0.0);
    ( 65873.2, 4154677.0,      4.0,     680.0,        0.0);        ( 65864.6,
4154697.3,        4.0,      680.0,       0.0);
    ( 65881.8, 4154705.1,      4.0,     680.0,        0.0);        ( 65858.5,
4154717.3,        4.0,      680.0,       0.0);
    ( 65878.5, 4154717.3,      4.0,     680.0,        0.0);        ( 65850.7,
4154734.6,        4.0,      680.0,       0.0);
    ( 65869.1, 4154734.6,      4.0,     680.0,        0.0);        ( 65858.5,
4154757.3,        4.0,      680.0,       0.0);
    ( 65850.3, 4154749.0,      4.0,     680.0,        0.0);        ( 65877.3,
4154743.6,        4.0,      680.0,       0.0);
    ( 65874.6, 4154762.9,      4.0,     680.0,        0.0);        ( 65887.8,
4154748.1,        4.0,      680.0,       0.0);
    ( 65887.9, 4154766.9,      4.0,     680.0,        0.0);        ( 65899.2,
4154749.5,        4.0,      680.0,       0.0);
    ( 65915.2, 4154755.6,      4.0,     680.0,        0.0);        ( 65932.4,
4154760.6,        4.0,      680.0,       0.0);
    ( 65949.5, 4154760.6,      4.0,     680.0,        0.0);        ( 65966.6,
```

```
4154760.6,         3.9,        680.0,         0.0);
     (  65983.8, 4154760.6,         3.7,       680.0,         0.0);         (  66003.1,
4154756.7,         3.2,        680.0,         0.0);
     (  66019.2, 4154749.5,         3.0,       680.0,         0.0);         (  66036.3,
4154749.5,         3.0,        680.0,         0.0);
     (  66054.6, 4154741.8,         3.1,       680.0,         0.0);         (  66070.0,
4154736.8,         3.0,        680.0,         0.0);
     (  66087.2, 4154735.1,         3.0,       680.0,         0.0);         (  65900.8,
4154774.5,         4.0,        680.0,         0.0);
     (  65916.3, 4154779.4,         4.0,       680.0,         0.0);         (  65933.5,
4154779.4,         4.0,        680.0,         0.0);
     (  65950.6, 4154779.4,         4.0,       680.0,         0.0);         (  65967.7,
4154779.4,         3.6,        680.0,         0.0);
     (  65984.9, 4154779.4,         3.1,       680.0,         0.0);         (  66002.0,
4154779.4,         3.0,        680.0,         0.0);
     (  66017.5, 4154773.9,         3.0,       680.0,         0.0);         (  66034.6,
4154773.9,         3.0,        680.0,         0.0);
     (  66047.4, 4154766.7,         3.0,       680.0,         0.0);         (  66061.7,
4154761.7,         3.0,        680.0,         0.0);
     (  66076.7, 4154757.8,         3.0,       680.0,         0.0);         (  66098.5,
4154732.9,         3.0,        680.0,         0.0);
     (  66090.7, 4154752.3,         3.0,       680.0,         0.0);         (  66107.9,
4154728.0,         3.1,        680.0,         0.0);
     (  66116.1, 4154722.4,         3.3,       680.0,         0.0);         (  66125.4,
4154722.4,         3.5,        680.0,         0.0);
     (  66134.8, 4154717.4,         3.8,       680.0,         0.0);         (  66144.1,
4154714.1,         3.9,        680.0,         0.0);
     (  66151.2, 4154710.8,         4.0,       680.0,         0.0);         (  66161.7,
4154707.5,         4.0,        680.0,         0.0);
     (  66171.6, 4154703.6,         4.0,       680.0,         0.0);         (  66181.4,
4154699.2,         4.0,        680.0,         0.0);
     (  66191.9, 4154698.1,         4.0,       680.0,         0.0);         (  66202.3,
4154691.4,         4.0,        680.0,         0.0);
     (  66236.0, 4154699.2,         4.0,       680.0,         0.0);         (  66106.8,
4154744.6,         3.0,        680.0,         0.0);
     (  66116.1, 4154744.6,         3.0,       680.0,         0.0);         (  66126.0,
4154740.1,         3.1,        680.0,         0.0);
     (  66135.3, 4154740.1,         3.1,       680.0,         0.0);         (  66143.6,
4154731.8,         3.3,        680.0,         0.0);
     (  66154.0, 4154727.4,         3.4,       680.0,         0.0);         (  66162.8,
4154725.2,         3.5,        680.0,         0.0);
     (  66171.6, 4154720.8,         3.8,       680.0,         0.0);         (  66182.0,
4154717.4,         3.9,        680.0,         0.0);
```
⦿ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                        ***   10:58:33

                         PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

```
                         *** DISCRETE CARTESIAN RECEPTORS ***
                         (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                   (METERS)


     ( 66194.6, 4154713.6,      4.0,     680.0,        0.0);        ( 66210.6,
4154711.3,       4.0,     680.0,      0.0);
     ( 66222.2, 4154706.9,      4.0,     680.0,        0.0);        ( 65678.6,
4154862.0,       3.0,     680.0,      0.0);
     ( 65714.9, 4153989.9,      4.0,       4.0,        0.0);        ( 67105.1,
4154013.2,       9.0,     680.0,      0.0);
     ( 67112.0, 4154867.2,      7.2,     715.0,        0.0);        ( 66221.9,
4154539.7,       4.0,     680.0,      0.0);
     ( 66095.3, 4154492.7,      4.0,     680.0,        0.0);        ( 66160.2,
4154517.9,       4.0,     680.0,      0.0);
     ( 66129.2, 4154504.9,      4.0,     680.0,        0.0);        ( 66195.5,
4154530.1,       4.0,     680.0,      0.0);
     ( 66145.6, 4154512.4,      4.0,     680.0,        0.0);        ( 66178.3,
4154525.9,       4.0,     680.0,      0.0);
     ( 66111.6, 4154499.4,      4.0,     680.0,        0.0);        ( 66208.5,
4154536.8,       4.0,     680.0,      0.0);
```

♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                        ***   10:58:33

                            PAGE   11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                  *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***

                                           (1=YES; 0=NO)


```
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

              NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON

WHAT IS INCLUDED IN THE DATA FILE.

♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                        ***   10:58:33

                                      PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                        *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

    Surface file: C:\Users\kheck\Desktop\724945\724945.SFC
                  Met Version: 14134
    Profile file: C:\Users\kheck\Desktop\724945\724945.PFL

    Surface format: FREE

    Profile format: FREE

    Surface station no.:   23293   Upper air station no.:   23230
              Name: SAN_JOSE_INTERNATIONAL_AIRPORT   Name:
OAKLAND/WSO_AP
              Year: 2009   Year: 2009

 First 24 hours of scalar data
 YR MO DY JDY HR   H0   U*   W*   DT/DZ ZICNV ZIMCH M-O LEN   Z0 BOWEN
ALBEDO REF WS   WD   HT   REF TA   HT
- -
- - - - - - - - - - - - - - - - - - - -
 09 01 01   1 01 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.25   1.10
1.00   0.00   0.   10.0 282.5   2.0
 09 01 01   1 02 -13.4 0.236 -9.000 -9.000 -999. 275.   89.0 0.32   1.10
1.00   2.36   18.   10.0 282.5   2.0
 09 01 01   1 03   -7.9 0.139 -9.000 -9.000 -999. 128.   30.9 0.32   1.10
1.00   1.76   4.   10.0 282.0   2.0
 09 01 01   1 04 -12.4 0.217 -9.000 -9.000 -999. 242.   74.8 0.25   1.10
1.00   2.36   73.   10.0 281.4   2.0
 09 01 01   1 05 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.25   1.10
1.00   0.00   0.   10.0 282.0   2.0
 09 01 01   1 06   -9.7 0.170 -9.000 -9.000 -999. 168.   46.1 0.47   1.10

```
1.00    1.76  342.    10.0  281.4    2.0
 09 01 01   1 07  -13.5  0.236 -9.000 -9.000 -999.   275.      88.6  0.32   1.10
1.00    2.36    5.    10.0  281.4    2.0
 09 01 01   1 08  -19.7  0.345 -9.000 -9.000 -999.   486.     189.6  0.47   1.10
0.74    2.86  333.    10.0  280.9    2.0
 09 01 01   1 09   -8.3  0.363 -9.000 -9.000 -999.   526.     525.4  0.47   1.10
0.39    2.86  327.    10.0  280.9    2.0
 09 01 01   1 10    8.1  0.382  0.288  0.014  106.   566.    -625.1  0.47   1.10
0.27    2.86  351.    10.0  280.9    2.0
 09 01 01   1 11   17.6 -9.000 -9.000 -9.000  189.  -999.  -99999.0  0.25   1.10
0.23    0.00    0.    10.0  280.9    2.0
 09 01 01   1 12   23.0 -9.000 -9.000 -9.000  259.  -999.  -99999.0  0.25   1.10
0.21    0.00    0.    10.0  281.4    2.0
 09 01 01   1 13   23.9 -9.000 -9.000 -9.000  315.  -999.  -99999.0  0.25   1.10
0.21    0.00    0.    10.0  281.4    2.0
 09 01 01   1 14   48.5 -9.000 -9.000 -9.000  407.  -999.  -99999.0  0.25   1.10
0.22    0.00    0.    10.0  283.1    2.0
 09 01 01   1 15   69.5  0.319  0.953  0.016  453.   433.     -42.6  0.32   1.10
0.25    2.36   32.    10.0  283.1    2.0
 09 01 01   1 16   24.5 -9.000 -9.000 -9.000  460.  -999.  -99999.0  0.25   1.10
0.33    0.00    0.    10.0  283.1    2.0
 09 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
0.57    0.00    0.    10.0  283.1    2.0
 09 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  282.5    2.0
 09 01 01   1 19  -24.2  0.212 -9.000 -9.000 -999.   235.      35.9  0.47   1.10
1.00    2.36  324.    10.0  281.4    2.0
 09 01 01   1 20 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  281.4    2.0
 09 01 01   1 21 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.9    2.0
 09 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.9    2.0
 09 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999.  -999.  -99999.0  0.25   1.10
1.00    0.00    0.    10.0  280.4    2.0
 09 01 01   1 24   -9.7  0.170 -9.000 -9.000 -999.   168.      45.7  0.47   1.10
1.00    1.76  310.    10.0  280.4    2.0


  First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01   10.0 1 -999.  -99.00   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

⬥ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                       ***   10:58:33

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                 *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL        ***
                              INCLUDING SOURCE(S):     PAREA1       ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                               ** CONC OF PM_2.5   IN MICROGRAMS/M**3
              **

        X-COORD (M)   Y-COORD (M)        CONC                  X-COORD (M)
Y-COORD (M)      CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        66313.29   4154531.41       0.02167                  66314.95
4154502.63      0.04297
        66317.72   4154473.28       0.06990                  66325.47
4154440.62      0.06671
        66316.90   4154570.04       0.01111                  66316.90
4154590.04      0.00850
        66316.90   4154610.04       0.00673                  66316.90
4154630.04      0.00553
        66316.90   4154650.04       0.00470                  66359.43
4154488.56      0.02911
        66384.43   4154488.56       0.02164                  66359.43
4154533.56      0.01373
        66384.43   4154533.56       0.01133                  66359.43
4154578.56      0.00814
        66384.43   4154578.56       0.00716                  66359.43
4154623.56      0.00518
        66384.43   4154623.56       0.00489                  66368.66
4154451.14      0.03895
        66404.64   4154460.00       0.02435                  66411.84
4154617.23      0.00473
        66412.95   4154580.69       0.00609                  66446.16
4154610.03      0.00435
        66445.06   4154571.28       0.00557                  66479.38
4154597.30      0.00408
        66414.05   4154542.49       0.00841                  66435.64
4154504.84      0.01109
        66447.27   4154543.59       0.00689                  66482.70
4154546.36      0.00563
        66504.29   4154586.22       0.00393                  66536.96
4154582.90      0.00354
        66475.51   4154504.29       0.00852                  66517.03
4154537.50      0.00514
        66450.59   4154470.52       0.01437                  66477.17
4154479.93      0.01070
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      66516.47    4154495.43        0.00725                        66535.85
4154519.24       0.00541
      66554.67    4154544.15        0.00418                        66562.98
4154569.06       0.00348
      66600.07    4154512.59        0.00427                        66593.98
4154512.04       0.00439
      66602.84    4154502.07        0.00452                        66597.30
4154500.41       0.00467
      66588.45    4154510.38        0.00454                        66583.46
4154509.82       0.00466
      66578.48    4154508.16        0.00481                        66572.39
4154506.50       0.00500
      66564.09    4154505.95        0.00522                        66565.19
4154497.09       0.00554
      66570.73    4154497.09        0.00539                        66577.37
4154498.20       0.00519
      66582.36    4154499.30        0.00503                        66589.55
4154499.86       0.00485
      66605.05    4154575.70        0.00291                        66600.63
4154570.17       0.00304
      66596.20    4154564.63        0.00317                        66592.32
4154556.88       0.00336
      66588.45    4154549.68        0.00355                        66584.02
4154545.81       0.00369
      66590.11    4154541.38        0.00370                        66595.09
4154539.72       0.00367
      66600.63    4154545.81        0.00347                        66602.84
4154552.45       0.00332
      66607.27    4154559.65        0.00314                        66611.14
4154567.40       0.00298
      66615.57    4154572.94        0.00285                        66628.27
4154502.03       0.00407
      66637.73    4154502.03        0.00392                        66628.27
4154507.03       0.00395
      66637.73    4154507.03        0.00380                        66624.39
4154512.03       0.00389
      66637.73    4154512.03        0.00369                        66624.39
4154517.03       0.00377
      66637.73    4154517.03        0.00359                        66624.39
4154522.03       0.00366
      66636.07    4154522.03        0.00351                        66621.07
4154527.03       0.00360
      66636.07    4154527.03        0.00341                        66621.07
4154532.03       0.00349
      66636.07    4154532.03        0.00331                        66621.07
4154537.03       0.00340
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   PAREA1   ,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                      ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
 -
          66636.07   4154537.03   0.00322   66081.88
4154382.49   0.00502
          66090.73   4154385.26   0.00601   66107.34
4154381.38   0.00851
          66110.11   4154374.74   0.00839   66115.65
4154356.47   0.00759
          66120.63   4154347.06   0.00756   66112.88
4154366.43   0.00807
          66127.27   4154338.75   0.00785   66097.93
4154368.65   0.00571
          66099.59   4154362.00   0.00551   66102.91
4154354.81   0.00550
          66105.13   4154348.16   0.00539   66108.45
4154341.52   0.00541
          66068.59   4154435.08   0.01457   66074.68
4154437.30   0.01733
          66081.88   4154438.96   0.02113   66091.29
4154441.73   0.02981
          66096.82   4154442.83   0.03732   66081.32
4154419.58   0.01062
          66087.97   4154421.80   0.01244   66094.61
4154425.12   0.01563
          66101.81   4154426.23   0.01924   66045.89
4154304.98   0.00170
          66054.20   4154308.30   0.00187   66062.50
4154312.73   0.00209
          66071.91   4154317.16   0.00240   66047.55
4154362.00   0.00283
          66048.66   4154355.36   0.00264   66050.87
4154348.16   0.00248
          66054.20   4154340.97   0.00238   66058.07
4154333.77   0.00232

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        66059.18    4154327.68         0.00223                          66032.05
4154360.34       0.00257
        66034.26    4154351.49         0.00234                          66037.59
4154345.40       0.00222
        66040.91    4154339.31         0.00213                          66045.34
4154331.00       0.00204
        66047.55    4154323.25         0.00195                          66051.98
4154381.38       0.00379
        66058.62    4154381.38         0.00395                          66019.32
4154369.76       0.00277
        66025.41    4154371.97         0.00293                          66032.05
4154373.63       0.00307
        66036.48    4154375.29         0.00321                          66054.75
4154421.80       0.00854
        66047.55    4154422.90         0.00818                          66040.91
4154419.58       0.00717
        66034.82    4154417.92         0.00659                          66021.53
4154415.15       0.00564
        66013.78    4154415.15         0.00533                          66005.48
4154417.37       0.00520
        65997.17    4154419.58         0.00506                          66056.41
4154489.34       0.03774
        66058.62    4154481.59         0.03660                          66061.39
4154472.73       0.03425
        66063.05    4154463.32         0.02943                          66067.48
4154455.01       0.02635
        66028.17    4154433.42         0.00843                          66034.26
4154432.87       0.00890
        66040.35    4154435.08         0.01000                          66047.55
4154436.19       0.01122
        66000.49    4154435.08         0.00663                          65967.83
4154569.62       0.01562
        65970.04    4154560.20         0.01578                          65996.06
4154443.94       0.00732
        65970.04    4154548.58         0.01541                          65970.04
4154538.06       0.01487
        65970.04    4154526.43         0.01405                          65971.15
4154513.14       0.01302
        65974.47    4154500.97         0.01219                          65976.69
4154491.00       0.01131
        65980.01    4154483.25         0.01076                          65984.44
4154473.28       0.00998
        65988.87    4154463.87         0.00921                          65992.19
4154453.91       0.00823
        65932.40    4154554.67         0.01121                          65943.47
4154558.54       0.01248
        65956.76    4154553.56         0.01382                          65955.65
4154540.27       0.01304
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  *** AERMET - VERSION  14134 ***    ***
                           ***          10:58:33

                             PAGE  15
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN
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                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL        ***
                                 INCLUDING SOURCE(S):     PAREA1      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                     **


      X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        65956.76   4154533.63        0.01276                         66027.62
4154498.75      0.02433
        66023.19   4154506.50        0.02405                         66020.42
4154516.47      0.02436
        66017.66   4154526.99        0.02432                         66014.89
4154535.84      0.02389
        66013.78   4154545.26        0.02370                         66012.67
4154554.11      0.02330
        66011.01   4154561.86        0.02269                         66009.91
4154571.83      0.02198
        66007.69   4154583.46        0.02087                         66005.48
4154595.64      0.01966
        65999.94   4154606.15        0.01823                         65963.40
4154584.01      0.01510
        65957.86   4154594.53        0.01441                         65950.11
4154606.71      0.01350
        65951.22   4154617.78        0.01334                         65953.44
4154622.21      0.01337
        65965.61   4154625.53        0.01414                         65973.37
4154623.32      0.01482
        65980.01   4154621.66        0.01542                         65987.21
4154617.78      0.01624
        66040.91   4154507.61        0.03169                         66038.69
4154514.25      0.03127
        66033.16   4154523.66        0.02943                         66030.94
4154535.29      0.02870
        66028.73   4154548.58        0.02748                         66027.62
4154560.20      0.02634
        66024.85   4154571.83        0.02469                         66020.98
4154585.67      0.02264
```

66016.55	4154600.06	0.02058	66011.57
4154612.80	0.01879		
65918.56	4154566.85	0.01044	65926.86
4154570.72	0.01126		
65935.17	4154571.83	0.01204	65943.47
4154575.71	0.01293		
65900.29	4154620.55	0.00990	65908.04
4154618.89	0.01036		
65919.11	4154617.78	0.01107	65931.29
4154614.46	0.01193		
65901.39	4154631.07	0.00992	65908.59
4154629.96	0.01033		
65915.79	4154628.85	0.01075	65922.99
4154627.19	0.01121		
65930.18	4154625.53	0.01169	65939.04
4154624.98	0.01229		
65947.90	4154634.39	0.01259	65952.88
4154636.60	0.01282		
65957.86	4154637.71	0.01308	65962.29
4154638.82	0.01331		
65975.58	4154638.27	0.01415	65980.01
4154635.50	0.01459		
65986.10	4154634.39	0.01506	65991.08
4154630.51	0.01567		
66080.77	4154521.45	0.05551	66076.89
4154535.84	0.04741		
66073.57	4154551.35	0.04065	66070.25
4154567.95	0.03468		
66067.48	4154582.90	0.03015	66063.05
4154602.28	0.02516		
66060.84	4154617.78	0.02193	66058.07
4154631.07	0.01951		
66055.86	4154644.91	0.01734	66051.98
4154659.30	0.01537		
66106.24	4154529.20	0.06591	66100.15
4154542.49	0.05373		
66096.27	4154556.33	0.04500	66091.84
4154572.94	0.03692		
66088.52	4154586.78	0.03161	66085.75
4154606.71	0.02567		
66082.98	4154620.55	0.02230	66080.77
4154636.05	0.01919		
66076.34	4154648.78	0.01703	66071.91
4154664.29	0.01484		
66147.76	4154547.47	0.06415	66146.10
4154558.54	0.05321		
66144.99	4154569.62	0.04460	66143.88
4154584.01	0.03589		
66140.56	4154598.40	0.02932	66138.35
4154609.48	0.02534		

                              PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   PAREA1   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         66136.13   4154623.87   0.02120   66133.92
4154637.16   0.01819
         66132.26   4154651.00   0.01565   66130.60
4154664.29   0.01367
         66136.13   4154672.59   0.01238   66141.67
4154672.59   0.01218
         66148.31   4154668.71   0.01239   66150.53
4154653.77   0.01439
         66154.96   4154639.93   0.01658   66156.62
4154624.42   0.01994
         66158.28   4154612.24   0.02330   66162.71
4154597.30   0.02845
         66162.15   4154582.35   0.03600   66165.47
4154570.17   0.04390
         66166.58   4154560.76   0.05188   66169.35
4154553.01   0.05999
         66211.31   4154558.54   0.04541   66243.54
4154558.54   0.02942
         66211.31   4154570.27   0.03443   66243.54
4154570.27   0.02317
         66211.31   4154582.00   0.02720   66243.54
4154582.00   0.01895
         66211.31   4154593.73   0.02218   66243.54
4154593.73   0.01593
         66211.31   4154605.46   0.01855   66243.54
4154605.46   0.01367
         66211.31   4154617.19   0.01582   66243.54
4154617.19   0.01193

66211.31	4154628.92	0.01370	66243.54
4154628.92	0.01055		
66211.31	4154640.65	0.01202	66243.54
4154640.65	0.00943		
66211.31	4154652.38	0.01066	66243.54
4154652.38	0.00850		
66211.31	4154664.11	0.00954	66243.54
4154664.11	0.00772		
66211.31	4154675.84	0.00860	66243.54
4154675.84	0.00705		
66211.31	4154687.57	0.00780	66243.54
4154687.57	0.00648		
66074.13	4154255.15	0.00175	66079.11
4154259.03	0.00189		
66085.75	4154262.90	0.00209	66092.95
4154265.12	0.00232		
66118.97	4154275.64	0.00359	66123.95
4154278.41	0.00395		
66130.60	4154281.73	0.00449	66140.56
4154286.16	0.00544		
66110.33	4154208.76	0.00207	66092.35
4154205.44	0.00168		
66150.53	4154208.76	0.00321	66097.60
4154192.27	0.00166		
66142.49	4154222.16	0.00324	66150.53
4154222.16	0.00355		
66110.33	4154235.56	0.00242	66118.37
4154235.56	0.00267		
66126.41	4154235.56	0.00295	66134.45
4154235.56	0.00325		
66142.49	4154235.56	0.00358	66150.53
4154235.56	0.00394		
66126.41	4154248.96	0.00324	66134.45
4154248.96	0.00360		
66142.49	4154248.96	0.00399	66150.53
4154248.96	0.00441		
66126.41	4154262.36	0.00359	66134.45
4154262.36	0.00401		
66142.49	4154262.36	0.00447	66150.53
4154262.36	0.00496		
66159.94	4154229.13	0.00417	66162.15
4154217.51	0.00389		
66166.58	4154206.43	0.00373	66084.09
4154219.72	0.00165		
66090.36	4154219.72	0.00176	66096.63
4154219.72	0.00189		
66102.90	4154219.72	0.00202	66084.09
4154231.90	0.00175		
66090.36	4154231.90	0.00187	66096.63
4154231.90	0.00201		

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        66102.90     4154231.90          0.00216                          66084.09
4154244.08          0.00186
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✦ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                       ***   10:58:33

                                 PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   PAREA1   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -

```
        66090.36     4154244.08          0.00200                          66096.63
4154244.08          0.00215
        66102.90     4154244.08          0.00232                          66084.09
4154256.26          0.00198
        66090.36     4154256.26          0.00213                          66096.63
4154256.26          0.00231
        66175.44     4154190.86          0.00361                          66121.30
4154149.34          0.00168
        66136.36     4154149.34          0.00193                          66151.42
4154149.34          0.00221
        66166.48     4154149.34          0.00253                          66106.24
4154159.34          0.00154
        66121.30     4154159.34          0.00177                          66136.36
4154159.34          0.00204
        66151.42     4154159.34          0.00234                          66166.48
4154159.34          0.00269
        66106.24     4154169.34          0.00162                          66121.30
4154169.34          0.00186
        66136.36     4154169.34          0.00215                          66151.42
4154169.34          0.00249
        66166.48     4154169.34          0.00287                          66106.24
4154179.34          0.00170
        66121.30     4154179.34          0.00196                          66136.36
4154179.34          0.00228
        66151.42     4154179.34          0.00265                          66166.48
4154179.34          0.00306
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66106.24	4154189.34	0.00178	66121.30
4154189.34	0.00208		
66166.48	4154189.34	0.00328	66178.21
4154180.97	0.00345		
66176.83	4154174.29	0.00326	66179.59
4154164.39	0.00312		
66179.04	4154161.00	0.00304	66181.81
4154151.11	0.00292		
66097.10	4154211.38	0.00181	66099.87
4154201.49	0.00178		
66143.88	4154278.41	0.00528	66146.65
4154272.87	0.00521		
66078.00	4154244.08	0.00173	66157.72
4154198.68	0.00321		
66115.65	4154199.79	0.00208	66158.83
4154241.87	0.00458		
65913.12	4154678.08	0.00958	65925.60
4154683.61	0.00984		
65936.98	4154683.61	0.01022	65948.36
4154690.26	0.01029		
65959.74	4154690.26	0.01061	65970.02
4154685.83	0.01113		
65981.40	4154685.83	0.01144	65992.78
4154678.08	0.01226		
65913.67	4154703.04	0.00886	65925.05
4154703.04	0.00915		
65935.88	4154708.03	0.00923	65947.26
4154708.03	0.00948		
65958.64	4154708.03	0.00972	65970.02
4154708.03	0.00994		
65982.50	4154703.60	0.01040	65993.88
4154703.60	0.01058		
66011.57	4154675.91	0.01290	66028.17
4154671.48	0.01365		
66038.69	4154669.27	0.01405	66007.69
4154700.27	0.01099		
66020.98	4154695.84	0.01145	66034.26
4154690.86	0.01196		
66048.11	4154688.65	0.01220	66063.05
4154682.56	0.01277		
65899.18	4154699.72	0.00856	65899.73
4154674.25	0.00919		
65887.55	4154693.63	0.00837	65886.45
4154670.38	0.00877		
65873.16	4154677.02	0.00820	65864.58
4154697.33	0.00764		
65881.82	4154705.08	0.00796	65858.49
4154717.33	0.00716		
65878.49	4154717.33	0.00762	65850.74
4154734.57	0.00670		

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          65869.08    4154734.57        0.00706                          65858.49
4154757.33        0.00642
          65850.26    4154749.03        0.00644                          65877.32
4154743.56        0.00701
```
♠ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***   02/08/21
 *** AERMET - VERSION 14134 ***   ***
                      ***   10:58:33

                              PAGE 18
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                          INCLUDING SOURCE(S):   PAREA1   ,

                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                              ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                **

     X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
 -
          65874.62   4154762.94   0.00652   65887.84
4154748.06   0.00707
          65887.91   4154766.88   0.00660   65899.18
4154749.54   0.00720
          65915.21   4154755.63   0.00723   65932.35
4154760.61   0.00725
          65949.49   4154760.61   0.00738   65966.63
4154760.61   0.00749
          65983.77   4154760.61   0.00754   66003.13
4154756.74   0.00772
          66019.16   4154749.54   0.00804   66036.30
4154749.54   0.00795
          66054.55   4154741.79   0.00822   66070.03
4154736.81   0.00831
          66087.17   4154735.15   0.00814   65900.84
4154774.46   0.00654
          65916.32   4154779.44   0.00653   65933.46
4154779.44   0.00665
          65950.60   4154779.44   0.00673   65967.74
4154779.44   0.00678
          65984.88   4154779.44   0.00679   66002.02
4154779.44   0.00676
          66017.50   4154773.90   0.00692   66034.64
4154773.90   0.00681
```

```
        66047.35   4154766.71   0.00702   66061.72
4154761.72   0.00709
        66076.65   4154757.85   0.00707   66098.49
4154732.94   0.00807
        66090.73   4154752.31   0.00713   66107.90
4154727.96   0.00820
        66116.12   4154722.42   0.00839   66125.45
4154722.42   0.00819
        66134.78   4154717.44   0.00831   66144.11
4154714.12   0.00830
        66151.23   4154710.79   0.00834   66161.66
4154707.47   0.00827
        66171.55   4154703.60   0.00823   66181.43
4154699.17   0.00819
        66191.87   4154698.06   0.00789   66202.30
4154691.42   0.00792
        66235.99   4154699.17   0.00626   66106.79
4154744.56   0.00725
        66116.12   4154744.56   0.00707   66126.00
4154740.13   0.00712
        66135.33   4154740.13   0.00693   66143.56
4154731.83   0.00721
        66153.99   4154727.40   0.00722   66162.77
4154725.18   0.00713
        66171.55   4154720.75   0.00716   66181.98
4154717.43   0.00706
        66194.64   4154713.56   0.00691   66210.61
4154711.34   0.00654
        66222.15   4154706.91   0.00638   65678.61
4154862.02   0.00345
        65714.88   4153989.87   0.00020   67105.13
4154013.18   0.00253
        67112.04   4154867.20   0.00053   66221.88
4154539.70   0.07338
        66095.26   4154492.74   0.09219   66160.24
4154517.90   0.12152
        66129.22   4154504.90   0.11842   66195.46
4154530.06   0.10429
        66145.57   4154512.45   0.12027   66178.27
4154525.86   0.10982
        66111.61   4154499.45   0.10918   66208.46
4154536.76   0.08728
```
⬆ *** AERMOD - VERSION  18081 ***    *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL PM2\125 N Milpitas_TOTAL P ***        02/08/21
 *** AERMET - VERSION  14134 ***    ***
                        ***        10:58:33

                        PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **


                           NETWORK
GROUP ID                        AVERAGE CONC                  RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - -

ALL      1ST HIGHEST VALUE IS       0.12152 AT (   66160.24,  4154517.90,
4.00,   680.00,    0.00)  DC
         2ND HIGHEST VALUE IS       0.12027 AT (   66145.57,  4154512.45,
4.00,   680.00,    0.00)  DC
         3RD HIGHEST VALUE IS       0.11842 AT (   66129.22,  4154504.90,
4.00,   680.00,    0.00)  DC
         4TH HIGHEST VALUE IS       0.10982 AT (   66178.27,  4154525.86,
4.00,   680.00,    0.00)  DC
         5TH HIGHEST VALUE IS       0.10918 AT (   66111.61,  4154499.45,
4.00,   680.00,    0.00)  DC
         6TH HIGHEST VALUE IS       0.10429 AT (   66195.46,  4154530.06,
4.00,   680.00,    0.00)  DC
         7TH HIGHEST VALUE IS       0.09219 AT (   66095.26,  4154492.74,
4.00,   680.00,    0.00)  DC
         8TH HIGHEST VALUE IS       0.08728 AT (   66208.46,  4154536.76,
4.00,   680.00,    0.00)  DC
         9TH HIGHEST VALUE IS       0.07338 AT (   66221.88,  4154539.70,
4.00,   680.00,    0.00)  DC
        10TH HIGHEST VALUE IS       0.06990 AT (   66317.72,  4154473.28,
4.00,   680.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\125 N Milpitas_TOTAL
PM2\125 N Milpitas_TOTAL P ***        02/08/21
 *** AERMET - VERSION  14134 ***   ***
                     ***        10:58:33


                                PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

 *** Message Summary : AERMOD Model Execution ***

```
         --------- Summary of Total Messages --------

   A Total of              0 Fatal Error Message(s)
   A Total of              1 Warning Message(s)
   A Total of          13130 Informational Message(s)

   A Total of          43872 Hours Were Processed

   A Total of          11611 Calm Hours Identified

   A Total of           1519 Missing Hours Identified (  3.46 Percent)


      ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


      ********   WARNING MESSAGES   ********
   MX W481   43873         MAIN: Data Remaining After End of Year. Number of Hours=
         48

      **********************************
      *** AERMOD Finishes Successfully ***
      **********************************
```

HARP2 Output Files

HARP2 - HRACalc (dated 19044) 2/8/2021 12:22:45 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 0.42

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 0.42
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining
pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|FAH changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\kheck\Desktop\HARP2\2.8.20MilpitasCancerRisk.csv
HRA ran successfully

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	residential_Milpitas		9901	DieselExhP	0.09897	6.95E-06	0.42YrCanc	*	6.95E-06