

**Health Risk Assessment
425 S. Winchester Boulevard Project
City of San José, California**

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LIST OF ABBREVIATED TERMS

A	absorption factor from inhalation
ACES	Advanced Collaborative Emissions Study
ASF	age sensitivity factor
AB	Assembly Bill
APN	Assessor's Parcel Number
APS	auxiliary power system
AT	averaging time
ATCM	Air Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CPF	cancer potency factor
C_{air}	air concentration from model
C_i	air concentration of substance
DBR	daily breathing rate
DOORS	Diesel Off-Road Reporting System
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
Dose-air	dose through inhalation
EMFAC	Emissions Factor Model
ED	exposure duration
EF	exposure frequency
°F	Fahrenheit
FCAA	Federal Clean Air Act
FAH	fraction of time spent at home
GVWR	gross vehicle weight rating
HAP	hazardous air pollutant
HQ	health quotient
HRA	health risk assessment
kg	kilograms
L	liter
MICR	Maximum Individual Cancer Risk
mg	milligrams
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
MSAT	Mobile Source Air Toxic
NAAQS	National Ambient Air Quality Standards
NED	National Elevation Dataset
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
O_3	ozone
OEHHA	Office Environmental Health Hazard Assessment
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
$\text{PM}_{2.5}$	particulate matter less than 2.5 microns in diameter
PERP	Portable Equipment Registration Program
REL	Reference Exposure Level
REL_i	Reference Exposure Level of substance
$\text{Risk}_{inh-res}$	residential inhalation cancer risk
SB	Senate Bill
T-BACT	toxics best available control technology
TAC	Toxic Air Contaminant
U.S. EPA	United States Environmental Protection Agency
VMT	vehicle miles traveled

1. INTRODUCTION

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

1.1 PROJECT LOCATION

The proposed Project is located on 425 S. Winchester Boulevard on the northwest corner of Winchester Boulevard and Olin Avenue in western San José. [Figure 1: Regional Location](#) and [Figure 2: Project Vicinity Map](#), depict the Project site in a regional and local context.

Currently, the Project site is developed as an existing gas station that is still in operation. The existing gas station has a single-story building. There are currently four pumping stations in the center of the Project site and surface parking along the northern and western boundaries of the Project site. There is existing landscaping along the western, northern and eastern (Winchester Boulevard) frontages of the Project site.

2.1 PROJECT DESCRIPTION

The Project site is located in an urban area with a mix of uses including commercial, office, and medium to high density residential uses. The proposed Project's existing land use designation is Mixed Use Commercial (MUC) and existing zoning designation is Commercial General (CG). The Project site is within the City of San José Santana Row/Valley Fair Urban Village Plan area, which is characterized by a wide range of commercial, residential, retail, and restaurant uses. The commercial area is home to two large retail commercial centers, Westfield Valley Fair Mall and Santana Row. The Project site is located approximately 114 feet west of Santana Row, immediately across South Winchester Boulevard.

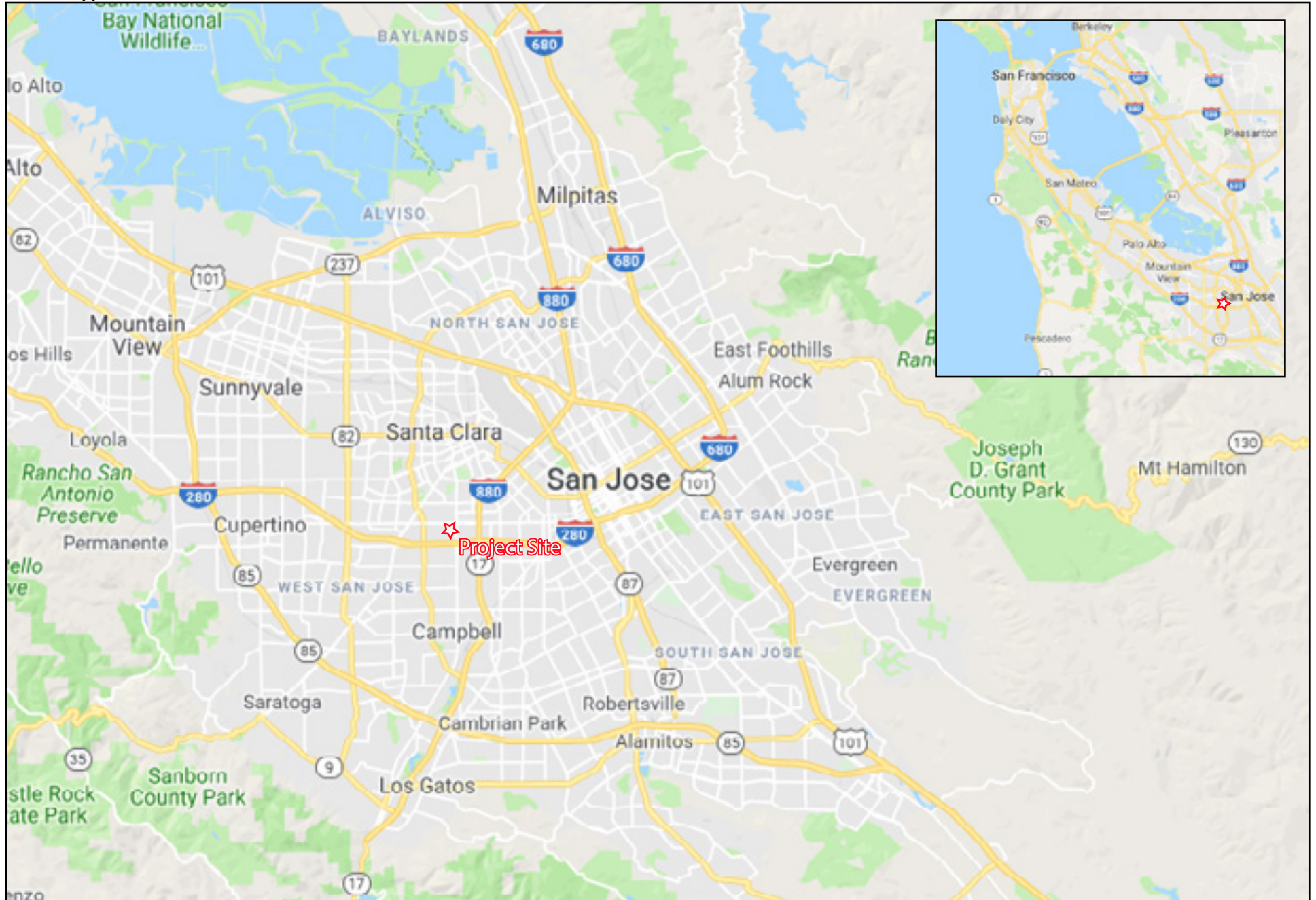
The proposed Project would include approximately 9,181 square feet of retail/commercial space, approximately 5,000 square feet of 2nd floor office space, and 27 dwelling units on an approximate 0.55-acre site. The mixed-use building would include approximately 7,662 square feet of private open space and approximately 1,232 square feet of open space common to the Project residents. See [Figure 3: Project Site Plan](#) for more details. Total on-site parking would include approximately 93 stalls. The proposed Project includes two levels of underground parking. Each underground parking level would have 55 stalls, total of 110 stalls, and five stalls would be on the surface level. Additionally, 24 bicycle racks would be located on the ground floor in a secured bike parking room with access from the lobby. The proposed building would be LEED certified as required by City Council policy. The Project would achieve LEED NC v4 certification through the USGBC.

Currently, one driveway allows access to the Project site from Winchester Boulevard and another driveway allows access to the Project site from Olin Avenue. For vehicles exiting the Project site onto Winchester Boulevard, vehicles must make a right turn to exit onto Winchester Boulevard. There is existing utility access (water, sewer, electricity, gas) to the Project site and no native habitat exists on the site.

In addition, the proposed Project is located adjacent to major bus Routes, therefore the residents of the proposed Project and the employment opportunities would have direct accessibility to local transit, furthering the City's General Plan goals to support a healthy community, reduce traffic congestion and decrease greenhouse gas emissions and energy consumption.

Construction is anticipated to begin in early Spring 2021 and last approximately 19 months until Fall of 2022. Construction methods would include demolition of the existing gas station and associated uses, site preparation, grading, paving, building construction, and architectural coating. Construction of the Project would be required to be consistent with the City's Best Management Practices and California Building Code.

Appendix E



Source: Google Earth, 2019

Figure 1: Regional Location

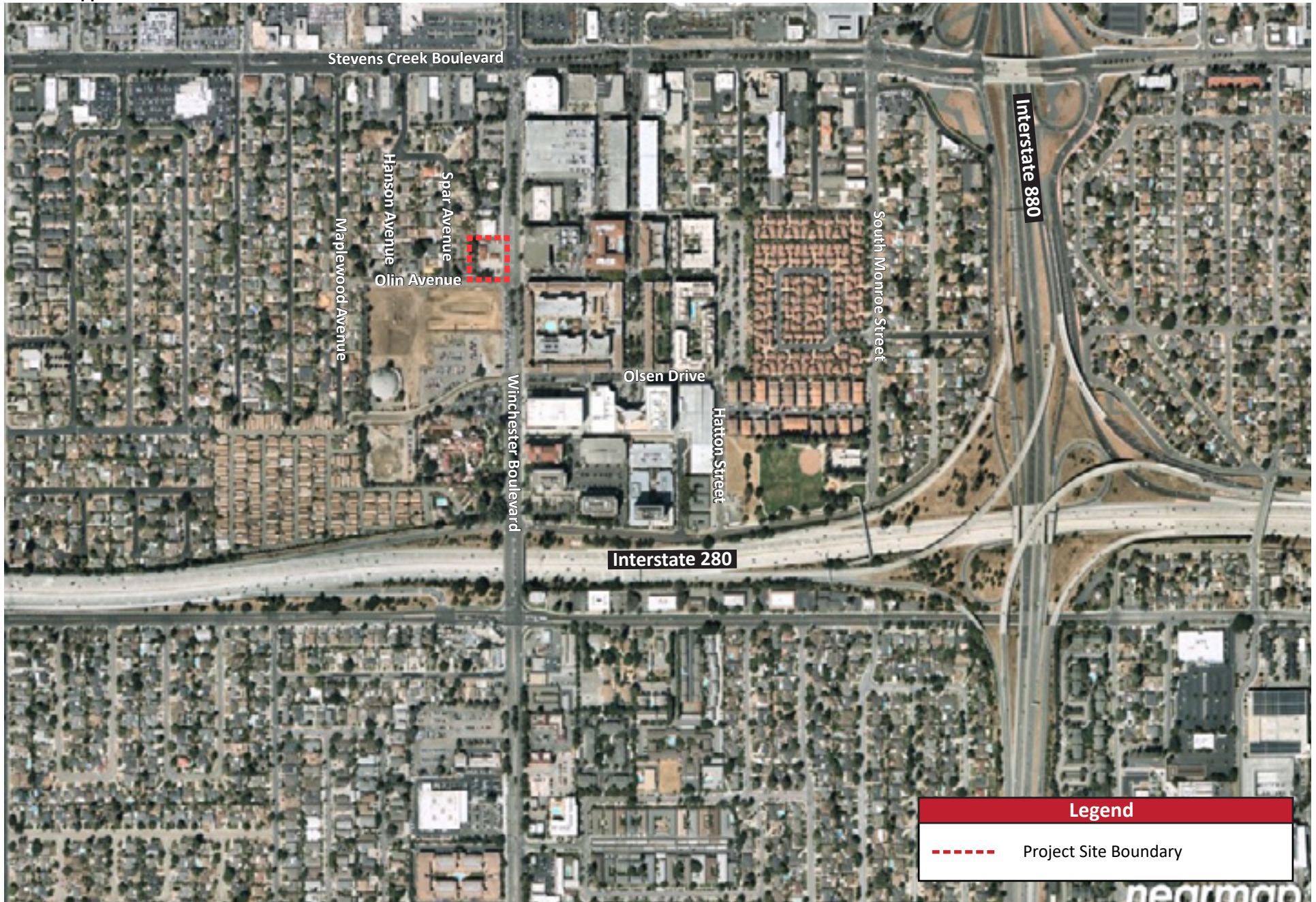
425 S. Winchester Blvd. Project



Not to scale

Kimley»Horn

Expect More. Experience Better.



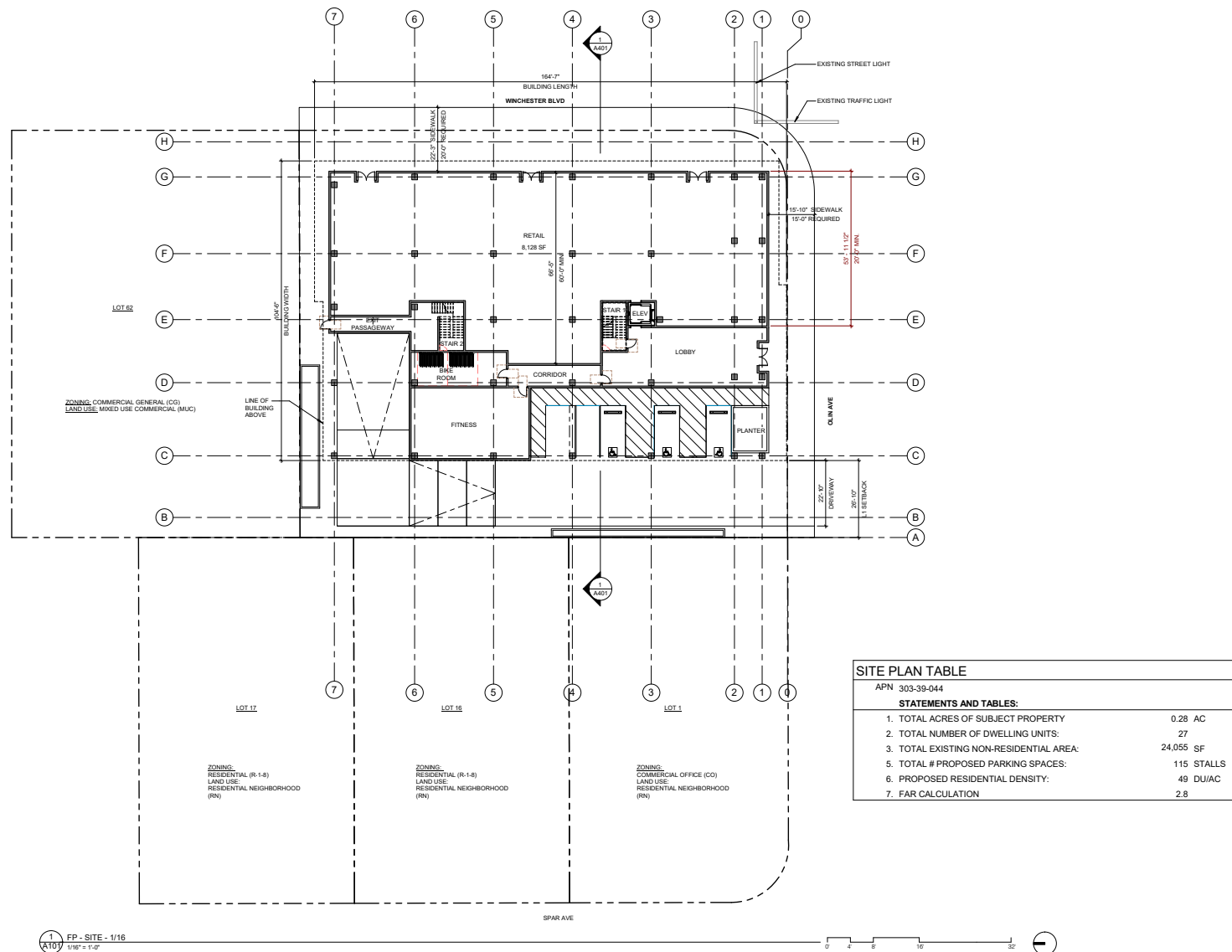
Source: Nearmap, 2019

Figure 2: Project Vicinity Map

425 S. Winchester Blvd. Project



Not to scale



Source: C2K Architecture, 2019

Figure 3: Project Site Plan

425 S. Winchester Blvd. Project



Not to scale

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2. ENVIRONMENTAL SETTING

2.1 CLIMATE

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

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

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

2.2 Toxic Air Contaminants

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

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

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

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

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

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

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

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

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

2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors near the project site include existing multi-family communities to the south of the Project site. As shown in Table 1: Sensitive Receptors, sensitive receptors near the Project site include single-family residences adjacent to the western boundary, approximately 30 feet from the property line. Single-family residential communities are located surrounding the Project site. These distances are from the Project site to the sensitive receptor property line.

Table 1: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site
Single-family residential community	20 feet west
Mix use residential (under construction)	150 feet southeast
Hotel Valencia Santana Row	700 feet east
Assisted Living Guidance	750 feet south
Winchester Mystery House	800 feet south
Shein Medicine Pediatrics and Associates	1,300 feet northwest
National University – San José	1,300 feet southeast
Single-family residential community	1,400 feet east
Santana Park	1,600 feet southeast
West Valley Alliance Church	1,800 feet southeast
Orion Montessori School	0.5 miles west
Christ Church of India	0.5 miles west

3. REGULATORY SETTING

3.1 Federal

Federal Clean Air Act

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

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

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

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

Federal Emissions Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the final and cleanest standards with the 2007 Heavy-Duty Highway Rule.¹ The PM emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the NO_x and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-hr and 0.14 g/hp-hr, respectively, were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010.

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

Emission Standards for Nonroad Diesel Engines

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

3.2 State of California

California Air Resources Board

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

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

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline². CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.³ The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO_x emissions from existing diesel vehicles operating in California. The regulation requires PM retrofits on all diesel trucks and buses that operate in California (i.e., existing vehicles are required to be upgraded to reduce emissions). Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older

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

³ California Air Resources Board, *Overview: Diesel Exhaust & Health*, available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>, accessed on November 5, 2019.

trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

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

Heavy-Duty Vehicle Idling Emission Reduction Program

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

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

CARB 2017 Technical Advisory (Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways)

CARB published a Technical Advisory in 2017 to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The Technical Advisory notes that research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors, and demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution. On-site strategies to remove air pollution identified in the Technical Advisory include the use of particle filtration systems (i.e., high efficiency filtration in mechanical ventilation systems), solid barriers, and vegetation.

California Energy Commission - Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in California Code of Regulations (CCR) Title 24 Part 6, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Energy Standards include requirements for mandatory mechanical ventilation intended to improve indoor air quality in homes, and requirements for Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems, and ventilation systems that provide outside air to a dwelling's occupiable

space. The Residential Compliance Manual for the 2019 Building Energy Efficiency Standards notes that air filter efficiencies of at least MERV 13 protect occupants from exposure to the smaller airborne particles (i.e., PM_{2.5}) that are known to adversely affect respiratory health. CCR Title 24 Part 6 requires a particle size efficiency rating equal to or greater than 85 percent in the 1.0 to 0.3 µg range.

3.3 Regional

Bay Area Air Quality Management District

The BAAQMD is the regional agency tasked with managing air quality in the region and has regulated TACs since the 1980s. The CCAA provides the BAAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles at an intersection, a mall, and on highways. As a State agency, CARB regulates motor vehicles and fuels for their emissions. The BAAQMD has published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.

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

Community Air Risk Evaluation Program

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

San José General Plan

- MS-10.4:** Encourage effective regulation of mobile and stationary sources of air pollution, both inside and outside of San José. In particular, support Federal and State regulations to improve automobile emission controls.
- MS-11.1:** Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an

adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

- MS-11.2:** For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.
- MS-11.6:** Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of toxic air contaminants (TACs) and particulate matter smaller than 2.5 microns (PM_{2.5}), emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.
- MS-11.7:** Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.
- MS-11.8:** For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.

4. SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Health Risk Analysis Thresholds

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

Individual Projects:

- **Excess Cancer Risk:** Emit contaminants that exceed the maximum individual cancer risk of 10 in one million.
- **Non-Cancer Risk:** Emit contaminants that exceed the maximum hazard quotient of 1.0 in one million.
- **Ambient PM_{2.5} Concentration:** Incremental increase in average annual PM_{2.5} concentration of greater than 0.3 µg/m³

Cumulative Thresholds:

- **Excess Cancer Risk:** Emit contaminants that would contribute to cumulative emissions, resulting in an exceedance of the maximum individual cancer risk of 100 in one million.
- **Non-Cancer Risk:** Emit contaminants that that would contribute to cumulative emissions, resulting in an exceedance of the maximum hazard quotient of 10.0 in one million.
- **Ambient PM_{2.5} Concentration:** Incremental increase in average cumulative annual PM_{2.5} concentration of greater than 0.8 µg/m³

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

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

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

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

4.2 Methodology

Construction Risk

Construction would generate DPM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site potentially poses a health risk to nearby sensitive receptors. The closest sensitive receptors to the Project site are residences adjacent to the site boundary. The nearest school to the Project site is the Orion Montessori School located approximately 0.5 miles (2,470 feet) west of the site.

The EPA recommended screening model AERSCREEN has been used to evaluate potential health effects to sensitive receptors from construction emissions. AERSCREEN is the recommended screening model based on the AERMOD dispersion model. The model produces estimates of worst-case concentrations without the need for hourly meteorological data. According to the EPA Support Center for Regulatory Atmospheric Modeling (SCRAM) website, AERSCREEN is intended to produce concentration estimates that are equal to or greater than the estimates produced by AERMOD with a fully developed set of meteorological and terrain data.⁴ Maximum (worst case) PM_{2.5} exhaust construction emissions over the entire construction period were used in AERSCREEN to approximate construction DPM emissions. Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) and based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015).

Operational Risk

The air dispersion modeling for the operational analysis was performed using the U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data is provided by CARB. Surface and upper air meteorological data from the Moffett Federal Airfield Monitoring Station was selected as being the most representative for meteorology based on proximity to the Project site.

The Project is located along S. Winchester Boulevard and near Winchester Boulevard. Given the roadways traffic volumes, emissions could result in pollutant concentrations at the Project site. Vehicle emissions along the two roadways were calculated using information derived from traffic counts. A DPM emission rate for PM_{2.5} was calculated using 2016 Caltrans traffic census data and a CARB 2017 Emission Factor

⁴ U.S. Environmental Protection Agency, *Air Quality Dispersion Modeling- Screening Models*. <https://www.epa.gov/scram/air-quality-dispersion-modeling-screening-models>

model (EMFAC)⁵ model run for Santa Clara County; refer to [Appendix A](#). EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to Project changes in future emissions from on-road mobile sources. EMFAC2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment. PM_{2.5} emissions were used as a proxy for DPM. An emissions rate (in grams per second) was calculated from the emissions generated by EMFAC2017.

AERMOD was run to obtain the peak 1-hour and annual average concentration in micrograms per cubic meter (µg/m³) at the proposed Project's future sensitive receptors (i.e., residents). The annual average concentrations were used to calculate the Maximum Individual Cancer Risk (MICR), the maximum chronic HI, as well as peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects. To achieve these goals, a receptor grid was placed over the Project site to cover the zone of impact. Due to the size of the Project site, nearby sensitive receptors were modeled with a 20-meter grid spacing. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. The modeling and analysis was prepared in accordance with the BAAQMD Modeling Guidance for AERMOD⁶.

Note that the concentration estimate developed using this methodology is conservative and is not a specific prediction of the actual concentrations that would occur at the Project site at any given point in time. Actual 1-hour and annual average concentrations are dependent on many variables, including specific distances during time periods of adverse meteorology.

Risk and Hazard Assessment

Cancer Risk. Based on the OEHHA methodology, residential inhalation cancer risk from annual average DPM and benzene concentrations are calculated by multiplying the daily inhalation dose, cancer potency factor, age sensitivity factor (ASF), frequency of time spent at home, and exposure duration divided by averaging time, yielding the excess cancer risk. These factors are discussed in more detail below. It is important to note that exposure duration is based on continual heavy truck operation at the along I-280. Exposure through inhalation (Dose-air) is a function of breathing rate, exposure frequency, and concentration of substance in the air. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

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

Where:

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

⁵ California Air Resources Board, *EMFAC 2017 Web Database*, www.arb.ca.gov/emfac/2017/, October 2019.

⁶ Bay Area Air Quality Management District, *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*, January 2016.

OEHHA developed ASFs to consider the increased sensitivity to carcinogens during early-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood and an ASF of 1 for ages 16 through 70 years. Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the following FAH values: from the third trimester to age <2 years, 85 percent of time is spent at home; from age 2 through <16 years, 72 percent of time is spent at home; from age 16 years and greater, 73 percent of time is spent at home.

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

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

Where:

$\text{Risk}_{\text{inh-res}}$	=	residential inhalation cancer risk (potential chances per million)
Dose_{air}	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

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

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

Where:

C_i	=	Concentration in the air of substance i (annual average concentration in $\mu\text{g}/\text{m}^3$)
REL_i	=	Chronic noncancer Reference Exposure Level for substance i ($\mu\text{g}/\text{m}^3$)

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

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

5. POTENTIAL HEALTH RISK IMPACTS

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

5.1 Construction Health Risk Analysis

The duration of construction activities for the project is estimated to be approximately 19 months. The project would demolish an existing gas station and associated uses. Construction-related activities would result in project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. Sensitive receptors near the project site include the adjacent residences approximately 20 feet west of the site. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs, so DPM is the focus of this discussion.

Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be episodic and would occur over several locations isolated from one another. Additionally, construction activities would be subject to and would comply with California regulations limiting idling to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Furthermore, even during the most intense year of construction, emissions of DPM would be generated from different locations on the project site rather than in a single location because different types of construction activities (e.g., site preparation and building construction) would not occur at the same place at the same time.

PM_{2.5} construction emissions rates in grams per second were calculated from the total annual mitigated on-site exhaust emissions reported in CalEEMod (0.09 tons unmitigated and 0.02 tons per year mitigated) total during construction. It should be noted that although construction would span over several years, the modeling conservatively uses the year with the highest emission for each phase. Annual emissions were converted to grams per second and these emissions rates were input into AERSCREEN.

As noted above, maximum (worst case) PM_{2.5} exhaust construction emissions over the entire construction period were used in AERSCREEN to approximate construction DPM emissions. Risk levels were calculated based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015). Results of this assessment are summarized in [Table 2: Construction Risk](#).

Table 2: Construction Risk

Exposure Scenario	Pollutant Concentration (µg/m ³)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Construction ¹	0.02	9.06	0.05	0.10
Threshold	0.3	10 in one million	1.0	1.0
Threshold Exceeded	No	No	No	No
1. Heavy-duty off-road construction equipment would also meet CARB Tier 4 Final emissions standards. Refer to Appendix A: Modeling Data.				

Results of this assessment indicate that the maximum concentration of PM_{2.5} during construction would be 0.02 µg/m³ which is below the BAAQMD 0.3 µg/m³ significance threshold. The highest calculated carcinogenic risk from Project construction is 9.06 per million, which is below the BAAQMD threshold of 10 in one million. Non-cancer hazards for DPM would be below BAAQMD threshold, with a chronic hazard index computed at 0.05 and an acute hazard index of 0.10. Acute and chronic hazards would be below the BAAQMD significance threshold of 1.0. As described above, worst-case construction risk levels based on screening-level modeling (AERSCREEN) and conservative assumptions would be below the BAAQMD's thresholds. Therefore, construction risk levels would be less than significant.

5.2 Operational Health Risk Analysis

The proposed Project would not include uses that would generate diesel truck traffic or other TACs at the Project site. Therefore, no operational health risks due to the Project were modeled and no impacts would occur.

On-Site Health Risk Analysis

The Project would include 27 residential units which would generate approximately 86 people on-site. These residences would potentially be exposed to health risks due to the proximity to high volume roadways.

The PM_{2.5} and total organic gases (TOG) for two nearby roadways (Winchester Boulevard and Stevens Creek Boulevard) were modeled in AERMOD. Based on the AERMOD outputs, the highest expected annual average diesel PM₁₀ emission concentrations from diesel truck traffic at the Project site would be 0.025 µg/m³ from Winchester Boulevard. The highest indoor concentration would be 0.008 µg/m³. As noted in Section 3 above, CCR Title 24 Part 6 requires new development to use MERV 13 air filtration on space conditioning systems and ventilation systems that provide outside air to the occupiable space of a dwelling. A MERV 13 filter has a particle removal efficiency in the range of 80-90 percent. A 80 percent removal efficiency was conservatively used for the purposes of this study. According to the U.S. EPA's *Exposure Factor Handbook* (2011), on average, people spend 90 percent of their time indoors. As residents are not always indoors, the filtration's overall effectiveness accounts for the time spent outdoors, which equates to approximately three hours per day. It is noted that this is a conservative assumption for this

Project, as all of the time spent outdoors would not occur at the Project site. Based on the particle removal efficiency and the percentage of time indoors, MERV 13 filters would reduce exposure to particulates by approximately 70 percent. SC-1 below includes details on the ventilation requirements.

As shown in [Table 2: Risk Assessment Results](#), the highest calculated carcinogenic risk at the Project site would be 6.53 per million for future residents. The risk calculations are based on the pollutant concentration at the worst-case location and conservatively assume: no cleaner technology or lower emissions in future years, and 95th percentile breathing rates. [Table 2](#) shows the cancer risk at the Project site would be less than significant.

Table 2: On-Site Health Risk

Exposure Scenario	Pollutant Concentration (µg/m³)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Winchester Boulevard (PM _{2.5})	0.008	6.53	0.0015	0.0101
Winchester (TOG)	0.121	0.63	0.0007	0.0002
Stevens Creek (PM _{2.5})	0.001	0.96	0.0002	0.0021
Stevens Creek (TOG)	0.015	0.08	0.0001	0.00004
Total	0.145	8.2	0.0025	0.01244
<i>Threshold</i>	<i>NA</i>	<i>10 in one million</i>	<i>1.0</i>	<i>1.0</i>
Threshold Exceeded	NA	No	No	No
Refer to Appendix A: Modeling Data.				

Cumulative On-Site Health Impacts

In addition to mobile sources, stationary sources within a 1,000-foot-radius of the Project site were identified using BAAQMD's Stationary Source Screening Analysis Tools and consultation with the BAAQMD. As indicated in [Table 3: Cumulative Operational Health Risk](#), TACs generated from the stationary and roadway sources within a 1,000-foot-radius would not exceed BAAQMD thresholds.

Table 3: Cumulative On-Site Health Risk

Emissions Sources	PM _{2.5} (µg/m³)	Cancer Risk (per million)	Chronic Hazard	Acute Hazard
Roadway Sources	0.145	8.2	0.0025	0.0124
Stationary Sources				
FRIT	0.047	1.777	0.003	0.0188
BelmontCorp	0.001	1.033	0.002	0.0004
Hotel Valencia	0.001	0.541	0.001	0.0004
Santana Row Gas Mart	0.0	0.490	0.002	0.000
Cumulative Health Risk Values	0.19	12.04	0.011	0.032
<i>BAAQMD Cumulative Threshold</i>	<i>0.8</i>	<i>100</i>	<i>10</i>	<i>10</i>
Threshold Exceeded?	No	No	No	No

As described above, cumulative impacts related to residential cancer risk, PM_{2.5}, chronic hazard, and acute hazard would be less than cumulatively considerable and within acceptable limits.

Standard Conditions and Requirements

SC-1 Ventilation Requirements. The ventilation system shall be provided with air filter(s) having a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30-1.0 μm range and equal to or greater than 85 percent in the 1.0-3.0 μm range, when tested in accordance with Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 680 (California Energy Commission, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings Section 150.0[m][12]).

Mitigation Measures: None required.

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

6. REFERENCES

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12. Lakes Environmental, *AERMOD View Gaussian Plume Air Dispersion Model*, Version 9.8.1
13. Ralph Propper, et al., *Ambient and Emission Trends of Toxic Air Contaminants in California*, Environmental Science and Technology, September 2015.
14. United States Environmental Protection Agency, *Exposure Factors Handbook: 2011 Edition*, September 2011.

Appendix A

Modeling Data

Appendix E

Winchester

Construction

Year	Phase	PM _{2.5} On-Site Exhaust	
		Mitigated	
		Tons/Year	g/s
2021	Demolition	3.70E-04	1.06E-05
2021	Site Prep	6.00E-04	1.73E-05
2021	Grading	6.70E-04	1.93E-05
2021	Paving	4.20E-04	1.21E-05
2021	Building	1.24E-02	3.57E-04
2022	Building	0.0196	5.64E-04
2022	Architectural Coating	1.30E-04	3.74E-06
		max:	5.64E-04
		0.03419	

Conversions:

1 ton =	907184.7	grams
1 year =	3.15E+07	seconds

County Population:

1,938,000 (Santa Clara County)

See 70 FR 68218, November 9, 2005

	µg/m ³		
	1 hr	24 hr	Annual
Unmitigated Concentration from AERMOD	2.63728	1.38663	0.61858
Mitigated Concentration from AERMOD	0.85484	0.44946	0.20051
	0.53	0.23	0.08

Appendix E

HARP 2 Risk Summary

Unmitigated

INDEX

POLID

1 9901 Diesel ExhPM
2 107028 Acrolein

Cancer	Per 1 million	Chronic	Acute
CONC	INH_RISK	RESP	CONC
6.19E-01	2.36E-04	1.24E-01	2.64E+00
0.0	0.0	0.0	2.64E+00
			1.05E+00

Mitigated (Tier 4)

INDEX

POLID

1 9901 Diesel ExhPM
1 9901 Diesel ExhPM
2 107028 Acrolein

Cancer	Per 1 million	Chronic	Acute
CONC	INH_RISK	RESP	CONC
2.01E-01	7.64E-05	4.01E-02	8.55E-01
8.00E-02	3.05E-05	1.60E-02	5.30E-01
0.0	0.0	0.0	8.55E-01
			3.42E-01

Appendix E

Roadway Emission Rate Calculations

	Speed (mph)	ADT	Emission Factor (g/mi)	Length (mi)	Emissions Rate (g/day)	(g/sec)	Vehicle Height
Winchester (PM2.5)	35	44,932	0.002353265	0.33	34.89317347	0.000403856	3.66
Winchester (TOG)	35	44,932	0.03175362	0.33	470.8287014	0.005449406	0.6
Stevens Creek (PM2.5)	35	43,262	0.002353265	0.66	67.19257859	0.000777692	3.66
Stevens Creek (TOG)	35	43,262	0.03175362	0.66	906.6585631	0.010493733	0.6

	AERMOD					HARP (without MERV)					HARP (with MERV)			
	Hourly	w/ merv	24-hour	Annual	w/merv	Cancer	Per 1 million	Chronic	Acute	Cancer	Per 1 million	Chronic	Acute	
Winchester (PM2.5)	0.08448	0.025344	0.04993	0.02516	0.007548	2.18E-05	21.77	5.03E-03	3.38E-02	6.5303E-06	6.5303	0.0015	0.0101	
Winchester (TOG)	1.4891	0.44673	0.84867	0.40391	0.121173		0.00				0			
Stevens Creek (PM2.5)	0.01723	0.005169	0.00707	0.00369	0.001107	3.19E-06	3.19	7.38E-04	6.89E-03	9.5775E-07	0.95775	0.0002	0.0021	
Stevens Creek (TOG)	0.26096	0.078288	0.09504	0.04867	0.014601		0.00				0.00			

Appendix E

	From	To	AADT	Percent Trucks	Truck ADT	Other Vehicle ADT
Winchester	Stevens Creek	Olin	44932	2.00%	899	44,033
Stevens Creek	Winchester	Santana Row	43262	2.00%	865	42,397

Source: Cumulative Scenario from TIA

Appendix E

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: Santa Clara (SF)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	VMT	TOG_RUNEX	PM2_5_RUNEX		
Santa Clara	2023	HHDT	Aggregate	35	GAS	86.91127	0.549522	47.75968	0.001061	0.092242
Santa Clara	2023	HHDT	Aggregate	35	DSL	34869.81	0.021215	739.7488	0.009512	331.6665
Santa Clara	2023	HHDT	Aggregate	35	NG	1291.631	2.335678	3016.833	0.003804	4.913282
Santa Clara	2023	LDA	Aggregate	35	GAS	1684955	0.011035	18593.48	0.001222	2059.23
Santa Clara	2023	LDA	Aggregate	35	DSL	17675	0.013798	243.8884	0.005672	100.2547
Santa Clara	2023	LDT1	Aggregate	35	GAS	155980.3	0.026318	4105.04	0.001582	246.7899
Santa Clara	2023	LDT1	Aggregate	35	DSL	39.10067	0.205257	8.025668	0.138445	5.413282
Santa Clara	2023	LDT2	Aggregate	35	GAS	522678.4	0.01919	10030.02	0.00124	647.9818
Santa Clara	2023	LDT2	Aggregate	35	DSL	4159.153	0.016322	67.88721	0.004827	20.07448
Santa Clara	2023	LHDT1	Aggregate	35	GAS	28481.02	0.036086	1027.779	0.001049	29.88081
Santa Clara	2023	LHDT1	Aggregate	35	DSL	28970.09	0.078225	2266.188	0.014127	409.2539
Santa Clara	2023	LHDT2	Aggregate	35	GAS	3949.219	0.024375	96.26055	0.00099	3.908851
Santa Clara	2023	LHDT2	Aggregate	35	DSL	11398.13	0.071972	820.3459	0.015434	175.9178
Santa Clara	2023	MCY	Aggregate	35	GAS	15278.81	2.638717	40316.44	0.001776	27.1419
Santa Clara	2023	MDV	Aggregate	35	GAS	308515.5	0.024189	7462.703	0.001306	403.052
Santa Clara	2023	MDV	Aggregate	35	DSL	8961.951	0.011382	102.0058	0.004032	36.13025
Santa Clara	2023	MH	Aggregate	35	GAS	2529.212	0.064332	162.7087	0.001198	3.030155
Santa Clara	2023	MH	Aggregate	35	DSL	859.2653	0.072929	62.66503	0.061812	53.11294
Santa Clara	2023	MHDT	Aggregate	35	GAS	7572.753	0.064657	489.6283	0.00099	7.494417
Santa Clara	2023	MHDT	Aggregate	35	DSL	45382.85	0.008403	381.3596	0.003827	173.6805
Santa Clara	2023	OBUS	Aggregate	35	GAS	2291.418	0.062019	142.1122	0.000759	1.739079
Santa Clara	2023	OBUS	Aggregate	35	DSL	8118.297	0.008133	66.02418	0.004077	33.0969
Santa Clara	2023	SBUS	Aggregate	35	GAS	2191.929	0.053115	116.4242	0.0008	1.753032
Santa Clara	2023	SBUS	Aggregate	35	DSL	2281.55	0.078272	178.5815	0.029423	67.12987
Santa Clara	2023	UBUS	Aggregate	35	GAS	13.65896	0.014938	0.204041	0.000991	0.013535
Santa Clara	2023	UBUS	Aggregate	35	DSL	603.8258	0.051457	31.07137	0.006014	3.631607
Santa Clara	2023	UBUS	Aggregate	35	NG	154.0715	5.284388	814.1735	0.00152	0.234203

DPM (Trucks) 0.002353

TOG (All Other Vehicle) 0.031754

Appendix E

Toxic Air Contaminant Concentrations			Winchester TOG				
	Mass Fraction	Emissions Rates	AERMOD Annual	Annual MER Concentration	Emissions Rates (1-hour)	Aermod Hourly	Acute Concentration
DPM	1			0.00E+00			
Acetaldehyde	2.80E-03		0.121173	3.39E-04	3.51E-03	0.44673	1.25E-03
Acrolein	1.30E-03			1.58E-04			5.81E-04
Benzene	2.83E-02			3.43E-03			1.26E-02
1,3-Butadiene	5.50E-03			6.66E-04			2.46E-03
Ethyl benzene	1.17E-02			1.42E-03			5.23E-03
Formaldehyde	1.58E-02			1.91E-03			7.06E-03
Hexane	3.14E-02			3.80E-03			1.40E-02
Methanol	1.20E-03			1.45E-04			5.36E-04
Methyl Ethyl Ketone	2.00E-04			2.42E-05			8.93E-05
Naphthalene	5.00E-04			6.06E-05			2.23E-04
Propylene	3.06E-02		3.71E-03	1.37E-02			
Styrene	1.20E-03		1.45E-04	5.36E-04			
Toluene	7.46E-02		9.04E-03	3.33E-02			
Xylenes	5.38E-02		6.52E-03	2.40E-02			
PM _{2.5}	1.00E+00	2.49E-02		1.21E-01			--

PM2.5= proxy for DPM

HARP 2 Risk Summary							
INDEX	POLID	POLABBREV	Cancer	Chronic	Acute		
			CONC	INH_RISK	RESP	CONC	RESP
1	75070	Acetaldehyde	3.39E-04	2.67E-09	2.42E-06	1.25E-03	2.66E-06
2	107028	Acrolein	1.58E-04	0.00E+00	4.51E-04	5.81E-04	2.32E-04
3	71432	Benzene	3.43E-03	2.70E-07	0.00E+00	1.26E-02	0.00E+00
4	106990	1,3-Butadiene	6.66E-04	3.14E-07	0.00E+00	2.46E-03	0.00E+00
5	100414	Ethyl Benzene	1.42E-03	9.72E-09	0.00E+00	5.23E-03	0.00E+00
6	50000	Formaldehyde	1.91E-03	3.15E-08	2.12E-04	7.06E-03	0.00E+00
7	110543	Hexane	3.80E-03	0.00E+00	0.00E+00	1.40E-02	0.00E+00
8	67561	Methanol	1.45E-04	0.00E+00	0.00E+00	5.36E-04	0.00E+00
9	78933	MEK	2.42E-05	0.00E+00	0.00E+00	8.93E-05	6.87E-09
10	91203	Naphthalene	6.06E-05	5.72E-09	6.73E-06	2.23E-04	0.00E+00
11	115071	Propylene	3.71E-03	0.00E+00	1.24E-06	1.37E-02	0.00E+00
12	100425	Styrene	1.45E-04	0.00E+00	0.00E+00	5.36E-04	2.55E-08
13	108883	Toluene	9.04E-03	0.00E+00	3.01E-05	3.33E-02	9.00E-07
14	1330207	Xylenes	6.52E-03	0.00E+00	9.31E-06	2.40E-02	1.09E-06
15	88101	PM25	1.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			6.34E-07	7.13E-04	1.16E-01	2.37E-04	0.000237083
				7.13E-04			

Appendix E

Toxic Air Contaminant Concentrations				Stevens Creek TOG			
	Mass Fraction	Emissions Rates	AERMOD Annual	Annual MER Concentration	Emissions Rates (1-hour)	Aermod Hourly	Acute Concentration
DPM	1			0.00E+00			
Acetaldehyde	2.80E-03		0.014601	4.09E-05	3.51E-03	0.078288	2.19E-04
Acrolein	1.30E-03			1.90E-05			1.02E-04
Benzene	2.83E-02			4.13E-04			2.22E-03
1,3-Butadiene	5.50E-03			8.03E-05			4.31E-04
Ethyl benzene	1.17E-02			1.71E-04			9.16E-04
Formaldehyde	1.58E-02			2.31E-04			1.24E-03
Hexane	3.14E-02			4.58E-04			2.46E-03
Methanol	1.20E-03			1.75E-05			9.39E-05
Methyl Ethyl Ketone	2.00E-04			2.92E-06			1.57E-05
Naphthalene	5.00E-04			7.30E-06			3.91E-05
Propylene	3.06E-02			4.47E-04			2.40E-03
Styrene	1.20E-03			1.75E-05			9.39E-05
Toluene	7.46E-02			1.09E-03			5.84E-03
Xylenes	5.38E-02			7.86E-04			4.21E-03
PM _{2.5}	1.00E+00	2.49E-02		1.46E-02			--

PM2.5= proxy for DPM

HARP 2 Risk Summary				
INDEX	POLID	POLABBREV	Cancer	Chronic
			CONC	INH_RISK
1	75070	Acetaldehyde	4.09E-05	3.22E-10
2	107028	Acrolein	1.90E-05	0.00E+00
3	71432	Benzene	4.13E-04	3.25E-08
4	106990	1,3-Butadiene	8.03E-05	3.79E-08
5	100414	Ethyl Benzene	1.71E-04	1.17E-09
6	50000	Formaldehyde	2.31E-04	3.82E-09
7	110543	Hexane	4.58E-04	0.00E+00
8	67561	Methanol	1.75E-05	0.00E+00
9	78933	MEK	2.92E-06	0.00E+00
10	91203	Naphthalene	7.30E-06	6.89E-10
11	115071	Propylene	4.47E-04	0.00E+00
12	100425	Styrene	1.75E-05	0.00E+00
13	108883	Toluene	1.09E-03	0.00E+00
14	1330207	Xylenes	7.86E-04	0.00E+00
15	88101	PM25	1.46E-02	0.00E+00
Total			7.64E-08	8.60E-05
			0.08	8.60E-05
				4.16208E-05

Appendix E

425 Winchester_ Winchester Rd_TOG.ADI

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**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_ Winchester Rd_TOG\425 Winchester_
Winchester Rd_TOG.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID TOG
  RUNORNOT RUN
  ERRORFIL "425 Winchester_ Winchester Rd_TOG.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Winchester
** PREFIX
** Length of Side = 15.50
** Configuration = Adjacent
** Emission Rate = 0.005449406
** Vertical Dimension = 1.02
** SZINIT = 0.47
** Nodes = 2
** 593013.255, 4131260.630, 40.15, 0.51, 7.21
```

Appendix E

425 Winchester_ Winchester Rd_TOG.ADI

** 593020.843, 4130725.644, 42.61, 0.51, 7.21

** -----

LOCATION	L0000001	VOLUME	593013.365	4131252.880	40.21
LOCATION	L0000002	VOLUME	593013.585	4131237.382	40.20
LOCATION	L0000003	VOLUME	593013.804	4131221.884	40.18
LOCATION	L0000004	VOLUME	593014.024	4131206.385	40.19
LOCATION	L0000005	VOLUME	593014.244	4131190.887	40.26
LOCATION	L0000006	VOLUME	593014.464	4131175.388	40.28
LOCATION	L0000007	VOLUME	593014.684	4131159.890	40.23
LOCATION	L0000008	VOLUME	593014.904	4131144.391	40.23
LOCATION	L0000009	VOLUME	593015.123	4131128.893	40.30
LOCATION	L0000010	VOLUME	593015.343	4131113.394	40.36
LOCATION	L0000011	VOLUME	593015.563	4131097.896	40.41
LOCATION	L0000012	VOLUME	593015.783	4131082.398	40.46
LOCATION	L0000013	VOLUME	593016.003	4131066.899	40.53
LOCATION	L0000014	VOLUME	593016.223	4131051.401	40.58
LOCATION	L0000015	VOLUME	593016.442	4131035.902	40.60
LOCATION	L0000016	VOLUME	593016.662	4131020.404	40.66
LOCATION	L0000017	VOLUME	593016.882	4131004.905	40.74
LOCATION	L0000018	VOLUME	593017.102	4130989.407	40.83
LOCATION	L0000019	VOLUME	593017.322	4130973.908	40.92
LOCATION	L0000020	VOLUME	593017.542	4130958.410	41.01
LOCATION	L0000021	VOLUME	593017.761	4130942.912	41.12
LOCATION	L0000022	VOLUME	593017.981	4130927.413	41.26
LOCATION	L0000023	VOLUME	593018.201	4130911.915	41.42
LOCATION	L0000024	VOLUME	593018.421	4130896.416	41.55
LOCATION	L0000025	VOLUME	593018.641	4130880.918	41.63
LOCATION	L0000026	VOLUME	593018.861	4130865.419	41.74
LOCATION	L0000027	VOLUME	593019.080	4130849.921	41.87
LOCATION	L0000028	VOLUME	593019.300	4130834.423	41.97
LOCATION	L0000029	VOLUME	593019.520	4130818.924	42.06
LOCATION	L0000030	VOLUME	593019.740	4130803.426	42.13
LOCATION	L0000031	VOLUME	593019.960	4130787.927	42.19
LOCATION	L0000032	VOLUME	593020.180	4130772.429	42.27
LOCATION	L0000033	VOLUME	593020.399	4130756.930	42.37
LOCATION	L0000034	VOLUME	593020.619	4130741.432	42.46
LOCATION	L0000035	VOLUME	593020.839	4130725.933	42.56

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000002	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000003	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000004	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000005	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000006	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000007	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000008	0.0001556973	0.51	7.21	0.47

Appendix E

	425 Winchester_	Winchester	Rd_TOG.ADI	
SRCPARAM L0000009	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000010	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000011	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000012	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000013	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000014	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000015	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000016	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000017	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000018	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000019	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000020	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000021	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000022	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000023	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000024	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000025	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000026	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000027	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000028	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000029	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000030	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000031	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000032	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000033	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000034	0.0001556973	0.51	7.21	0.47
SRCPARAM L0000035	0.0001556973	0.51	7.21	0.47

**

 URBANSRC ALL

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "425 Winchester_ Winchester Rd_TOG.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE 724945.SFC

AERSCREEN 16216 / AERMOD 18081
11/18/19

22:31:58

TITLE: WINCHESTER-CONST

***** AREA PARAMETERS

SOURCE EMISSION RATE: 0.564E-03 g/s
0.448E-02 lb/hr

AREA EMISSION RATE: 0.226E-06 g/(s-m2)
0.179E-05 lb/(hr-m2)

AREA HEIGHT: 6.00 meters
19.69 feet

AREA SOURCE LONG SIDE: 50.00 meters
164.04 feet

AREA SOURCE SHORT SIDE: 50.00 meters
164.04 feet

INITIAL VERTICAL DIMENSION: 5.00 meters
16.40 feet

RURAL OR URBAN: URBAN
POPULATION: 1938000

INITIAL PROBE DISTANCE = 5000. meters
16404. feet

***** BUILDING DOWNWASH PARAMETERS

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

***** FLOW SECTOR ANALYSIS

25 meter receptor spacing: 1. meters - 5000.
meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	2.334	20	25.0	ANN

* = worst case diagonal

***** MAKEMET METEOROLOGY PARAMETERS *****

MIN/MAX TEMPERATURE: 278.0 / 298.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: USER ENTERED

ALBEDO: 0.21
BOWEN RATIO: 1.63
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM
IMPACT

YR MO DY JDY HR

10 01 10 10 01

HO	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	ZO	BOWEN
ALBEDO	REF	WS							

-1.27	0.043	-9.000	0.020	-999.	21.	5.9	1.000	1.63	
-------	-------	--------	-------	-------	-----	-----	-------	------	--

Appendix E

0.21 0.50

HT	REF TA	HT
10.0	298.0	2.0

 ***** AERSCREEN AUTOMATED DISTANCES

 OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

MAXIMUM CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	1-HR
----	----	----	----	----
--	1.00	1.489	2524.99	
0.6936E-02	25.00	2.334	2550.00	
0.6843E-02	50.01	1.476	2575.00	
0.6752E-02	75.00	0.8465	2600.00	
0.6664E-02	100.00	0.5721	2625.00	
0.6577E-02	125.00	0.4222	2650.00	
0.6492E-02	150.00	0.3294	2675.00	
0.6409E-02	175.00	0.2668	2700.00	
0.6328E-02	200.00	0.2225	2725.00	
0.6249E-02	225.00	0.1893	2750.00	
0.6171E-02	250.00	0.1639	2775.00	
0.6096E-02	275.00	0.1439	2800.00	
0.6021E-02	300.00	0.1278	2824.99	
0.5948E-02	325.00	0.1145	2849.99	

Appendix E

0.5877E-02	350.00	0.1035	2875.00
0.5807E-02	375.00	0.9412E-01	2900.00
0.5739E-02	400.00	0.8617E-01	2925.00
0.5672E-02	425.00	0.7933E-01	2950.00
0.5606E-02	450.00	0.7338E-01	2975.00
0.5542E-02	475.00	0.6815E-01	3000.00
0.5479E-02	500.00	0.6351E-01	3025.00
0.5417E-02	525.00	0.5940E-01	3050.00
0.5356E-02	550.00	0.5573E-01	3075.00
0.5297E-02	575.00	0.5244E-01	3100.00
0.5239E-02	600.00	0.4946E-01	3125.00
0.5181E-02	625.00	0.4677E-01	3150.00
0.5125E-02	650.00	0.4432E-01	3174.99
0.5070E-02	675.00	0.4208E-01	3200.00
0.5016E-02	700.00	0.4003E-01	3225.00
0.4963E-02	725.00	0.3815E-01	3250.00
0.4911E-02	750.00	0.3642E-01	3274.99
0.4860E-02	775.00	0.3482E-01	3300.00
0.4809E-02	800.00	0.3334E-01	3325.00
0.4760E-02	825.00	0.3196E-01	3350.00
0.4711E-02	850.00	0.3068E-01	3375.00
0.4664E-02	875.00	0.2958E-01	3400.00
0.4617E-02	900.00	0.2846E-01	3425.00
0.4571E-02	925.00	0.2741E-01	3450.00
0.4526E-02	950.00	0.2643E-01	3475.00
0.4481E-02	975.00	0.2550E-01	3500.00

Appendix E

0.4437E-02	1000.00	0.2463E-01	3525.00
0.4394E-02	1025.00	0.2381E-01	3550.00
0.4352E-02	1050.00	0.2304E-01	3575.00
0.4311E-02	1075.00	0.2231E-01	3600.00
0.4270E-02	1100.00	0.2162E-01	3625.00
0.4229E-02	1125.00	0.2096E-01	3650.00
0.4190E-02	1149.99	0.2034E-01	3675.00
0.4151E-02	1175.00	0.1975E-01	3700.00
0.4113E-02	1200.00	0.1919E-01	3725.00
0.4075E-02	1225.00	0.1865E-01	3750.00
0.4038E-02	1250.00	0.1814E-01	3775.00
0.4001E-02	1275.00	0.1766E-01	3800.00
0.3965E-02	1300.00	0.1719E-01	3825.00
0.3930E-02	1325.00	0.1675E-01	3849.99
0.3895E-02	1349.99	0.1633E-01	3875.00
0.3861E-02	1375.00	0.1592E-01	3900.00
0.3827E-02	1400.00	0.1553E-01	3925.00
0.3794E-02	1425.00	0.1516E-01	3950.00
0.3761E-02	1449.99	0.1480E-01	3975.00
0.3729E-02	1475.00	0.1446E-01	4000.00
0.3697E-02	1500.00	0.1413E-01	4025.00
0.3665E-02	1525.00	0.1382E-01	4050.00
0.3635E-02	1550.00	0.1351E-01	4075.00
0.3604E-02	1575.00	0.1322E-01	4100.00
0.3574E-02	1600.00	0.1294E-01	4125.00
0.3544E-02	1625.00	0.1266E-01	4150.00

Appendix E

0.3515E-02	1650.00	0.1240E-01	4175.00
0.3487E-02	1675.00	0.1215E-01	4200.00
0.3458E-02	1700.00	0.1191E-01	4225.00
0.3430E-02	1725.00	0.1167E-01	4250.00
0.3403E-02	1750.00	0.1144E-01	4275.00
0.3375E-02	1775.00	0.1122E-01	4300.00
0.3349E-02	1800.00	0.1101E-01	4325.00
0.3322E-02	1825.00	0.1080E-01	4350.00
0.3296E-02	1850.00	0.1061E-01	4375.00
0.3270E-02	1875.00	0.1041E-01	4400.00
0.3245E-02	1900.00	0.1023E-01	4425.00
0.3220E-02	1924.99	0.1004E-01	4450.00
0.3195E-02	1950.00	0.9869E-02	4475.00
0.3171E-02	1975.00	0.9699E-02	4500.00
0.3147E-02	2000.00	0.9534E-02	4525.00
0.3123E-02	2025.00	0.9373E-02	4550.00
0.3100E-02	2050.00	0.9218E-02	4575.00
0.3077E-02	2075.00	0.9067E-02	4599.99
0.3054E-02	2100.00	0.8920E-02	4625.00
0.3031E-02	2124.99	0.8777E-02	4650.00
0.3009E-02	2150.00	0.8638E-02	4675.00
0.2987E-02	2175.00	0.8504E-02	4700.00
0.2965E-02	2199.99	0.8373E-02	4725.00
0.2944E-02	2224.99	0.8245E-02	4750.00
0.2923E-02	2250.00	0.8121E-02	4775.00
0.2902E-02	2275.00	0.8000E-02	4800.00

Appendix E

0.2881E-02	2300.00	0.7881E-02	4825.00
0.2861E-02	2325.00	0.7765E-02	4850.00
0.2841E-02	2350.00	0.7652E-02	4875.00
0.2821E-02	2375.00	0.7542E-02	4900.00
0.2801E-02	2399.99	0.7435E-02	4924.99
0.2782E-02	2425.00	0.7330E-02	4950.00
0.2762E-02	2449.99	0.7228E-02	4975.00
0.2743E-02	2475.00	0.7128E-02	5000.00
0.2725E-02	2500.00	0.7031E-02	

 ***** AERSCREEN MAXIMUM IMPACT SUMMARY *****

3-hour, 8-hour, and 24-hour scaled
 concentrations are equal to the 1-hour concentration as
 referenced in
 SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
 IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
 Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
 under Screening Guidance

SCALED	MAXIMUM	SCALED	SCALED	SCALED
	1-HOUR	3-HOUR	8-HOUR	24-HOUR
ANNUAL				
CALCULATION	CONC	CONC	CONC	CONC
CONC				
PROCEDURE	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)
(ug/m3)				
-----	-----	-----	-----	-----
FLAT TERRAIN	2.378	2.378	2.378	2.378
N/A				
DISTANCE FROM SOURCE	27.00 meters			

Appendix E

IMPACT AT THE AMBIENT BOUNDARY N/A	1.489	1.489	1.489	1.489
--	-------	-------	-------	-------

DISTANCE FROM SOURCE	1.00 meters
----------------------	-------------

Appendix E

425 Winchester_Winchester Rd.ADI

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_Winchester Rd\425
Winchester_Winchester Rd.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "425 Winchester_Winchester Rd.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Winchester
** PREFIX
** Length of Side = 15.50
** Configuration = Adjacent
** Emission Rate = 0.000403856
** Vertical Dimension = 6.22
** SZINIT = 2.89
** Nodes = 2
** 593013.255, 4131260.630, 40.15, 3.11, 7.21
```

Appendix E

425 Winchester_Winchester Rd.ADI

** 593020.843, 4130725.644, 42.61, 3.11, 7.21

** -----

LOCATION	L0000001	VOLUME	593013.365	4131252.880	40.21
LOCATION	L0000002	VOLUME	593013.585	4131237.382	40.20
LOCATION	L0000003	VOLUME	593013.804	4131221.884	40.18
LOCATION	L0000004	VOLUME	593014.024	4131206.385	40.19
LOCATION	L0000005	VOLUME	593014.244	4131190.887	40.26
LOCATION	L0000006	VOLUME	593014.464	4131175.388	40.28
LOCATION	L0000007	VOLUME	593014.684	4131159.890	40.23
LOCATION	L0000008	VOLUME	593014.904	4131144.391	40.23
LOCATION	L0000009	VOLUME	593015.123	4131128.893	40.30
LOCATION	L0000010	VOLUME	593015.343	4131113.394	40.36
LOCATION	L0000011	VOLUME	593015.563	4131097.896	40.41
LOCATION	L0000012	VOLUME	593015.783	4131082.398	40.46
LOCATION	L0000013	VOLUME	593016.003	4131066.899	40.53
LOCATION	L0000014	VOLUME	593016.223	4131051.401	40.58
LOCATION	L0000015	VOLUME	593016.442	4131035.902	40.60
LOCATION	L0000016	VOLUME	593016.662	4131020.404	40.66
LOCATION	L0000017	VOLUME	593016.882	4131004.905	40.74
LOCATION	L0000018	VOLUME	593017.102	4130989.407	40.83
LOCATION	L0000019	VOLUME	593017.322	4130973.908	40.92
LOCATION	L0000020	VOLUME	593017.542	4130958.410	41.01
LOCATION	L0000021	VOLUME	593017.761	4130942.912	41.12
LOCATION	L0000022	VOLUME	593017.981	4130927.413	41.26
LOCATION	L0000023	VOLUME	593018.201	4130911.915	41.42
LOCATION	L0000024	VOLUME	593018.421	4130896.416	41.55
LOCATION	L0000025	VOLUME	593018.641	4130880.918	41.63
LOCATION	L0000026	VOLUME	593018.861	4130865.419	41.74
LOCATION	L0000027	VOLUME	593019.080	4130849.921	41.87
LOCATION	L0000028	VOLUME	593019.300	4130834.423	41.97
LOCATION	L0000029	VOLUME	593019.520	4130818.924	42.06
LOCATION	L0000030	VOLUME	593019.740	4130803.426	42.13
LOCATION	L0000031	VOLUME	593019.960	4130787.927	42.19
LOCATION	L0000032	VOLUME	593020.180	4130772.429	42.27
LOCATION	L0000033	VOLUME	593020.399	4130756.930	42.37
LOCATION	L0000034	VOLUME	593020.619	4130741.432	42.46
LOCATION	L0000035	VOLUME	593020.839	4130725.933	42.56

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000002	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000003	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000004	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000005	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000006	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000007	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000008	0.0000115387	3.11	7.21	2.89

Appendix E

```

                                425 Winchester_Winchester Rd.ADI
SRCPARAM L0000009      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000010      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000011      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000012      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000013      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000014      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000015      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000016      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000017      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000018      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000019      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000020      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000021      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000022      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000023      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000024      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000025      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000026      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000027      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000028      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000029      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000030      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000031      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000032      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000033      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000034      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000035      0.0000115387      3.11      7.21      2.89

```

**

URBANSRC ALL

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "425 Winchester_Winchester Rd.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE 724945.SFC

Appendix E

```

                                425 Winchester_Winchester Rd.ADI
PROFFILE 724945.PFL
SURFDATA 23293 2009
UAIRDATA 23230 2009 OAKLAND/WSO_AP
PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_WINCHESTER RD.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_WINCHESTER RD.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_WINCHESTER RD.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_Winchester Rd.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS     m
** ZONE      10
** ZONEINX   0
**
```


Appendix E

```

                                425 Winchester_ Winchester Rd_TOG.ADI
PROFFILE 724945.PFL
SURFDATA 23293 2009
UAIRDATA 23230 2009 OAKLAND/WSO_AP
PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_ WINCHESTER RD_TOG.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_ WINCHESTER RD_TOG.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_ WINCHESTER RD_TOG.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_ Winchester Rd_TOG.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS     m
** ZONE      10
** ZONEINX   0
**
```

Appendix E

425 Winchester_Winchester Rd.ADO

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_Winchester Rd\425
Winchester_Winchester Rd.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "425 Winchester_Winchester Rd.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Winchester
** PREFIX
** Length of Side = 15.50
** Configuration = Adjacent
** Emission Rate = 0.000403856
** Vertical Dimension = 6.22
** SZINIT = 2.89
** Nodes = 2
** 593013.255, 4131260.630, 40.15, 3.11, 7.21
```

Appendix E

425 Winchester_Winchester Rd.ADO

** 593020.843, 4130725.644, 42.61, 3.11, 7.21

** -----

LOCATION	L0000001	VOLUME	593013.365	4131252.880	40.21
LOCATION	L0000002	VOLUME	593013.585	4131237.382	40.20
LOCATION	L0000003	VOLUME	593013.804	4131221.884	40.18
LOCATION	L0000004	VOLUME	593014.024	4131206.385	40.19
LOCATION	L0000005	VOLUME	593014.244	4131190.887	40.26
LOCATION	L0000006	VOLUME	593014.464	4131175.388	40.28
LOCATION	L0000007	VOLUME	593014.684	4131159.890	40.23
LOCATION	L0000008	VOLUME	593014.904	4131144.391	40.23
LOCATION	L0000009	VOLUME	593015.123	4131128.893	40.30
LOCATION	L0000010	VOLUME	593015.343	4131113.394	40.36
LOCATION	L0000011	VOLUME	593015.563	4131097.896	40.41
LOCATION	L0000012	VOLUME	593015.783	4131082.398	40.46
LOCATION	L0000013	VOLUME	593016.003	4131066.899	40.53
LOCATION	L0000014	VOLUME	593016.223	4131051.401	40.58
LOCATION	L0000015	VOLUME	593016.442	4131035.902	40.60
LOCATION	L0000016	VOLUME	593016.662	4131020.404	40.66
LOCATION	L0000017	VOLUME	593016.882	4131004.905	40.74
LOCATION	L0000018	VOLUME	593017.102	4130989.407	40.83
LOCATION	L0000019	VOLUME	593017.322	4130973.908	40.92
LOCATION	L0000020	VOLUME	593017.542	4130958.410	41.01
LOCATION	L0000021	VOLUME	593017.761	4130942.912	41.12
LOCATION	L0000022	VOLUME	593017.981	4130927.413	41.26
LOCATION	L0000023	VOLUME	593018.201	4130911.915	41.42
LOCATION	L0000024	VOLUME	593018.421	4130896.416	41.55
LOCATION	L0000025	VOLUME	593018.641	4130880.918	41.63
LOCATION	L0000026	VOLUME	593018.861	4130865.419	41.74
LOCATION	L0000027	VOLUME	593019.080	4130849.921	41.87
LOCATION	L0000028	VOLUME	593019.300	4130834.423	41.97
LOCATION	L0000029	VOLUME	593019.520	4130818.924	42.06
LOCATION	L0000030	VOLUME	593019.740	4130803.426	42.13
LOCATION	L0000031	VOLUME	593019.960	4130787.927	42.19
LOCATION	L0000032	VOLUME	593020.180	4130772.429	42.27
LOCATION	L0000033	VOLUME	593020.399	4130756.930	42.37
LOCATION	L0000034	VOLUME	593020.619	4130741.432	42.46
LOCATION	L0000035	VOLUME	593020.839	4130725.933	42.56

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000002	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000003	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000004	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000005	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000006	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000007	0.0000115387	3.11	7.21	2.89
SRCPARAM	L0000008	0.0000115387	3.11	7.21	2.89

Appendix E

```

                                425 Winchester_Winchester Rd.ADO
SRCPARAM L0000009      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000010      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000011      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000012      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000013      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000014      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000015      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000016      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000017      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000018      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000019      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000020      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000021      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000022      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000023      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000024      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000025      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000026      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000027      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000028      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000029      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000030      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000031      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000032      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000033      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000034      0.0000115387      3.11      7.21      2.89
SRCPARAM L0000035      0.0000115387      3.11      7.21      2.89

```

**

URBANSRC ALL

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "425 Winchester_Winchester Rd.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE 724945.SFC

Appendix E

425 Winchester_Winchester Rd.ADO

PROFFILE 724945.PFL
SURFDATA 23293 2009
UAIRDATA 23230 2009 OAKLAND/WSO_AP
PROFBASE 15.5 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

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

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "425 WINCHESTER_WINCHESTER RD.AD\01H1GALL.PLT" 31
PLOTFILE 24 ALL 1ST "425 WINCHESTER_WINCHESTER RD.AD\24H1GALL.PLT" 32
PLOTFILE ANNUAL ALL "425 WINCHESTER_WINCHESTER RD.AD\AN00GALL.PLT" 33
SUMMFILE "425 Winchester_Winchester Rd.sum"

OU FINISHED

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 *** ***
*** 22:14:11

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 35 Source(s),

Appendix E

425 Winchester_Winchester Rd.ADO

for Total of 1 Urban Area(s):

Urban Population = 1938000.0 ; 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 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages**

****This Run Includes: 35 Source(s); 1 Source Group(s); and 6
Receptor(s)**

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 35 VOLUME source(s)
and: 0 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 Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

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**

Appendix E

425 Winchester_Winchester Rd.ADO

m for Missing

Hours

b for Both Calm

and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 15.50 ; 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 = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 425 Winchester_Winchester Rd.err

**File for Summary of Results: 425 Winchester_Winchester Rd.sum

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 *** ***
 *** 22:14:11

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY			(METERS)	(METERS)	(METERS)
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0000001		0	0.11539E-04	593013.4	4131252.9	40.2	3.11	7.21
2.89	YES							
L0000002		0	0.11539E-04	593013.6	4131237.4	40.2	3.11	7.21
2.89	YES							
L0000003		0	0.11539E-04	593013.8	4131221.9	40.2	3.11	7.21
2.89	YES							

Appendix E

425 Winchester_Winchester Rd.ADO							
L0000004	0	0.11539E-04	593014.0	4131206.4	40.2	3.11	7.21
2.89 YES							
L0000005	0	0.11539E-04	593014.2	4131190.9	40.3	3.11	7.21
2.89 YES							
L0000006	0	0.11539E-04	593014.5	4131175.4	40.3	3.11	7.21
2.89 YES							
L0000007	0	0.11539E-04	593014.7	4131159.9	40.2	3.11	7.21
2.89 YES							
L0000008	0	0.11539E-04	593014.9	4131144.4	40.2	3.11	7.21
2.89 YES							
L0000009	0	0.11539E-04	593015.1	4131128.9	40.3	3.11	7.21
2.89 YES							
L0000010	0	0.11539E-04	593015.3	4131113.4	40.4	3.11	7.21
2.89 YES							
L0000011	0	0.11539E-04	593015.6	4131097.9	40.4	3.11	7.21
2.89 YES							
L0000012	0	0.11539E-04	593015.8	4131082.4	40.5	3.11	7.21
2.89 YES							
L0000013	0	0.11539E-04	593016.0	4131066.9	40.5	3.11	7.21
2.89 YES							
L0000014	0	0.11539E-04	593016.2	4131051.4	40.6	3.11	7.21
2.89 YES							
L0000015	0	0.11539E-04	593016.4	4131035.9	40.6	3.11	7.21
2.89 YES							
L0000016	0	0.11539E-04	593016.7	4131020.4	40.7	3.11	7.21
2.89 YES							
L0000017	0	0.11539E-04	593016.9	4131004.9	40.7	3.11	7.21
2.89 YES							
L0000018	0	0.11539E-04	593017.1	4130989.4	40.8	3.11	7.21
2.89 YES							
L0000019	0	0.11539E-04	593017.3	4130973.9	40.9	3.11	7.21
2.89 YES							
L0000020	0	0.11539E-04	593017.5	4130958.4	41.0	3.11	7.21
2.89 YES							
L0000021	0	0.11539E-04	593017.8	4130942.9	41.1	3.11	7.21
2.89 YES							
L0000022	0	0.11539E-04	593018.0	4130927.4	41.3	3.11	7.21
2.89 YES							
L0000023	0	0.11539E-04	593018.2	4130911.9	41.4	3.11	7.21
2.89 YES							
L0000024	0	0.11539E-04	593018.4	4130896.4	41.5	3.11	7.21
2.89 YES							
L0000025	0	0.11539E-04	593018.6	4130880.9	41.6	3.11	7.21
2.89 YES							
L0000026	0	0.11539E-04	593018.9	4130865.4	41.7	3.11	7.21
2.89 YES							
L0000027	0	0.11539E-04	593019.1	4130849.9	41.9	3.11	7.21
2.89 YES							

Appendix E

425 Winchester_Winchester Rd.ADO

L0000028	0	0.11539E-04	593019.3	4130834.4	42.0	3.11	7.21
2.89 YES							
L0000029	0	0.11539E-04	593019.5	4130818.9	42.1	3.11	7.21
2.89 YES							
L0000030	0	0.11539E-04	593019.7	4130803.4	42.1	3.11	7.21
2.89 YES							
L0000031	0	0.11539E-04	593020.0	4130787.9	42.2	3.11	7.21
2.89 YES							
L0000032	0	0.11539E-04	593020.2	4130772.4	42.3	3.11	7.21
2.89 YES							
L0000033	0	0.11539E-04	593020.4	4130756.9	42.4	3.11	7.21
2.89 YES							
L0000034	0	0.11539E-04	593020.6	4130741.4	42.5	3.11	7.21
2.89 YES							
L0000035	0	0.11539E-04	593020.8	4130725.9	42.6	3.11	7.21
2.89 YES							

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***
 *** 22:14:11

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID

SOURCE IDs

ALL	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,
L0000006	,	L0000007	,	L0000008	,					
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,
L0000014	,	L0000015	,	L0000016	,					
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,
L0000022	,	L0000023	,	L0000024	,					
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,
L0000030	,	L0000031	,	L0000032	,					
	L0000033	,	L0000034	,	L0000035	,				

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***

Appendix E

425 Winchester_Winchester Rd.ADO
 *** 22:14:11

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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000005	1938000.	L0000001 , L0000002 , L0000003 , L0000004 ,
L0000008	, L0000006	, L0000007 ,
	, L0000009	, L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014	, L0000015	, L0000016 ,
	L0000017	, L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022	, L0000023	, L0000024 ,
	L0000025	, L0000026 , L0000027 , L0000028 , L0000029 ,
L0000030	, L0000031	, L0000032 ,
	L0000033	, L0000034 , L0000035 ,

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***
 *** 22:14:11

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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(592965.7, 4130954.9, 40.6, 40.6, 0.0); (592985.7,
 4130954.9, 40.7, 40.7, 0.0);
 (592965.7, 4130974.9, 40.8, 40.8, 0.0); (592985.7,
 4130974.9, 40.8, 40.8, 0.0);
 (592965.7, 4130994.9, 40.9, 40.9, 0.0); (592985.7,
 4130994.9, 40.8, 40.8, 0.0);

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***

Appendix E

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425 Winchester_Winchester Rd.ADO
***      22:14:11
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

[illegible]

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\425 Winchester
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 11/18/19

```
*** AERMET - VERSION 14134 ***
*** 22.
```

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*** MODELOPTs: RegDFault CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

DATA ***

Surface file: 724945.SFC

Appendix E

425 Winchester_Winchester Rd.ADO

Met Version: 14134

Profile file: 724945.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23293

Upper air station no.: 23230

Name: UNKNOWN

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	

Appendix E

425 Winchester_Winchester Rd.ADO

```

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\425 Winchester
Construction\425 Winchester Cons ***      11/18/19
*** AERMET - VERSION 14134 ***      ***
***                                     22:14:11

```

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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): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
, L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
, L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
, L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

Appendix E

425 Winchester_Winchester Rd.ADO

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

592965.68	4130954.92	0.01643	592985.68
4130954.92	0.02448		
592965.68	4130974.92	0.01665	592985.68
4130974.92	0.02488		
592965.68	4130994.92	0.01679	592985.68
4130994.92	0.02516		

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***
 *** 22:14:11

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

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

592965.68	4130954.92	0.05851	(09020123)	592985.68
4130954.92	0.08079	(10013003)		
592965.68	4130974.92	0.05965	(09012901)	592985.68
4130974.92	0.08289	(10013003)		
592965.68	4130994.92	0.06052	(09012901)	592985.68
4130994.92	0.08448	(10013003)		

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

Appendix E

425 Winchester_Winchester Rd.ADO

*** AERMET - VERSION 14134 ***
 *** 22:14:11

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

**

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
592965.68	4130954.92	0.03499c (12122824)	592985.68
4130954.92	0.04859c (12122824)		
592965.68	4130974.92	0.03545c (12122824)	592985.68
4130974.92	0.04940c (12122824)		
592965.68	4130994.92	0.03573c (12122824)	592985.68
4130994.92	0.04993c (12122824)		

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
 *** 22:14:11

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

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

**

425 Winchester_Winchester Rd.ADO

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

ALL	1ST HIGHEST VALUE IS	0.02516 AT (	592985.68, 4130994.92,
40.81,	40.81, 0.00) DC		
	2ND HIGHEST VALUE IS	0.02488 AT (	592985.68, 4130974.92,
40.78,	40.78, 0.00) DC		
	3RD HIGHEST VALUE IS	0.02448 AT (	592985.68, 4130954.92,
40.66,	40.66, 0.00) DC		
	4TH HIGHEST VALUE IS	0.01679 AT (	592965.68, 4130994.92,
40.87,	40.87, 0.00) DC		
	5TH HIGHEST VALUE IS	0.01665 AT (	592965.68, 4130974.92,
40.81,	40.81, 0.00) DC		
	6TH HIGHEST VALUE IS	0.01643 AT (	592965.68, 4130954.92,
40.64,	40.64, 0.00) DC		
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***

*** 22:14:11

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

Appendix E

425 Winchester_Winchester Rd.ADO
DATE

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

ALL HIGH 1ST HIGH VALUE IS 0.08448 ON 10013003: AT (592985.68,
4130994.92, 40.81, 40.81, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 *** ***
*** 22:14:11

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR

RESULTS ***

** CONC OF PM_{2.5} IN MICROGRAMS/M**3

**

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

ALL HIGH 1ST HIGH VALUE IS 0.04993c ON 12122824: AT (592985.68,
4130994.92, 40.81, 40.81, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 *** ***

Appendix E

425 Winchester_Winchester Rd.ADO
*** 22:14:11

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*** 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 ***

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_ Winchester Rd_TOG\425 Winchester_
Winchester Rd_TOG.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID TOG
  RUNORNOT RUN
  ERRORFIL "425 Winchester_ Winchester Rd_TOG.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Winchester
** PREFIX
** Length of Side = 15.50
** Configuration = Adjacent
** Emission Rate = 0.005449406
** Vertical Dimension = 1.02
** SZINIT = 0.47
** Nodes = 2
** 593013.255, 4131260.630, 40.15, 0.51, 7.21
```

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

** 593020.843, 4130725.644, 42.61, 0.51, 7.21

** -----

LOCATION	L0000001	VOLUME	593013.365	4131252.880	40.21
LOCATION	L0000002	VOLUME	593013.585	4131237.382	40.20
LOCATION	L0000003	VOLUME	593013.804	4131221.884	40.18
LOCATION	L0000004	VOLUME	593014.024	4131206.385	40.19
LOCATION	L0000005	VOLUME	593014.244	4131190.887	40.26
LOCATION	L0000006	VOLUME	593014.464	4131175.388	40.28
LOCATION	L0000007	VOLUME	593014.684	4131159.890	40.23
LOCATION	L0000008	VOLUME	593014.904	4131144.391	40.23
LOCATION	L0000009	VOLUME	593015.123	4131128.893	40.30
LOCATION	L0000010	VOLUME	593015.343	4131113.394	40.36
LOCATION	L0000011	VOLUME	593015.563	4131097.896	40.41
LOCATION	L0000012	VOLUME	593015.783	4131082.398	40.46
LOCATION	L0000013	VOLUME	593016.003	4131066.899	40.53
LOCATION	L0000014	VOLUME	593016.223	4131051.401	40.58
LOCATION	L0000015	VOLUME	593016.442	4131035.902	40.60
LOCATION	L0000016	VOLUME	593016.662	4131020.404	40.66
LOCATION	L0000017	VOLUME	593016.882	4131004.905	40.74
LOCATION	L0000018	VOLUME	593017.102	4130989.407	40.83
LOCATION	L0000019	VOLUME	593017.322	4130973.908	40.92
LOCATION	L0000020	VOLUME	593017.542	4130958.410	41.01
LOCATION	L0000021	VOLUME	593017.761	4130942.912	41.12
LOCATION	L0000022	VOLUME	593017.981	4130927.413	41.26
LOCATION	L0000023	VOLUME	593018.201	4130911.915	41.42
LOCATION	L0000024	VOLUME	593018.421	4130896.416	41.55
LOCATION	L0000025	VOLUME	593018.641	4130880.918	41.63
LOCATION	L0000026	VOLUME	593018.861	4130865.419	41.74
LOCATION	L0000027	VOLUME	593019.080	4130849.921	41.87
LOCATION	L0000028	VOLUME	593019.300	4130834.423	41.97
LOCATION	L0000029	VOLUME	593019.520	4130818.924	42.06
LOCATION	L0000030	VOLUME	593019.740	4130803.426	42.13
LOCATION	L0000031	VOLUME	593019.960	4130787.927	42.19
LOCATION	L0000032	VOLUME	593020.180	4130772.429	42.27
LOCATION	L0000033	VOLUME	593020.399	4130756.930	42.37
LOCATION	L0000034	VOLUME	593020.619	4130741.432	42.46
LOCATION	L0000035	VOLUME	593020.839	4130725.933	42.56

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000002	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000003	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000004	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000005	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000006	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000007	0.0001556973	0.51	7.21	0.47
SRCPARAM	L0000008	0.0001556973	0.51	7.21	0.47

Appendix E

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425 Winchester_ Winchester Rd_TOG.ADO
SRCPARAM L0000009 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000010 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000011 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000012 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000013 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000014 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000015 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000016 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000017 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000018 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000019 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000020 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000021 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000022 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000023 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000024 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000025 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000026 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000027 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000028 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000029 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000030 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000031 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000032 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000033 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000034 0.0001556973 0.51 7.21 0.47
SRCPARAM L0000035 0.0001556973 0.51 7.21 0.47

```

**

URBANSRC ALL

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "425 Winchester_ Winchester Rd_TOG.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE 724945.SFC

Appendix E

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                                425 Winchester_ Winchester Rd_TOG.ADO
PROFFILE 724945.PFL
SURFDATA 23293 2009
UAIRDATA 23230 2009 OAKLAND/WSO_AP
PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_ WINCHESTER RD_TOG.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_ WINCHESTER RD_TOG.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_ WINCHESTER RD_TOG.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_ Winchester Rd_TOG.sum"
OU FINISHED

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

^ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons ***   11/18/19
*** AERMET - VERSION 14134 ***   ***
***                               ***   22:48:15

                                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 35 Source(s),
```

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO
for Total of 1 Urban Area(s):
Urban Population = 1938000.0 ; 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: TOG**

****Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages**

****This Run Includes: 35 Source(s); 1 Source Group(s); and 6
Receptor(s)**

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 35 VOLUME source(s)
and: 0 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 Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
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**

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

m for Missing

Hours

b for Both Calm

and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 15.50 ; 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 = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 425 Winchester_ Winchester Rd_TOG.err

**File for Summary of Results: 425 Winchester_ Winchester Rd_TOG.sum

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 *** ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY			(METERS)	(METERS)	(METERS)
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0000001		0	0.15570E-03	593013.4	4131252.9	40.2	0.51	7.21
0.47	YES							
L0000002		0	0.15570E-03	593013.6	4131237.4	40.2	0.51	7.21
0.47	YES							
L0000003		0	0.15570E-03	593013.8	4131221.9	40.2	0.51	7.21
0.47	YES							

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO							
L0000004	0	0.15570E-03	593014.0	4131206.4	40.2	0.51	7.21
0.47 YES							
L0000005	0	0.15570E-03	593014.2	4131190.9	40.3	0.51	7.21
0.47 YES							
L0000006	0	0.15570E-03	593014.5	4131175.4	40.3	0.51	7.21
0.47 YES							
L0000007	0	0.15570E-03	593014.7	4131159.9	40.2	0.51	7.21
0.47 YES							
L0000008	0	0.15570E-03	593014.9	4131144.4	40.2	0.51	7.21
0.47 YES							
L0000009	0	0.15570E-03	593015.1	4131128.9	40.3	0.51	7.21
0.47 YES							
L0000010	0	0.15570E-03	593015.3	4131113.4	40.4	0.51	7.21
0.47 YES							
L0000011	0	0.15570E-03	593015.6	4131097.9	40.4	0.51	7.21
0.47 YES							
L0000012	0	0.15570E-03	593015.8	4131082.4	40.5	0.51	7.21
0.47 YES							
L0000013	0	0.15570E-03	593016.0	4131066.9	40.5	0.51	7.21
0.47 YES							
L0000014	0	0.15570E-03	593016.2	4131051.4	40.6	0.51	7.21
0.47 YES							
L0000015	0	0.15570E-03	593016.4	4131035.9	40.6	0.51	7.21
0.47 YES							
L0000016	0	0.15570E-03	593016.7	4131020.4	40.7	0.51	7.21
0.47 YES							
L0000017	0	0.15570E-03	593016.9	4131004.9	40.7	0.51	7.21
0.47 YES							
L0000018	0	0.15570E-03	593017.1	4130989.4	40.8	0.51	7.21
0.47 YES							
L0000019	0	0.15570E-03	593017.3	4130973.9	40.9	0.51	7.21
0.47 YES							
L0000020	0	0.15570E-03	593017.5	4130958.4	41.0	0.51	7.21
0.47 YES							
L0000021	0	0.15570E-03	593017.8	4130942.9	41.1	0.51	7.21
0.47 YES							
L0000022	0	0.15570E-03	593018.0	4130927.4	41.3	0.51	7.21
0.47 YES							
L0000023	0	0.15570E-03	593018.2	4130911.9	41.4	0.51	7.21
0.47 YES							
L0000024	0	0.15570E-03	593018.4	4130896.4	41.5	0.51	7.21
0.47 YES							
L0000025	0	0.15570E-03	593018.6	4130880.9	41.6	0.51	7.21
0.47 YES							
L0000026	0	0.15570E-03	593018.9	4130865.4	41.7	0.51	7.21
0.47 YES							
L0000027	0	0.15570E-03	593019.1	4130849.9	41.9	0.51	7.21
0.47 YES							

Appendix E

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                                425 Winchester_ Winchester Rd_TOG.ADO
L0000028      0  0.15570E-03  593019.3  4130834.4    42.0    0.51    7.21
0.47      YES
L0000029      0  0.15570E-03  593019.5  4130818.9    42.1    0.51    7.21
0.47      YES
L0000030      0  0.15570E-03  593019.7  4130803.4    42.1    0.51    7.21
0.47      YES
L0000031      0  0.15570E-03  593020.0  4130787.9    42.2    0.51    7.21
0.47      YES
L0000032      0  0.15570E-03  593020.2  4130772.4    42.3    0.51    7.21
0.47      YES
L0000033      0  0.15570E-03  593020.4  4130756.9    42.4    0.51    7.21
0.47      YES
L0000034      0  0.15570E-03  593020.6  4130741.4    42.5    0.51    7.21
0.47      YES
L0000035      0  0.15570E-03  593020.8  4130725.9    42.6    0.51    7.21
0.47      YES

```

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^ *** AERMOD - VERSION 18081 ***      *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons ***      11/18/19
*** AERMET - VERSION 14134 ***      ***
***      22:48:15

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                                PAGE 3
*** MODELOPTs:   RegDEFAULT  CONC  ELEV  URBAN

```

*** SOURCE IDs DEFINING SOURCE GROUPS

```

SRCGROUP ID                                SOURCE IDs
-----
ALL      L0000001  , L0000002  , L0000003  , L0000004  , L0000005  ,
L0000006  , L0000007  , L0000008  ,

L0000009  , L0000010  , L0000011  , L0000012  , L0000013  ,
L0000014  , L0000015  , L0000016  ,

L0000017  , L0000018  , L0000019  , L0000020  , L0000021  ,
L0000022  , L0000023  , L0000024  ,

L0000025  , L0000026  , L0000027  , L0000028  , L0000029  ,
L0000030  , L0000031  , L0000032  ,

L0000033  , L0000034  , L0000035  ,

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^ *** AERMOD - VERSION 18081 ***      *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons ***      11/18/19
*** AERMET - VERSION 14134 ***      ***

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Appendix E

425 Winchester_ Winchester Rd_TOG.ADO
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000005	1938000.	L0000001 , L0000002 , L0000003 , L0000004 ,
L0000008	, L0000006	, L0000007 ,
	, L0000009	, L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014	, L0000015	, L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,	
L0000022	, L0000023 , L0000024 ,	
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,	
L0000030	, L0000031 , L0000032 ,	
	L0000033 , L0000034 , L0000035 ,	

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 *** ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(592965.7, 4130954.9, 40.6, 40.6, 0.0); (592985.7,
 4130954.9, 40.7, 40.7, 0.0);
 (592965.7, 4130974.9, 40.8, 40.8, 0.0); (592985.7,
 4130974.9, 40.8, 40.8, 0.0);
 (592965.7, 4130994.9, 40.9, 40.9, 0.0); (592985.7,
 4130994.9, 40.8, 40.8, 0.0);

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
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Appendix E

425 Winchester_Winchester Rd_TOG.ADO
*** 22:48:15

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*** MODELOPTs: RegDFault CONC ELEV URBAN

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

[illegible]

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 ***
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 11/18/19

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*** AERMET - VERSION 14134 ***
*** 22.
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*** MODELOPTs: RegDFault CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

DATA ***

Surface file: 724945.SFC

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO
Met Version: 14134

Profile file: 724945.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23293

Name: UNKNOWN

OAKLAND/WSO_AP

Year: 2009

Upper air station no.: 23230

Name:

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	

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

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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\425 Winchester
Construction\425 Winchester Cons ***      11/18/19
*** AERMET - VERSION 14134 ***      ***
***                                     22:48:15

```

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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): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
, L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
, L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
, L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
592965.68	4130954.92	0.24757	592985.68
4130954.92	0.39432		
592965.68	4130974.92	0.25010	592985.68
4130974.92	0.39970		
592965.68	4130994.92	0.25193	592985.68
4130994.92	0.40391		

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19
 *** AERMET - VERSION 14134 ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
592965.68	4130954.92	0.93449	(09011908)	592985.68
4130954.92	1.43845	(10013003)		
592965.68	4130974.92	0.94926	(09011908)	592985.68
4130974.92	1.46463	(09121505)		
592965.68	4130994.92	0.96281	(10013003)	592985.68
4130994.92	1.48910	(09121505)		

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO

*** AERMET - VERSION 14134 ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
592965.68	4130954.92	0.53964c (12122824)	592985.68
4130954.92	0.82894c (12122824)		
592965.68	4130974.92	0.54480c (12122824)	592985.68
4130974.92	0.84036c (12122824)		
592965.68	4130994.92	0.54830c (12122824)	592985.68
4130994.92	0.84867c (12122824)		

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

** CONC OF TOG IN MICROGRAMS/M**3

**

425 Winchester_ Winchester Rd_TOG.ADO

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

ALL	1ST HIGHEST VALUE IS	0.40391 AT (	592985.68, 4130994.92,
40.81,	40.81, 0.00) DC		
	2ND HIGHEST VALUE IS	0.39970 AT (	592985.68, 4130974.92,
40.78,	40.78, 0.00) DC		
	3RD HIGHEST VALUE IS	0.39432 AT (	592985.68, 4130954.92,
40.66,	40.66, 0.00) DC		
	4TH HIGHEST VALUE IS	0.25193 AT (	592965.68, 4130994.92,
40.87,	40.87, 0.00) DC		
	5TH HIGHEST VALUE IS	0.25010 AT (	592965.68, 4130974.92,
40.81,	40.81, 0.00) DC		
	6TH HIGHEST VALUE IS	0.24757 AT (	592965.68, 4130954.92,
40.64,	40.64, 0.00) DC		
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00, 0.00,
0.00,	0.00, 0.00)		

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
 *** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF TOG IN MICROGRAMS/M**3

**

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO
DATE

GROUP ID (XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC OF TYPE	NETWORK GRID-ID	DATE (YYMMDDHH)	RECEPTOR
ALL HIGH 1ST HIGH VALUE IS 4130994.92, 40.81, 40.81, 0.00)	1.48910	ON 09121505:	AT (592985.68,	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:48:15

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***

** CONC OF TOG IN MICROGRAMS/M**3
**

GROUP ID (XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC OF TYPE	NETWORK GRID-ID	DATE (YYMMDDHH)	RECEPTOR
ALL HIGH 1ST HIGH VALUE IS 4130994.92, 40.81, 40.81, 0.00)	0.84867c	ON 12122824:	AT (592985.68,	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***

Appendix E

425 Winchester_ Winchester Rd_TOG.ADO
*** 22:48:15

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*** 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 ***

Appendix E

425 Winchester_StevensCreek_PM2.ADI

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_StevensCreek_PM2\425
Winchester_StevensCreek_PM2.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "425 Winchester_StevensCreek_PM2.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Stevens Creek
** PREFIX
** Length of Side = 15.00
** Configuration = Adjacent
** Emission Rate = 0.000777692
** Vertical Dimension = 6.22
** SZINIT = 2.89
** Nodes = 2
** 592559.230, 4131257.899, 38.96, 3.11, 6.98
```

Appendix E

425 Winchester_StevensCreek_PM2.ADI

** 593619.727, 4131272.526, 39.77, 3.11, 6.98

**

LOCATION	L0000001	VOLUME	592566.729	4131258.002	38.97
LOCATION	L0000002	VOLUME	592581.728	4131258.209	38.99
LOCATION	L0000003	VOLUME	592596.726	4131258.416	39.06
LOCATION	L0000004	VOLUME	592611.725	4131258.623	39.13
LOCATION	L0000005	VOLUME	592626.723	4131258.830	39.19
LOCATION	L0000006	VOLUME	592641.722	4131259.037	39.22
LOCATION	L0000007	VOLUME	592656.721	4131259.243	39.29
LOCATION	L0000008	VOLUME	592671.719	4131259.450	39.40
LOCATION	L0000009	VOLUME	592686.718	4131259.657	39.38
LOCATION	L0000010	VOLUME	592701.716	4131259.864	39.38
LOCATION	L0000011	VOLUME	592716.715	4131260.071	39.43
LOCATION	L0000012	VOLUME	592731.713	4131260.278	39.45
LOCATION	L0000013	VOLUME	592746.712	4131260.485	39.44
LOCATION	L0000014	VOLUME	592761.711	4131260.692	39.43
LOCATION	L0000015	VOLUME	592776.709	4131260.899	39.42
LOCATION	L0000016	VOLUME	592791.708	4131261.105	39.41
LOCATION	L0000017	VOLUME	592806.706	4131261.312	39.45
LOCATION	L0000018	VOLUME	592821.705	4131261.519	39.48
LOCATION	L0000019	VOLUME	592836.703	4131261.726	39.44
LOCATION	L0000020	VOLUME	592851.702	4131261.933	39.47
LOCATION	L0000021	VOLUME	592866.701	4131262.140	39.60
LOCATION	L0000022	VOLUME	592881.699	4131262.347	39.60
LOCATION	L0000023	VOLUME	592896.698	4131262.554	39.58
LOCATION	L0000024	VOLUME	592911.696	4131262.760	39.61
LOCATION	L0000025	VOLUME	592926.695	4131262.967	39.67
LOCATION	L0000026	VOLUME	592941.693	4131263.174	39.77
LOCATION	L0000027	VOLUME	592956.692	4131263.381	39.85
LOCATION	L0000028	VOLUME	592971.691	4131263.588	39.94
LOCATION	L0000029	VOLUME	592986.689	4131263.795	40.03
LOCATION	L0000030	VOLUME	593001.688	4131264.002	40.14
LOCATION	L0000031	VOLUME	593016.686	4131264.209	40.25
LOCATION	L0000032	VOLUME	593031.685	4131264.415	40.15
LOCATION	L0000033	VOLUME	593046.683	4131264.622	40.07
LOCATION	L0000034	VOLUME	593061.682	4131264.829	40.01
LOCATION	L0000035	VOLUME	593076.681	4131265.036	40.04
LOCATION	L0000036	VOLUME	593091.679	4131265.243	40.10
LOCATION	L0000037	VOLUME	593106.678	4131265.450	40.09
LOCATION	L0000038	VOLUME	593121.676	4131265.657	40.09
LOCATION	L0000039	VOLUME	593136.675	4131265.864	40.08
LOCATION	L0000040	VOLUME	593151.673	4131266.070	40.05
LOCATION	L0000041	VOLUME	593166.672	4131266.277	40.02
LOCATION	L0000042	VOLUME	593181.671	4131266.484	40.03
LOCATION	L0000043	VOLUME	593196.669	4131266.691	40.05
LOCATION	L0000044	VOLUME	593211.668	4131266.898	40.08
LOCATION	L0000045	VOLUME	593226.666	4131267.105	40.12
LOCATION	L0000046	VOLUME	593241.665	4131267.312	40.15

Appendix E

425 Winchester_StevensCreek_PM2.ADI

LOCATION L0000047	VOLUME	593256.663	4131267.519	40.14
LOCATION L0000048	VOLUME	593271.662	4131267.725	40.14
LOCATION L0000049	VOLUME	593286.661	4131267.932	40.16
LOCATION L0000050	VOLUME	593301.659	4131268.139	40.14
LOCATION L0000051	VOLUME	593316.658	4131268.346	40.12
LOCATION L0000052	VOLUME	593331.656	4131268.553	40.13
LOCATION L0000053	VOLUME	593346.655	4131268.760	40.10
LOCATION L0000054	VOLUME	593361.653	4131268.967	40.05
LOCATION L0000055	VOLUME	593376.652	4131269.174	39.94
LOCATION L0000056	VOLUME	593391.651	4131269.380	39.86
LOCATION L0000057	VOLUME	593406.649	4131269.587	39.81
LOCATION L0000058	VOLUME	593421.648	4131269.794	39.77
LOCATION L0000059	VOLUME	593436.646	4131270.001	39.72
LOCATION L0000060	VOLUME	593451.645	4131270.208	39.67
LOCATION L0000061	VOLUME	593466.643	4131270.415	39.64
LOCATION L0000062	VOLUME	593481.642	4131270.622	39.65
LOCATION L0000063	VOLUME	593496.641	4131270.829	39.63
LOCATION L0000064	VOLUME	593511.639	4131271.035	39.61
LOCATION L0000065	VOLUME	593526.638	4131271.242	39.62
LOCATION L0000066	VOLUME	593541.636	4131271.449	39.64
LOCATION L0000067	VOLUME	593556.635	4131271.656	39.67
LOCATION L0000068	VOLUME	593571.633	4131271.863	39.63
LOCATION L0000069	VOLUME	593586.632	4131272.070	39.61
LOCATION L0000070	VOLUME	593601.631	4131272.277	39.64
LOCATION L0000071	VOLUME	593616.629	4131272.484	39.71

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000001	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000002	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000003	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000004	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000005	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000006	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000007	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000008	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000009	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000010	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000011	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000012	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000013	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000014	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000015	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000016	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000017	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000018	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000019	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000020	0.0000109534	3.11	6.98	2.89

Appendix E

425 Winchester_StevensCreek_PM2.ADI

SRCPARAM	L0000021	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000022	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000023	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000024	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000025	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000026	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000027	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000028	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000029	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000030	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000031	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000032	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000033	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000034	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000035	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000036	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000037	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000038	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000039	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000040	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000041	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000042	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000043	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000044	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000045	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000046	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000047	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000048	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000049	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000050	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000051	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000052	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000053	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000054	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000055	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000056	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000057	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000058	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000059	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000060	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000061	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000062	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000063	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000064	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000065	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000066	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000067	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000068	0.0000109534	3.11	6.98	2.89

Appendix E

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                                425 Winchester_StevensCreek_PM2.ADI
SRCPARAM L0000069      0.0000109534      3.11      6.98      2.89
SRCPARAM L0000070      0.0000109534      3.11      6.98      2.89
SRCPARAM L0000071      0.0000109534      3.11      6.98      2.89
** -----
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED "425 Winchester_StevensCreek_PM2.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE 724945.SFC
  PROFFILE 724945.PFL
  SURFDATA 23293 2009
  UAIRDATA 23230 2009 OAKLAND/WSO_AP
  PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_STEVENS CREEK_PM2.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_STEVENS CREEK_PM2.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_STEVENS CREEK_PM2.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_StevensCreek_PM2.sum"
OU FINISHED
**
*****
** Project Parameters
```


425 Winchester_StevensCreek_PM2.ADI

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

Appendix E

425 Winchester_StevensCreek_PM2.ADO

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_StevensCreek_PM2\425
Winchester_StevensCreek_PM2.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "425 Winchester_StevensCreek_PM2.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Stevens Creek
** PREFIX
** Length of Side = 15.00
** Configuration = Adjacent
** Emission Rate = 0.000777692
** Vertical Dimension = 6.22
** SZINIT = 2.89
** Nodes = 2
** 592559.230, 4131257.899, 38.96, 3.11, 6.98
```

Appendix E

425 Winchester_StevensCreek_PM2.ADO

** 593619.727, 4131272.526, 39.77, 3.11, 6.98

**

LOCATION	L0000001	VOLUME	592566.729	4131258.002	38.97
LOCATION	L0000002	VOLUME	592581.728	4131258.209	38.99
LOCATION	L0000003	VOLUME	592596.726	4131258.416	39.06
LOCATION	L0000004	VOLUME	592611.725	4131258.623	39.13
LOCATION	L0000005	VOLUME	592626.723	4131258.830	39.19
LOCATION	L0000006	VOLUME	592641.722	4131259.037	39.22
LOCATION	L0000007	VOLUME	592656.721	4131259.243	39.29
LOCATION	L0000008	VOLUME	592671.719	4131259.450	39.40
LOCATION	L0000009	VOLUME	592686.718	4131259.657	39.38
LOCATION	L0000010	VOLUME	592701.716	4131259.864	39.38
LOCATION	L0000011	VOLUME	592716.715	4131260.071	39.43
LOCATION	L0000012	VOLUME	592731.713	4131260.278	39.45
LOCATION	L0000013	VOLUME	592746.712	4131260.485	39.44
LOCATION	L0000014	VOLUME	592761.711	4131260.692	39.43
LOCATION	L0000015	VOLUME	592776.709	4131260.899	39.42
LOCATION	L0000016	VOLUME	592791.708	4131261.105	39.41
LOCATION	L0000017	VOLUME	592806.706	4131261.312	39.45
LOCATION	L0000018	VOLUME	592821.705	4131261.519	39.48
LOCATION	L0000019	VOLUME	592836.703	4131261.726	39.44
LOCATION	L0000020	VOLUME	592851.702	4131261.933	39.47
LOCATION	L0000021	VOLUME	592866.701	4131262.140	39.60
LOCATION	L0000022	VOLUME	592881.699	4131262.347	39.60
LOCATION	L0000023	VOLUME	592896.698	4131262.554	39.58
LOCATION	L0000024	VOLUME	592911.696	4131262.760	39.61
LOCATION	L0000025	VOLUME	592926.695	4131262.967	39.67
LOCATION	L0000026	VOLUME	592941.693	4131263.174	39.77
LOCATION	L0000027	VOLUME	592956.692	4131263.381	39.85
LOCATION	L0000028	VOLUME	592971.691	4131263.588	39.94
LOCATION	L0000029	VOLUME	592986.689	4131263.795	40.03
LOCATION	L0000030	VOLUME	593001.688	4131264.002	40.14
LOCATION	L0000031	VOLUME	593016.686	4131264.209	40.25
LOCATION	L0000032	VOLUME	593031.685	4131264.415	40.15
LOCATION	L0000033	VOLUME	593046.683	4131264.622	40.07
LOCATION	L0000034	VOLUME	593061.682	4131264.829	40.01
LOCATION	L0000035	VOLUME	593076.681	4131265.036	40.04
LOCATION	L0000036	VOLUME	593091.679	4131265.243	40.10
LOCATION	L0000037	VOLUME	593106.678	4131265.450	40.09
LOCATION	L0000038	VOLUME	593121.676	4131265.657	40.09
LOCATION	L0000039	VOLUME	593136.675	4131265.864	40.08
LOCATION	L0000040	VOLUME	593151.673	4131266.070	40.05
LOCATION	L0000041	VOLUME	593166.672	4131266.277	40.02
LOCATION	L0000042	VOLUME	593181.671	4131266.484	40.03
LOCATION	L0000043	VOLUME	593196.669	4131266.691	40.05
LOCATION	L0000044	VOLUME	593211.668	4131266.898	40.08
LOCATION	L0000045	VOLUME	593226.666	4131267.105	40.12
LOCATION	L0000046	VOLUME	593241.665	4131267.312	40.15

Appendix E

425 Winchester_StevensCreek_PM2.ADO

LOCATION L0000047	VOLUME	593256.663	4131267.519	40.14
LOCATION L0000048	VOLUME	593271.662	4131267.725	40.14
LOCATION L0000049	VOLUME	593286.661	4131267.932	40.16
LOCATION L0000050	VOLUME	593301.659	4131268.139	40.14
LOCATION L0000051	VOLUME	593316.658	4131268.346	40.12
LOCATION L0000052	VOLUME	593331.656	4131268.553	40.13
LOCATION L0000053	VOLUME	593346.655	4131268.760	40.10
LOCATION L0000054	VOLUME	593361.653	4131268.967	40.05
LOCATION L0000055	VOLUME	593376.652	4131269.174	39.94
LOCATION L0000056	VOLUME	593391.651	4131269.380	39.86
LOCATION L0000057	VOLUME	593406.649	4131269.587	39.81
LOCATION L0000058	VOLUME	593421.648	4131269.794	39.77
LOCATION L0000059	VOLUME	593436.646	4131270.001	39.72
LOCATION L0000060	VOLUME	593451.645	4131270.208	39.67
LOCATION L0000061	VOLUME	593466.643	4131270.415	39.64
LOCATION L0000062	VOLUME	593481.642	4131270.622	39.65
LOCATION L0000063	VOLUME	593496.641	4131270.829	39.63
LOCATION L0000064	VOLUME	593511.639	4131271.035	39.61
LOCATION L0000065	VOLUME	593526.638	4131271.242	39.62
LOCATION L0000066	VOLUME	593541.636	4131271.449	39.64
LOCATION L0000067	VOLUME	593556.635	4131271.656	39.67
LOCATION L0000068	VOLUME	593571.633	4131271.863	39.63
LOCATION L0000069	VOLUME	593586.632	4131272.070	39.61
LOCATION L0000070	VOLUME	593601.631	4131272.277	39.64
LOCATION L0000071	VOLUME	593616.629	4131272.484	39.71

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000001	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000002	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000003	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000004	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000005	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000006	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000007	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000008	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000009	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000010	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000011	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000012	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000013	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000014	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000015	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000016	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000017	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000018	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000019	0.0000109534	3.11	6.98	2.89
SRCPARAM L0000020	0.0000109534	3.11	6.98	2.89

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425 Winchester_StevensCreek_PM2.ADO

SRCPARAM	L0000021	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000022	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000023	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000024	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000025	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000026	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000027	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000028	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000029	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000030	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000031	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000032	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000033	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000034	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000035	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000036	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000037	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000038	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000039	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000040	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000041	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000042	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000043	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000044	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000045	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000046	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000047	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000048	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000049	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000050	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000051	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000052	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000053	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000054	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000055	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000056	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000057	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000058	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000059	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000060	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000061	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000062	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000063	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000064	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000065	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000066	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000067	0.0000109534	3.11	6.98	2.89
SRCPARAM	L0000068	0.0000109534	3.11	6.98	2.89

Appendix E

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                                425 Winchester_StevensCreek_PM2.ADO
SRCPARAM L0000069      0.0000109534      3.11      6.98      2.89
SRCPARAM L0000070      0.0000109534      3.11      6.98      2.89
SRCPARAM L0000071      0.0000109534      3.11      6.98      2.89
** -----
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED "425 Winchester_StevensCreek_PM2.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE 724945.SFC
  PROFFILE 724945.PFL
  SURFDATA 23293 2009
  UAIRDATA 23230 2009 OAKLAND/WSO_AP
  PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_STEVENS CREEK_PM2.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_STEVENS CREEK_PM2.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_STEVENS CREEK_PM2.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_StevensCreek_PM2.sum"
OU FINISHED

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

425 Winchester_StevensCreek_PM2.ADO

*** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 *** ***
*** 22:37:17

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*** MODELOPTs: RegDEFAULT 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 71 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 1938000.0 ; 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 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 71 Source(s); 1 Source Group(s); and 6
Receptor(s)

425 Winchester_StevensCreek_PM2.ADO

with: 0 POINT(s), including
 0 POINTCAP(s) and 0 POINTHOR(s)
 and: 71 VOLUME source(s)
 and: 0 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 Tables of Highest Short Term Values by Receptor (RECTABLE
 Keyword)

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) = 15.50 ; 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 = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 425 Winchester_StevensCreek_PM2.err

**File for Summary of Results: 425 Winchester_StevensCreek_PM2.sum

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

Appendix E

425 Winchester_StevensCreek_PM2.ADO

*** AERMET - VERSION 14134 ***

22:37:17

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY	X	Y	(METERS)	(METERS)	(METERS)
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0000001		0	0.10953E-04	592566.7	4131258.0	39.0	3.11	6.98
2.89	YES							
L0000002		0	0.10953E-04	592581.7	4131258.2	39.0	3.11	6.98
2.89	YES							
L0000003		0	0.10953E-04	592596.7	4131258.4	39.1	3.11	6.98
2.89	YES							
L0000004		0	0.10953E-04	592611.7	4131258.6	39.1	3.11	6.98
2.89	YES							
L0000005		0	0.10953E-04	592626.7	4131258.8	39.2	3.11	6.98
2.89	YES							
L0000006		0	0.10953E-04	592641.7	4131259.0	39.2	3.11	6.98
2.89	YES							
L0000007		0	0.10953E-04	592656.7	4131259.2	39.3	3.11	6.98
2.89	YES							
L0000008		0	0.10953E-04	592671.7	4131259.4	39.4	3.11	6.98
2.89	YES							
L0000009		0	0.10953E-04	592686.7	4131259.7	39.4	3.11	6.98
2.89	YES							
L0000010		0	0.10953E-04	592701.7	4131259.9	39.4	3.11	6.98
2.89	YES							
L0000011		0	0.10953E-04	592716.7	4131260.1	39.4	3.11	6.98
2.89	YES							
L0000012		0	0.10953E-04	592731.7	4131260.3	39.4	3.11	6.98
2.89	YES							
L0000013		0	0.10953E-04	592746.7	4131260.5	39.4	3.11	6.98
2.89	YES							
L0000014		0	0.10953E-04	592761.7	4131260.7	39.4	3.11	6.98
2.89	YES							
L0000015		0	0.10953E-04	592776.7	4131260.9	39.4	3.11	6.98
2.89	YES							

Appendix E

425 Winchester_StevensCreek_PM2.ADO							
L0000016	0	0.10953E-04	592791.7	4131261.1	39.4	3.11	6.98
2.89 YES							
L0000017	0	0.10953E-04	592806.7	4131261.3	39.4	3.11	6.98
2.89 YES							
L0000018	0	0.10953E-04	592821.7	4131261.5	39.5	3.11	6.98
2.89 YES							
L0000019	0	0.10953E-04	592836.7	4131261.7	39.4	3.11	6.98
2.89 YES							
L0000020	0	0.10953E-04	592851.7	4131261.9	39.5	3.11	6.98
2.89 YES							
L0000021	0	0.10953E-04	592866.7	4131262.1	39.6	3.11	6.98
2.89 YES							
L0000022	0	0.10953E-04	592881.7	4131262.3	39.6	3.11	6.98
2.89 YES							
L0000023	0	0.10953E-04	592896.7	4131262.6	39.6	3.11	6.98
2.89 YES							
L0000024	0	0.10953E-04	592911.7	4131262.8	39.6	3.11	6.98
2.89 YES							
L0000025	0	0.10953E-04	592926.7	4131263.0	39.7	3.11	6.98
2.89 YES							
L0000026	0	0.10953E-04	592941.7	4131263.2	39.8	3.11	6.98
2.89 YES							
L0000027	0	0.10953E-04	592956.7	4131263.4	39.8	3.11	6.98
2.89 YES							
L0000028	0	0.10953E-04	592971.7	4131263.6	39.9	3.11	6.98
2.89 YES							
L0000029	0	0.10953E-04	592986.7	4131263.8	40.0	3.11	6.98
2.89 YES							
L0000030	0	0.10953E-04	593001.7	4131264.0	40.1	3.11	6.98
2.89 YES							
L0000031	0	0.10953E-04	593016.7	4131264.2	40.2	3.11	6.98
2.89 YES							
L0000032	0	0.10953E-04	593031.7	4131264.4	40.1	3.11	6.98
2.89 YES							
L0000033	0	0.10953E-04	593046.7	4131264.6	40.1	3.11	6.98
2.89 YES							
L0000034	0	0.10953E-04	593061.7	4131264.8	40.0	3.11	6.98
2.89 YES							
L0000035	0	0.10953E-04	593076.7	4131265.0	40.0	3.11	6.98
2.89 YES							
L0000036	0	0.10953E-04	593091.7	4131265.2	40.1	3.11	6.98
2.89 YES							
L0000037	0	0.10953E-04	593106.7	4131265.4	40.1	3.11	6.98
2.89 YES							
L0000038	0	0.10953E-04	593121.7	4131265.7	40.1	3.11	6.98
2.89 YES							
L0000039	0	0.10953E-04	593136.7	4131265.9	40.1	3.11	6.98
2.89 YES							

Appendix E

425 Winchester_StevensCreek_PM2.ADO

L0000040 0 0.10953E-04 593151.7 4131266.1 40.0 3.11 6.98

2.89 YES

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Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***

*** 22:37:17

PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE	EMISSION RATE				
SZ	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT
ID	SCALAR VARY	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)	CATS.	BY			SY

L0000041 0 0.10953E-04 593166.7 4131266.3 40.0 3.11 6.98

2.89 YES

L0000042 0 0.10953E-04 593181.7 4131266.5 40.0 3.11 6.98

2.89 YES

L0000043 0 0.10953E-04 593196.7 4131266.7 40.0 3.11 6.98

2.89 YES

L0000044 0 0.10953E-04 593211.7 4131266.9 40.1 3.11 6.98

2.89 YES

L0000045 0 0.10953E-04 593226.7 4131267.1 40.1 3.11 6.98

2.89 YES

L0000046 0 0.10953E-04 593241.7 4131267.3 40.1 3.11 6.98

2.89 YES

L0000047 0 0.10953E-04 593256.7 4131267.5 40.1 3.11 6.98

2.89 YES

L0000048 0 0.10953E-04 593271.7 4131267.7 40.1 3.11 6.98

2.89 YES

L0000049 0 0.10953E-04 593286.7 4131267.9 40.2 3.11 6.98

2.89 YES

L0000050 0 0.10953E-04 593301.7 4131268.1 40.1 3.11 6.98

2.89 YES

L0000051 0 0.10953E-04 593316.7 4131268.3 40.1 3.11 6.98

2.89 YES

L0000052 0 0.10953E-04 593331.7 4131268.6 40.1 3.11 6.98

2.89 YES

L0000053 0 0.10953E-04 593346.7 4131268.8 40.1 3.11 6.98

2.89 YES

Appendix E

425 Winchester_StevensCreek_PM2.ADO							
L0000054	0	0.10953E-04	593361.7	4131269.0	40.0	3.11	6.98
2.89 YES							
L0000055	0	0.10953E-04	593376.7	4131269.2	39.9	3.11	6.98
2.89 YES							
L0000056	0	0.10953E-04	593391.7	4131269.4	39.9	3.11	6.98
2.89 YES							
L0000057	0	0.10953E-04	593406.6	4131269.6	39.8	3.11	6.98
2.89 YES							
L0000058	0	0.10953E-04	593421.6	4131269.8	39.8	3.11	6.98
2.89 YES							
L0000059	0	0.10953E-04	593436.6	4131270.0	39.7	3.11	6.98
2.89 YES							
L0000060	0	0.10953E-04	593451.6	4131270.2	39.7	3.11	6.98
2.89 YES							
L0000061	0	0.10953E-04	593466.6	4131270.4	39.6	3.11	6.98
2.89 YES							
L0000062	0	0.10953E-04	593481.6	4131270.6	39.6	3.11	6.98
2.89 YES							
L0000063	0	0.10953E-04	593496.6	4131270.8	39.6	3.11	6.98
2.89 YES							
L0000064	0	0.10953E-04	593511.6	4131271.0	39.6	3.11	6.98
2.89 YES							
L0000065	0	0.10953E-04	593526.6	4131271.2	39.6	3.11	6.98
2.89 YES							
L0000066	0	0.10953E-04	593541.6	4131271.4	39.6	3.11	6.98
2.89 YES							
L0000067	0	0.10953E-04	593556.6	4131271.7	39.7	3.11	6.98
2.89 YES							
L0000068	0	0.10953E-04	593571.6	4131271.9	39.6	3.11	6.98
2.89 YES							
L0000069	0	0.10953E-04	593586.6	4131272.1	39.6	3.11	6.98
2.89 YES							
L0000070	0	0.10953E-04	593601.6	4131272.3	39.6	3.11	6.98
2.89 YES							
L0000071	0	0.10953E-04	593616.6	4131272.5	39.7	3.11	6.98
2.89 YES							

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS

Appendix E

425 Winchester_StevensCreek_PM2.ADO

SRCGROUP ID

SOURCE IDs

ALL	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,
L0000006	, L0000007	,	L0000008	,						
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,
L0000014	, L0000015	,	L0000016	,						
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,
L0000022	, L0000023	,	L0000024	,						
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,
L0000030	, L0000031	,	L0000032	,						
	L0000033	,	L0000034	,	L0000035	,	L0000036	,	L0000037	,
L0000038	, L0000039	,	L0000040	,						
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,
L0000046	, L0000047	,	L0000048	,						
	L0000049	,	L0000050	,	L0000051	,	L0000052	,	L0000053	,
L0000054	, L0000055	,	L0000056	,						
	L0000057	,	L0000058	,	L0000059	,	L0000060	,	L0000061	,
L0000062	, L0000063	,	L0000064	,						
	L0000065	,	L0000066	,	L0000067	,	L0000068	,	L0000069	,
L0000070	, L0000071	,								

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID

URBAN POP

SOURCE IDs

	1938000.	L0000001	,	L0000002	,	L0000003	,	L0000004	,
L0000005	, L0000006	, L0000007	,						

425 Winchester_StevensCreek_PM2.ADO

```

L0000008      ,
      L0000009      , L0000010      , L0000011      , L0000012      , L0000013      ,
L0000014      , L0000015      , L0000016      ,
      L0000017      , L0000018      , L0000019      , L0000020      , L0000021      ,
L0000022      , L0000023      , L0000024      ,
      L0000025      , L0000026      , L0000027      , L0000028      , L0000029      ,
L0000030      , L0000031      , L0000032      ,
      L0000033      , L0000034      , L0000035      , L0000036      , L0000037      ,
L0000038      , L0000039      , L0000040      ,
      L0000041      , L0000042      , L0000043      , L0000044      , L0000045      ,
L0000046      , L0000047      , L0000048      ,
      L0000049      , L0000050      , L0000051      , L0000052      , L0000053      ,
L0000054      , L0000055      , L0000056      ,
      L0000057      , L0000058      , L0000059      , L0000060      , L0000061      ,
L0000062      , L0000063      , L0000064      ,
      L0000065      , L0000066      , L0000067      , L0000068      , L0000069      ,
L0000070      , L0000071      ,
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:37:17

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

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

```

      ( 592965.7, 4130954.9, 40.6, 40.6, 0.0);      ( 592985.7,
4130954.9, 40.7, 40.7, 0.0);
      ( 592965.7, 4130974.9, 40.8, 40.8, 0.0);      ( 592985.7,
4130974.9, 40.8, 40.8, 0.0);
      ( 592965.7, 4130994.9, 40.9, 40.9, 0.0);      ( 592985.7,
4130994.9, 40.8, 40.8, 0.0);
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
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Appendix E

425 Winchester StevensCreek PM2.ADO

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```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

[illegible]

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,

```

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Construction\425 Winchester Cons ***      11/18/19

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*** AERMET - VERSION 14134 ***
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```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

DATA ***

Surface file: 724945.SFC
Met Version: 14134
Profile file: 724945.PFL

Appendix E

425 Winchester_StevensCreek_PM2.ADO

Surface format: FREE

Profile format: FREE

Surface station no.: 23293

Upper air station no.: 23230

Name: UNKNOWN

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	

Appendix E

425 Winchester_StevensCreek_PM2.ADO

```

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)

```

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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): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
, L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
, L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
, L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

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

Appendix E

425 Winchester_StevensCreek_PM2.ADO

```

Y-COORD (M)      CONC
- - - - -
- - - - -
      592965.68      4130954.92      0.00297      592985.68
4130954.92      0.00302
      592965.68      4130974.92      0.00327      592985.68
4130974.92      0.00333
      592965.68      4130994.92      0.00363      592985.68
4130994.92      0.00369
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0000001      , L0000002
, L0000003      , L0000004      , L0000005      ,
      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
      L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
      L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

```

      X-COORD (M) Y-COORD (M)      CONC      (YYMMDDHH)      X-COORD (M)
Y-COORD (M)      CONC      (YYMMDDHH)
- - - - -
- - - - -
      592965.68      4130954.92      0.01406      (10122503)      592985.68
4130954.92      0.01372      (10122503)
      592965.68      4130974.92      0.01558      (10122503)      592985.68
4130974.92      0.01525      (10122503)
      592965.68      4130994.92      0.01723      (10122503)      592985.68
4130994.92      0.01693      (10122503)
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425 Winchester_StevensCreek_PM2.ADO

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

**

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
592965.68	4130954.92	0.00592b (12111124)	592985.68
4130954.92	0.00597b (12111124)		
592965.68	4130974.92	0.00643b (12111124)	592985.68
4130974.92	0.00648b (12111124)		
592965.68	4130994.92	0.00702b (12111124)	592985.68
4130994.92	0.00707b (12111124)		

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*** 22:37:17

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

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

**

NETWORK

Appendix E

425 Winchester_StevensCreek_PM2.ADO

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

- - - - -

ALL	1ST HIGHEST VALUE IS	0.00369 AT (	592985.68,	4130994.92,
40.81,	40.81, 0.00) DC			
	2ND HIGHEST VALUE IS	0.00363 AT (	592965.68,	4130994.92,
40.87,	40.87, 0.00) DC			
	3RD HIGHEST VALUE IS	0.00333 AT (	592985.68,	4130974.92,
40.78,	40.78, 0.00) DC			
	4TH HIGHEST VALUE IS	0.00327 AT (	592965.68,	4130974.92,
40.81,	40.81, 0.00) DC			
	5TH HIGHEST VALUE IS	0.00302 AT (	592985.68,	4130954.92,
40.66,	40.66, 0.00) DC			
	6TH HIGHEST VALUE IS	0.00297 AT (	592965.68,	4130954.92,
40.64,	40.64, 0.00) DC			
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
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*** AERMET - VERSION 14134 *** ***

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF PM_{2.5} IN MICROGRAMS/M³

**

DATE

NETWORK

Appendix E

425 Winchester_StevensCreek_PM2.ADO

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

ALL HIGH 1ST HIGH VALUE IS 0.01723 ON 10122503: AT (592965.68,
4130994.92, 40.87, 40.87, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
*** 22:37:17

PAGE 14
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***

** CONC OF PM_{2.5} IN MICROGRAMS/M³
**

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

ALL HIGH 1ST HIGH VALUE IS 0.00707b ON 12111124: AT (592985.68,
4130994.92, 40.81, 40.81, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
*** 22:37:17

Appendix E

425 Winchester_StevensCreek_PM2.ADO

PAGE 15

*** 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 ***

Appendix E

425 Winchester_StevensCreek_TOG.ADI

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_StevensCreek_TOG\425
Winchester_StevensCreek_TOG.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID TOG
  RUNORNOT RUN
  ERRORFIL "425 Winchester_StevensCreek_TOG.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Stevens Creek
** PREFIX
** Length of Side = 15.00
** Configuration = Adjacent
** Emission Rate = 0.010493733
** Vertical Dimension = 1.02
** SZINIT = 0.47
** Nodes = 2
** 592559.230, 4131257.899, 38.96, 0.51, 6.98
```

Appendix E

425 Winchester_StevensCreek_TOG.ADI

** 593619.727, 4131272.526, 39.77, 0.51, 6.98

**

LOCATION	L0000001	VOLUME	592566.729	4131258.002	38.97
LOCATION	L0000002	VOLUME	592581.728	4131258.209	38.99
LOCATION	L0000003	VOLUME	592596.726	4131258.416	39.06
LOCATION	L0000004	VOLUME	592611.725	4131258.623	39.13
LOCATION	L0000005	VOLUME	592626.723	4131258.830	39.19
LOCATION	L0000006	VOLUME	592641.722	4131259.037	39.22
LOCATION	L0000007	VOLUME	592656.721	4131259.243	39.29
LOCATION	L0000008	VOLUME	592671.719	4131259.450	39.40
LOCATION	L0000009	VOLUME	592686.718	4131259.657	39.38
LOCATION	L0000010	VOLUME	592701.716	4131259.864	39.38
LOCATION	L0000011	VOLUME	592716.715	4131260.071	39.43
LOCATION	L0000012	VOLUME	592731.713	4131260.278	39.45
LOCATION	L0000013	VOLUME	592746.712	4131260.485	39.44
LOCATION	L0000014	VOLUME	592761.711	4131260.692	39.43
LOCATION	L0000015	VOLUME	592776.709	4131260.899	39.42
LOCATION	L0000016	VOLUME	592791.708	4131261.105	39.41
LOCATION	L0000017	VOLUME	592806.706	4131261.312	39.45
LOCATION	L0000018	VOLUME	592821.705	4131261.519	39.48
LOCATION	L0000019	VOLUME	592836.703	4131261.726	39.44
LOCATION	L0000020	VOLUME	592851.702	4131261.933	39.47
LOCATION	L0000021	VOLUME	592866.701	4131262.140	39.60
LOCATION	L0000022	VOLUME	592881.699	4131262.347	39.60
LOCATION	L0000023	VOLUME	592896.698	4131262.554	39.58
LOCATION	L0000024	VOLUME	592911.696	4131262.760	39.61
LOCATION	L0000025	VOLUME	592926.695	4131262.967	39.67
LOCATION	L0000026	VOLUME	592941.693	4131263.174	39.77
LOCATION	L0000027	VOLUME	592956.692	4131263.381	39.85
LOCATION	L0000028	VOLUME	592971.691	4131263.588	39.94
LOCATION	L0000029	VOLUME	592986.689	4131263.795	40.03
LOCATION	L0000030	VOLUME	593001.688	4131264.002	40.14
LOCATION	L0000031	VOLUME	593016.686	4131264.209	40.25
LOCATION	L0000032	VOLUME	593031.685	4131264.415	40.15
LOCATION	L0000033	VOLUME	593046.683	4131264.622	40.07
LOCATION	L0000034	VOLUME	593061.682	4131264.829	40.01
LOCATION	L0000035	VOLUME	593076.681	4131265.036	40.04
LOCATION	L0000036	VOLUME	593091.679	4131265.243	40.10
LOCATION	L0000037	VOLUME	593106.678	4131265.450	40.09
LOCATION	L0000038	VOLUME	593121.676	4131265.657	40.09
LOCATION	L0000039	VOLUME	593136.675	4131265.864	40.08
LOCATION	L0000040	VOLUME	593151.673	4131266.070	40.05
LOCATION	L0000041	VOLUME	593166.672	4131266.277	40.02
LOCATION	L0000042	VOLUME	593181.671	4131266.484	40.03
LOCATION	L0000043	VOLUME	593196.669	4131266.691	40.05
LOCATION	L0000044	VOLUME	593211.668	4131266.898	40.08
LOCATION	L0000045	VOLUME	593226.666	4131267.105	40.12
LOCATION	L0000046	VOLUME	593241.665	4131267.312	40.15

Appendix E

425 Winchester_StevensCreek_TOG.ADI

LOCATION L0000047	VOLUME	593256.663	4131267.519	40.14
LOCATION L0000048	VOLUME	593271.662	4131267.725	40.14
LOCATION L0000049	VOLUME	593286.661	4131267.932	40.16
LOCATION L0000050	VOLUME	593301.659	4131268.139	40.14
LOCATION L0000051	VOLUME	593316.658	4131268.346	40.12
LOCATION L0000052	VOLUME	593331.656	4131268.553	40.13
LOCATION L0000053	VOLUME	593346.655	4131268.760	40.10
LOCATION L0000054	VOLUME	593361.653	4131268.967	40.05
LOCATION L0000055	VOLUME	593376.652	4131269.174	39.94
LOCATION L0000056	VOLUME	593391.651	4131269.380	39.86
LOCATION L0000057	VOLUME	593406.649	4131269.587	39.81
LOCATION L0000058	VOLUME	593421.648	4131269.794	39.77
LOCATION L0000059	VOLUME	593436.646	4131270.001	39.72
LOCATION L0000060	VOLUME	593451.645	4131270.208	39.67
LOCATION L0000061	VOLUME	593466.643	4131270.415	39.64
LOCATION L0000062	VOLUME	593481.642	4131270.622	39.65
LOCATION L0000063	VOLUME	593496.641	4131270.829	39.63
LOCATION L0000064	VOLUME	593511.639	4131271.035	39.61
LOCATION L0000065	VOLUME	593526.638	4131271.242	39.62
LOCATION L0000066	VOLUME	593541.636	4131271.449	39.64
LOCATION L0000067	VOLUME	593556.635	4131271.656	39.67
LOCATION L0000068	VOLUME	593571.633	4131271.863	39.63
LOCATION L0000069	VOLUME	593586.632	4131272.070	39.61
LOCATION L0000070	VOLUME	593601.631	4131272.277	39.64
LOCATION L0000071	VOLUME	593616.629	4131272.484	39.71

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000001	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000002	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000003	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000004	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000005	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000006	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000007	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000008	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000009	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000010	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000011	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000012	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000013	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000014	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000015	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000016	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000017	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000018	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000019	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000020	0.0001477991	0.51	6.98	0.47

Appendix E

425 Winchester_StevensCreek_TOG.ADI

SRCPARAM	L0000021	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000022	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000023	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000024	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000025	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000026	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000027	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000028	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000029	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000030	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000031	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000032	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000033	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000034	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000035	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000036	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000037	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000038	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000039	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000040	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000041	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000042	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000043	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000044	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000045	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000046	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000047	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000048	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000049	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000050	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000051	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000052	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000053	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000054	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000055	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000056	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000057	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000058	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000059	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000060	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000061	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000062	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000063	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000064	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000065	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000066	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000067	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000068	0.0001477991	0.51	6.98	0.47

Appendix E

```

                                425 Winchester_StevensCreek_TOG.ADI
SRCPARAM L0000069      0.0001477991      0.51      6.98      0.47
SRCPARAM L0000070      0.0001477991      0.51      6.98      0.47
SRCPARAM L0000071      0.0001477991      0.51      6.98      0.47
** -----
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED "425 Winchester_StevensCreek_TOG.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE 724945.SFC
  PROFFILE 724945.PFL
  SURFDATA 23293 2009
  UAIRDATA 23230 2009 OAKLAND/WSO_AP
  PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_STEVENS CREEK_TOG.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_STEVENS CREEK_TOG.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_STEVENS CREEK_TOG.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_StevensCreek_TOG.sum"
OU FINISHED
**
*****
** Project Parameters
```

Appendix E

425 Winchester_StevensCreek_T0G.ADI

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

Appendix E

425 Winchester_StevensCreek_TOG.ADO

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 11/18/2019
** File: C:\Lakes\AERMOD View\425 Winchester_StevensCreek_TOG\425
Winchester_StevensCreek_TOG.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\425 Winchester Construction\425 Winchester Cons
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1938000
  POLLUTID TOG
  RUNORNOT RUN
  ERRORFIL "425 Winchester_StevensCreek_TOG.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Stevens Creek
** PREFIX
** Length of Side = 15.00
** Configuration = Adjacent
** Emission Rate = 0.010493733
** Vertical Dimension = 1.02
** SZINIT = 0.47
** Nodes = 2
** 592559.230, 4131257.899, 38.96, 0.51, 6.98
```

Appendix E

425 Winchester_StevensCreek_TOG.ADO

** 593619.727, 4131272.526, 39.77, 0.51, 6.98

**

LOCATION	L0000001	VOLUME	592566.729	4131258.002	38.97
LOCATION	L0000002	VOLUME	592581.728	4131258.209	38.99
LOCATION	L0000003	VOLUME	592596.726	4131258.416	39.06
LOCATION	L0000004	VOLUME	592611.725	4131258.623	39.13
LOCATION	L0000005	VOLUME	592626.723	4131258.830	39.19
LOCATION	L0000006	VOLUME	592641.722	4131259.037	39.22
LOCATION	L0000007	VOLUME	592656.721	4131259.243	39.29
LOCATION	L0000008	VOLUME	592671.719	4131259.450	39.40
LOCATION	L0000009	VOLUME	592686.718	4131259.657	39.38
LOCATION	L0000010	VOLUME	592701.716	4131259.864	39.38
LOCATION	L0000011	VOLUME	592716.715	4131260.071	39.43
LOCATION	L0000012	VOLUME	592731.713	4131260.278	39.45
LOCATION	L0000013	VOLUME	592746.712	4131260.485	39.44
LOCATION	L0000014	VOLUME	592761.711	4131260.692	39.43
LOCATION	L0000015	VOLUME	592776.709	4131260.899	39.42
LOCATION	L0000016	VOLUME	592791.708	4131261.105	39.41
LOCATION	L0000017	VOLUME	592806.706	4131261.312	39.45
LOCATION	L0000018	VOLUME	592821.705	4131261.519	39.48
LOCATION	L0000019	VOLUME	592836.703	4131261.726	39.44
LOCATION	L0000020	VOLUME	592851.702	4131261.933	39.47
LOCATION	L0000021	VOLUME	592866.701	4131262.140	39.60
LOCATION	L0000022	VOLUME	592881.699	4131262.347	39.60
LOCATION	L0000023	VOLUME	592896.698	4131262.554	39.58
LOCATION	L0000024	VOLUME	592911.696	4131262.760	39.61
LOCATION	L0000025	VOLUME	592926.695	4131262.967	39.67
LOCATION	L0000026	VOLUME	592941.693	4131263.174	39.77
LOCATION	L0000027	VOLUME	592956.692	4131263.381	39.85
LOCATION	L0000028	VOLUME	592971.691	4131263.588	39.94
LOCATION	L0000029	VOLUME	592986.689	4131263.795	40.03
LOCATION	L0000030	VOLUME	593001.688	4131264.002	40.14
LOCATION	L0000031	VOLUME	593016.686	4131264.209	40.25
LOCATION	L0000032	VOLUME	593031.685	4131264.415	40.15
LOCATION	L0000033	VOLUME	593046.683	4131264.622	40.07
LOCATION	L0000034	VOLUME	593061.682	4131264.829	40.01
LOCATION	L0000035	VOLUME	593076.681	4131265.036	40.04
LOCATION	L0000036	VOLUME	593091.679	4131265.243	40.10
LOCATION	L0000037	VOLUME	593106.678	4131265.450	40.09
LOCATION	L0000038	VOLUME	593121.676	4131265.657	40.09
LOCATION	L0000039	VOLUME	593136.675	4131265.864	40.08
LOCATION	L0000040	VOLUME	593151.673	4131266.070	40.05
LOCATION	L0000041	VOLUME	593166.672	4131266.277	40.02
LOCATION	L0000042	VOLUME	593181.671	4131266.484	40.03
LOCATION	L0000043	VOLUME	593196.669	4131266.691	40.05
LOCATION	L0000044	VOLUME	593211.668	4131266.898	40.08
LOCATION	L0000045	VOLUME	593226.666	4131267.105	40.12
LOCATION	L0000046	VOLUME	593241.665	4131267.312	40.15

Appendix E

425 Winchester_StevensCreek_TOG.ADO

LOCATION L0000047	VOLUME	593256.663	4131267.519	40.14
LOCATION L0000048	VOLUME	593271.662	4131267.725	40.14
LOCATION L0000049	VOLUME	593286.661	4131267.932	40.16
LOCATION L0000050	VOLUME	593301.659	4131268.139	40.14
LOCATION L0000051	VOLUME	593316.658	4131268.346	40.12
LOCATION L0000052	VOLUME	593331.656	4131268.553	40.13
LOCATION L0000053	VOLUME	593346.655	4131268.760	40.10
LOCATION L0000054	VOLUME	593361.653	4131268.967	40.05
LOCATION L0000055	VOLUME	593376.652	4131269.174	39.94
LOCATION L0000056	VOLUME	593391.651	4131269.380	39.86
LOCATION L0000057	VOLUME	593406.649	4131269.587	39.81
LOCATION L0000058	VOLUME	593421.648	4131269.794	39.77
LOCATION L0000059	VOLUME	593436.646	4131270.001	39.72
LOCATION L0000060	VOLUME	593451.645	4131270.208	39.67
LOCATION L0000061	VOLUME	593466.643	4131270.415	39.64
LOCATION L0000062	VOLUME	593481.642	4131270.622	39.65
LOCATION L0000063	VOLUME	593496.641	4131270.829	39.63
LOCATION L0000064	VOLUME	593511.639	4131271.035	39.61
LOCATION L0000065	VOLUME	593526.638	4131271.242	39.62
LOCATION L0000066	VOLUME	593541.636	4131271.449	39.64
LOCATION L0000067	VOLUME	593556.635	4131271.656	39.67
LOCATION L0000068	VOLUME	593571.633	4131271.863	39.63
LOCATION L0000069	VOLUME	593586.632	4131272.070	39.61
LOCATION L0000070	VOLUME	593601.631	4131272.277	39.64
LOCATION L0000071	VOLUME	593616.629	4131272.484	39.71

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000001	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000002	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000003	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000004	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000005	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000006	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000007	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000008	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000009	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000010	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000011	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000012	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000013	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000014	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000015	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000016	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000017	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000018	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000019	0.0001477991	0.51	6.98	0.47
SRCPARAM L0000020	0.0001477991	0.51	6.98	0.47

Appendix E

425 Winchester_StevensCreek_TOG.ADO

SRCPARAM	L0000021	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000022	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000023	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000024	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000025	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000026	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000027	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000028	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000029	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000030	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000031	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000032	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000033	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000034	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000035	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000036	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000037	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000038	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000039	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000040	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000041	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000042	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000043	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000044	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000045	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000046	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000047	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000048	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000049	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000050	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000051	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000052	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000053	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000054	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000055	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000056	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000057	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000058	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000059	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000060	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000061	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000062	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000063	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000064	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000065	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000066	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000067	0.0001477991	0.51	6.98	0.47
SRCPARAM	L0000068	0.0001477991	0.51	6.98	0.47

Appendix E

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                                425 Winchester_StevensCreek_TOG.ADO
SRCPARAM L0000069      0.0001477991      0.51      6.98      0.47
SRCPARAM L0000070      0.0001477991      0.51      6.98      0.47
SRCPARAM L0000071      0.0001477991      0.51      6.98      0.47
** -----
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED "425 Winchester_StevensCreek_TOG.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE 724945.SFC
  PROFFILE 724945.PFL
  SURFDATA 23293 2009
  UAIRDATA 23230 2009 OAKLAND/WSO_AP
  PROFBASE 15.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "425 WINCHESTER_STEVENS CREEK_TOG.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "425 WINCHESTER_STEVENS CREEK_TOG.AD\24H1GALL.PLT" 32
  PLOTFILE ANNUAL ALL "425 WINCHESTER_STEVENS CREEK_TOG.AD\AN00GALL.PLT" 33
  SUMMFILE "425 Winchester_StevensCreek_TOG.sum"
OU FINISHED

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

425 Winchester_StevensCreek_TOG.ADO

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*** MODELOPTs: RegDEFAULT 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 71 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 1938000.0 ; 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: TOG

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 71 Source(s); 1 Source Group(s); and 6
Receptor(s)

425 Winchester_StevensCreek_TOG.ADO

with: 0 POINT(s), including
 0 POINTCAP(s) and 0 POINTHOR(s)
 and: 71 VOLUME source(s)
 and: 0 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 Tables of Highest Short Term Values by Receptor (RECTABLE
 Keyword)

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) = 15.50 ; 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 = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 425 Winchester_StevensCreek_TOG.err

**File for Summary of Results: 425 Winchester_StevensCreek_TOG.sum

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE					
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0000001		0	0.14780E-03	592566.7	4131258.0	39.0	0.51	6.98
0.47	YES							
L0000002		0	0.14780E-03	592581.7	4131258.2	39.0	0.51	6.98
0.47	YES							
L0000003		0	0.14780E-03	592596.7	4131258.4	39.1	0.51	6.98
0.47	YES							
L0000004		0	0.14780E-03	592611.7	4131258.6	39.1	0.51	6.98
0.47	YES							
L0000005		0	0.14780E-03	592626.7	4131258.8	39.2	0.51	6.98
0.47	YES							
L0000006		0	0.14780E-03	592641.7	4131259.0	39.2	0.51	6.98
0.47	YES							
L0000007		0	0.14780E-03	592656.7	4131259.2	39.3	0.51	6.98
0.47	YES							
L0000008		0	0.14780E-03	592671.7	4131259.4	39.4	0.51	6.98
0.47	YES							
L0000009		0	0.14780E-03	592686.7	4131259.7	39.4	0.51	6.98
0.47	YES							
L0000010		0	0.14780E-03	592701.7	4131259.9	39.4	0.51	6.98
0.47	YES							
L0000011		0	0.14780E-03	592716.7	4131260.1	39.4	0.51	6.98
0.47	YES							
L0000012		0	0.14780E-03	592731.7	4131260.3	39.4	0.51	6.98
0.47	YES							
L0000013		0	0.14780E-03	592746.7	4131260.5	39.4	0.51	6.98
0.47	YES							
L0000014		0	0.14780E-03	592761.7	4131260.7	39.4	0.51	6.98
0.47	YES							
L0000015		0	0.14780E-03	592776.7	4131260.9	39.4	0.51	6.98
0.47	YES							

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425 Winchester_StevensCreek_TOG.ADO							
L0000016	0	0.14780E-03	592791.7	4131261.1	39.4	0.51	6.98
0.47 YES							
L0000017	0	0.14780E-03	592806.7	4131261.3	39.4	0.51	6.98
0.47 YES							
L0000018	0	0.14780E-03	592821.7	4131261.5	39.5	0.51	6.98
0.47 YES							
L0000019	0	0.14780E-03	592836.7	4131261.7	39.4	0.51	6.98
0.47 YES							
L0000020	0	0.14780E-03	592851.7	4131261.9	39.5	0.51	6.98
0.47 YES							
L0000021	0	0.14780E-03	592866.7	4131262.1	39.6	0.51	6.98
0.47 YES							
L0000022	0	0.14780E-03	592881.7	4131262.3	39.6	0.51	6.98
0.47 YES							
L0000023	0	0.14780E-03	592896.7	4131262.6	39.6	0.51	6.98
0.47 YES							
L0000024	0	0.14780E-03	592911.7	4131262.8	39.6	0.51	6.98
0.47 YES							
L0000025	0	0.14780E-03	592926.7	4131263.0	39.7	0.51	6.98
0.47 YES							
L0000026	0	0.14780E-03	592941.7	4131263.2	39.8	0.51	6.98
0.47 YES							
L0000027	0	0.14780E-03	592956.7	4131263.4	39.8	0.51	6.98
0.47 YES							
L0000028	0	0.14780E-03	592971.7	4131263.6	39.9	0.51	6.98
0.47 YES							
L0000029	0	0.14780E-03	592986.7	4131263.8	40.0	0.51	6.98
0.47 YES							
L0000030	0	0.14780E-03	593001.7	4131264.0	40.1	0.51	6.98
0.47 YES							
L0000031	0	0.14780E-03	593016.7	4131264.2	40.2	0.51	6.98
0.47 YES							
L0000032	0	0.14780E-03	593031.7	4131264.4	40.1	0.51	6.98
0.47 YES							
L0000033	0	0.14780E-03	593046.7	4131264.6	40.1	0.51	6.98
0.47 YES							
L0000034	0	0.14780E-03	593061.7	4131264.8	40.0	0.51	6.98
0.47 YES							
L0000035	0	0.14780E-03	593076.7	4131265.0	40.0	0.51	6.98
0.47 YES							
L0000036	0	0.14780E-03	593091.7	4131265.2	40.1	0.51	6.98
0.47 YES							
L0000037	0	0.14780E-03	593106.7	4131265.4	40.1	0.51	6.98
0.47 YES							
L0000038	0	0.14780E-03	593121.7	4131265.7	40.1	0.51	6.98
0.47 YES							
L0000039	0	0.14780E-03	593136.7	4131265.9	40.1	0.51	6.98
0.47 YES							

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425 Winchester_StevensCreek_TOG.ADO

L0000040 0 0.14780E-03 593151.7 4131266.1 40.0 0.51 6.98
0.47 YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE	EMISSION RATE				
SZ	SCALAR VARY	X	Y	ELEV.	HEIGHT
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)	BY				

L0000041	0	0.14780E-03	593166.7	4131266.3	40.0	0.51	6.98
0.47	YES						
L0000042	0	0.14780E-03	593181.7	4131266.5	40.0	0.51	6.98
0.47	YES						
L0000043	0	0.14780E-03	593196.7	4131266.7	40.0	0.51	6.98
0.47	YES						
L0000044	0	0.14780E-03	593211.7	4131266.9	40.1	0.51	6.98
0.47	YES						
L0000045	0	0.14780E-03	593226.7	4131267.1	40.1	0.51	6.98
0.47	YES						
L0000046	0	0.14780E-03	593241.7	4131267.3	40.1	0.51	6.98
0.47	YES						
L0000047	0	0.14780E-03	593256.7	4131267.5	40.1	0.51	6.98
0.47	YES						
L0000048	0	0.14780E-03	593271.7	4131267.7	40.1	0.51	6.98
0.47	YES						
L0000049	0	0.14780E-03	593286.7	4131267.9	40.2	0.51	6.98
0.47	YES						
L0000050	0	0.14780E-03	593301.7	4131268.1	40.1	0.51	6.98
0.47	YES						
L0000051	0	0.14780E-03	593316.7	4131268.3	40.1	0.51	6.98
0.47	YES						
L0000052	0	0.14780E-03	593331.7	4131268.6	40.1	0.51	6.98
0.47	YES						
L0000053	0	0.14780E-03	593346.7	4131268.8	40.1	0.51	6.98
0.47	YES						

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425 Winchester_StevensCreek_TOG.ADO							
L0000054	0	0.14780E-03	593361.7	4131269.0	40.0	0.51	6.98
0.47 YES							
L0000055	0	0.14780E-03	593376.7	4131269.2	39.9	0.51	6.98
0.47 YES							
L0000056	0	0.14780E-03	593391.7	4131269.4	39.9	0.51	6.98
0.47 YES							
L0000057	0	0.14780E-03	593406.6	4131269.6	39.8	0.51	6.98
0.47 YES							
L0000058	0	0.14780E-03	593421.6	4131269.8	39.8	0.51	6.98
0.47 YES							
L0000059	0	0.14780E-03	593436.6	4131270.0	39.7	0.51	6.98
0.47 YES							
L0000060	0	0.14780E-03	593451.6	4131270.2	39.7	0.51	6.98
0.47 YES							
L0000061	0	0.14780E-03	593466.6	4131270.4	39.6	0.51	6.98
0.47 YES							
L0000062	0	0.14780E-03	593481.6	4131270.6	39.6	0.51	6.98
0.47 YES							
L0000063	0	0.14780E-03	593496.6	4131270.8	39.6	0.51	6.98
0.47 YES							
L0000064	0	0.14780E-03	593511.6	4131271.0	39.6	0.51	6.98
0.47 YES							
L0000065	0	0.14780E-03	593526.6	4131271.2	39.6	0.51	6.98
0.47 YES							
L0000066	0	0.14780E-03	593541.6	4131271.4	39.6	0.51	6.98
0.47 YES							
L0000067	0	0.14780E-03	593556.6	4131271.7	39.7	0.51	6.98
0.47 YES							
L0000068	0	0.14780E-03	593571.6	4131271.9	39.6	0.51	6.98
0.47 YES							
L0000069	0	0.14780E-03	593586.6	4131272.1	39.6	0.51	6.98
0.47 YES							
L0000070	0	0.14780E-03	593601.6	4131272.3	39.6	0.51	6.98
0.47 YES							
L0000071	0	0.14780E-03	593616.6	4131272.5	39.7	0.51	6.98
0.47 YES							

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*** MODELPTS: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS

Appendix E

425 Winchester_StevensCreek_TOG.ADO

SRCGROUP ID

SOURCE IDs

ALL	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,
L0000006	, L0000007	,	L0000008	,						
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,
L0000014	, L0000015	,	L0000016	,						
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,
L0000022	, L0000023	,	L0000024	,						
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,
L0000030	, L0000031	,	L0000032	,						
	L0000033	,	L0000034	,	L0000035	,	L0000036	,	L0000037	,
L0000038	, L0000039	,	L0000040	,						
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,
L0000046	, L0000047	,	L0000048	,						
	L0000049	,	L0000050	,	L0000051	,	L0000052	,	L0000053	,
L0000054	, L0000055	,	L0000056	,						
	L0000057	,	L0000058	,	L0000059	,	L0000060	,	L0000061	,
L0000062	, L0000063	,	L0000064	,						
	L0000065	,	L0000066	,	L0000067	,	L0000068	,	L0000069	,
L0000070	, L0000071	,								

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID URBAN POP

SOURCE IDs

	1938000.	L0000001	,	L0000002	,	L0000003	,	L0000004	,
L0000005	, L0000006	, L0000007	,						

425 Winchester_StevensCreek_TOG.ADO

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L0000008      ,
      L0000009      , L0000010      , L0000011      , L0000012      , L0000013      ,
L0000014      , L0000015      , L0000016      ,
      L0000017      , L0000018      , L0000019      , L0000020      , L0000021      ,
L0000022      , L0000023      , L0000024      ,
      L0000025      , L0000026      , L0000027      , L0000028      , L0000029      ,
L0000030      , L0000031      , L0000032      ,
      L0000033      , L0000034      , L0000035      , L0000036      , L0000037      ,
L0000038      , L0000039      , L0000040      ,
      L0000041      , L0000042      , L0000043      , L0000044      , L0000045      ,
L0000046      , L0000047      , L0000048      ,
      L0000049      , L0000050      , L0000051      , L0000052      , L0000053      ,
L0000054      , L0000055      , L0000056      ,
      L0000057      , L0000058      , L0000059      , L0000060      , L0000061      ,
L0000062      , L0000063      , L0000064      ,
      L0000065      , L0000066      , L0000067      , L0000068      , L0000069      ,
L0000070      , L0000071      ,
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:42:20

```

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

```

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

```

```

      ( 592965.7, 4130954.9, 40.6, 40.6, 0.0);      ( 592985.7,
4130954.9, 40.7, 40.7, 0.0);
      ( 592965.7, 4130974.9, 40.8, 40.8, 0.0);      ( 592985.7,
4130974.9, 40.8, 40.8, 0.0);
      ( 592965.7, 4130994.9, 40.9, 40.9, 0.0);      ( 592985.7,
4130994.9, 40.8, 40.8, 0.0);
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:42:20

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Appendix E

425 Winchester StevensCreek TOG.ADO

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```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

[illegible]

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\425 Winchester
Construction\425 Winchester Cons ***      11/18/19

```

*** AERMET - VERSION 14134 ***

*** 22:42:20

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```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

DATA ***

Surface file: 724945.SFC
Met Version: 14134
Profile file: 724945.PFL

Appendix E

425 Winchester_StevensCreek_TOG.ADO

Surface format: FREE

Profile format: FREE

Surface station no.: 23293

Upper air station no.: 23230

Name: UNKNOWN

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	

Appendix E

425 Winchester_StevensCreek_TOG.ADO

```

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\425 Winchester
Construction\425 Winchester Cons ***      11/18/19
*** AERMET - VERSION 14134 ***      ***
***      22:42:20

```

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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): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
, L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
, L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
, L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

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

Appendix E

425 Winchester_StevensCreek_TOG.ADO

```

Y-COORD (M)      CONC
- - - - -
592965.68      4130954.92      0.03905      592985.68
4130954.92      0.03966
592965.68      4130974.92      0.04301      592985.68
4130974.92      0.04376
592965.68      4130994.92      0.04777      592985.68
4130994.92      0.04867
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:42:20

```

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
, L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
, L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
, L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

```

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
Y-COORD (M) CONC (YYMMDDHH)
- - - - -
592965.68 4130954.92 0.21049 (10122503) 592985.68
4130954.92 0.20354 (10122503)
592965.68 4130974.92 0.23555 (10122503) 592985.68
4130974.92 0.22971 (10122503)
592965.68 4130994.92 0.26096 (10122503) 592985.68
4130994.92 0.25636 (10122503)
^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19
*** AERMET - VERSION 14134 *** ***
*** 22:42:20

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425 Winchester_StevensCreek_TOG.ADO

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF TOG IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
592965.68	4130954.92	0.07972b (12111124)	592985.68
4130954.92	0.08025b (12111124)		
592965.68	4130974.92	0.08651b (12111124)	592985.68
4130974.92	0.08711b (12111124)		
592965.68	4130994.92	0.09436b (12111124)	592985.68
4130994.92	0.09504b (12111124)		

▲ *** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***

22:42:20

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

** CONC OF TOG IN MICROGRAMS/M**3

**

NETWORK

Appendix E

425 Winchester_StevensCreek_TOG.ADO

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

ALL	1ST HIGHEST VALUE IS	0.04867 AT (	592985.68,	4130994.92,
40.81,	40.81, 0.00) DC			
	2ND HIGHEST VALUE IS	0.04777 AT (	592965.68,	4130994.92,
40.87,	40.87, 0.00) DC			
	3RD HIGHEST VALUE IS	0.04376 AT (	592985.68,	4130974.92,
40.78,	40.78, 0.00) DC			
	4TH HIGHEST VALUE IS	0.04301 AT (	592965.68,	4130974.92,
40.81,	40.81, 0.00) DC			
	5TH HIGHEST VALUE IS	0.03966 AT (	592985.68,	4130954.92,
40.66,	40.66, 0.00) DC			
	6TH HIGHEST VALUE IS	0.03905 AT (	592965.68,	4130954.92,
40.64,	40.64, 0.00) DC			
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,
0.00,	0.00, 0.00)			

```
*** RECEPTOR TYPES:  GC = GRIDCART
                        GP = GRIDPOLR
                        DC = DISCCART
                        DP = DISCPOLR
```

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
 Construction\425 Winchester Cons *** 11/18/19

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*** AERMET - VERSION 14134 ***
***                               22:42:20
```

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*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF TOG IN MICROGRAMS/M**3

DATE _____

NETWORK

Appendix E

425 Winchester_StevensCreek_TOG.ADO

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

ALL HIGH 1ST HIGH VALUE IS 0.26096 ON 10122503: AT (592965.68,
4130994.92, 40.87, 40.87, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
*** 22:42:20

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***

** CONC OF TOG IN MICROGRAMS/M**3
**

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

ALL HIGH 1ST HIGH VALUE IS 0.09504b ON 12111124: AT (592985.68,
4130994.92, 40.81, 40.81, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 18081 *** C:\Lakes\AERMOD View\425 Winchester
Construction\425 Winchester Cons *** 11/18/19

*** AERMET - VERSION 14134 ***
*** 22:42:20

Appendix E

425 Winchester_StevensCreek_TOG.ADO

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*** 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 ***
