

**Air Quality and Greenhouse Gas Emissions  
Analysis Technical Report  
for the Victoria Greens Project  
City of Carson, California**

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# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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## TABLE OF CONTENTS

<b><u>Section</u></b>	<b><u>Page No.</u></b>
<b>EXECUTIVE SUMMARY .....</b>	<b>IX</b>
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 Report Purpose and Scope .....	1
1.2 Regional and Local Setting .....	1
1.3 Project Description.....	2
1.4 Dust Control Strategies .....	2
<b>2 AIR QUALITY.....</b>	<b>7</b>
2.1 Environmental Setting .....	7
2.1.1 Meteorological and Topographical Conditions .....	7
2.1.2 Pollutants and Effects .....	9
2.1.3 Sensitive Receptors .....	15
2.2 Regulatory Setting .....	15
2.2.1 Federal Regulations .....	15
2.2.2 State Regulations .....	16
2.2.3 Local Regulations .....	19
2.3 Regional and Local Air Quality Conditions .....	25
2.3.1 South Coast Air Basin Attainment Designation .....	25
2.3.2 Local Ambient Air Quality .....	26
2.4 Significance Criteria and Methodology .....	28
2.4.1 Thresholds of Significance .....	28
2.4.2 Approach and Methodology .....	32
2.5 Impact Analysis .....	41
<b>3 GREENHOUSE GAS EMISSIONS.....</b>	<b>57</b>
3.1 Environmental Setting .....	57
3.1.1 Climate Change Overview .....	57
3.1.2 Greenhouse Gases .....	58
3.1.3 Global Warming Potential .....	59
3.2 Regulatory Setting .....	60
3.2.1 Federal Regulations .....	60
3.2.2 State Regulations .....	61

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

---

## TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page No.</u>
3.2.3 Local Regulations .....	75
3.3 Greenhouse Gas Inventories and Climate Change Conditions .....	79
3.3.1 Sources of Greenhouse Gas Emissions .....	79
3.3.2 Potential Effects of Climate Change .....	80
3.4 Significance Criteria and Methodology .....	83
3.4.1 Thresholds of Significance .....	83
3.4.2 Approach and Methodology .....	86
3.5 Impact Analysis .....	88
3.5.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? .....	88
<b>4 REFERENCES CITED .....</b>	<b>98</b>
<b>5 LIST OF PREPARERS .....</b>	<b>106</b>

## APPENDICES

- A CalEEMod Output Files
- B Health Risk Assessment

## FIGURE

1 Project Location .....	5
--------------------------	---

## TABLES

1 Project Residential and Parking Land Use Breakdown .....	2
2 Ambient Air Quality Standards .....	16
3 South Coast Air Basin Attainment Classification .....	25
4 Local Ambient Air Quality Data .....	27
5 SCAQMD Air Quality Significance Thresholds .....	29
6 Localized Significance Thresholds for Source Receptor Area 4 (SouthCoastal Los Angeles County) .....	32
7 Construction Scenario Assumptions .....	33
8 AERMOD Principle Construction Parameters .....	38
9 AERMOD Principle Cumulative Parameters .....	40

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

---

## TABLE OF CONTENTS (CONTINUED)

	<u>Page No.</u>
10	SCAG 2016 RTP/SCS Regional Growth Forecast .....43
11	Estimated Maximum Daily Construction Criteria Air Pollutant Emissions.....46
12	Estimated Maximum Daily Operational Criteria Air Pollutant Emissions.....47
13	Localized Significance Thresholds Analysis for Project Construction .....50
14	Construction Health Risk Assessment Results - Unmitigated.....52
15	Cumulative Health Risk Assessment Results - Unmitigated.....52
16	Construction Health Risk Assessment Results - Mitigated .....55
17	Cumulative Health Risk Assessment Results - Mitigated .....55
18	GHG Emissions Sources in California .....79
19	Estimated Annual Construction GHG Emissions .....89
20	Estimated Annual Operational GHG Emissions.....90
21	Project Consistency with Scoping Plan GHG Emission Reduction Strategies.....91

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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## ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
°C	degrees Celsius
°F	degrees Fahrenheit
µg/m <sup>3</sup>	micrograms per cubic meter
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
amsl	above mean sea level
AQMP	Air Quality Management Plan
BC	black carbon
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California's Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
City	City of Carson
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CPUC	California Public Utilities Commission
CY	cubic yards
DPM	diesel particulate matter
EO	Executive Order
EPA	U.S. Environmental Protection Agency
F&P	Fehr & Peers
GHG	greenhouse gas
GWP	global warming potential
H <sub>2</sub> S	hydrogen sulfide
HAP	hazardous air pollutant
HARP2	Hotspots Analysis and Reporting Program Version 2
HFC	hydrofluorocarbon
HOA	Homeowners Association
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Acronym/Abbreviation	Definition
LCFS	Low Carbon Fuel Standard
LOS	level of service
LST	localized significance thresholds
MERV 13	Minimum Efficiency Reporting Value 13
MM	mitigation measure
MMT	million metric ton
MPO	metropolitan planning organization
MT CO <sub>2e</sub>	metric tons of CO <sub>2</sub> equivalent
MTA	Metropolitan Transportation Authority
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
pb	lead
PFC	perfluorocarbon
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to 10 microns
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppb	parts per billion
ppm	parts per million
project	Victoria Greens Project
RCP	Regional Comprehensive Plan
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SBCCOG	South Bay Cities Council of Governments
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	short-lived climate pollutant
SR	State Route
SO <sub>2</sub>	sulfur dioxide
SO <sub>4</sub>	sulfates
SO <sub>x</sub>	sulfur oxides
SRA	source-receptor area



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Acronym/Abbreviation	Definition
TAC	toxic air contaminant
TDM	Transportation Demand Management
TIA	traffic impact analysis
TRU	transport refrigeration unit
VMT	vehicle miles traveled
VOC	volatile organic compound
ZNE	zero net energy

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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## EXECUTIVE SUMMARY

The purpose of this technical report is to assess the potential air quality and greenhouse gas (GHG) emissions impacts associated with implementation of the proposed Victoria Greens Project (project). This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

### Project Overview

The project site is located at the northeast corner of the intersection of Victoria Street and Carson Avenue in the City of Carson (City) in Los Angeles County, California. The project site encompasses approximately 8.06 acres. The project is a 176-unit multifamily residential development, which includes 50 two-bedroom units and 126 three-bedroom units. Additionally, the project would include open space/landscaping, and 62-space surface parking lot.

The project is part of the Dominguez Hills Specific Plan and is comprised of three planning areas currently zoned for Tank Farm and Oil Production, Neighborhood Serving Retail Center and Industrial Development, and Manufacturing and Distribution. The project is proposing to revise the land use designations from the existing commercial and industrial zoning to Multifamily zoning similar to Housing Type D as defined in the Dominguez Hills Specific Plan.

The project site is located within the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Construction and operational criteria air pollutant and GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, consistent with SCAQMD guidance.

### Air Quality

The air quality impact analysis evaluated the potential for adverse impacts to air quality due to construction and operational emissions resulting from the project. Impacts were evaluated for their significance based on the SCAQMD mass daily criteria air pollutant thresholds of significance (SCAQMD 1993, as revised in March 2015). Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM<sub>10</sub>), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM<sub>2.5</sub>), and lead. Pollutants that were evaluated include volatile organic compounds (VOCs) (also referred to as reactive organic gases), oxides of nitrogen (NO<sub>x</sub>), CO, sulfur oxides (SO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>. VOCs and NO<sub>x</sub> are important because they are precursors to O<sub>3</sub>.

# **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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## ***Air Quality Plan Consistency***

Implementation of the project would not exceed the demographic growth forecasts in the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS); therefore, the project would also be consistent with the SCAQMD 2016 Air Quality Management Plan (AQMP), which based future emission estimates on the SCAG 2016 RTP/SCS. In addition, the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations. Based on these considerations, impacts related to the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

## ***Construction Criteria Air Pollutant Emissions***

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Estimated maximum daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> during construction in all construction years (2018–2020).

## ***Operational Criteria Air Pollutant Emissions***

As specified by the applicant, operational year 2022 was assumed upon completion of construction. Operation of the project would generate operational criteria air pollutants from mobile sources (vehicles), area sources (consumer product use, architectural coatings, and landscape maintenance equipment), and energy (natural gas). Estimated maximum daily operational emissions would not exceed the SCAQMD operational significance thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>.

## ***Exposure of Sensitive Receptors***

Construction activities would not generate emissions in excess of the SCAQMD site-specific localized significance thresholds (LSTs); therefore, site-specific construction impacts during construction of the project would be less than significant.

Operation of the project would not expose sensitive receptors to localized high concentrations of CO or contribute traffic volumes to intersections that would cause a CO hotspot. Based on the Traffic Impact Analysis, the six study intersections evaluated would continue to operate acceptably at level of service C or better during AM and PM peak hours, potential CO hotspot impacts would be less than significant.

# **Air Quality and Greenhouse Gas Emissions Analysis**

## **Technical Report for the Victoria Greens Project**

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Impacts related to cancer risk and chronic hazard from diesel particulate matter (DPM), which is a toxic air contaminant (TAC), would be below the SCAQMD's health risk thresholds during construction activities; therefore, construction health risk impacts would be less than significant after implementation of MM-AQ-1. The project includes residential land uses in close proximity to industrial/warehouse land uses and the vehicles traveling on State Route 91. Health risk impacts from the surrounding sources on project future sensitive (residential) receptors would be less than significant after implementation of MM-AQ-2.

### ***Odors***

Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application, which would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Impacts associated with odors during construction would be less than significant. The project is a residential development that would not include land uses with sources that have the potential to generate substantial odors and impacts associated with odors during operation would be less than significant.

### ***Cumulative Impacts***

The potential for the project to result in a cumulatively considerable impact, per the SCAQMD guidance and thresholds, is based on the project's potential to exceed the project-specific daily thresholds. As discussed previously, maximum construction and operational emissions would not exceed the SCAQMD significance thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. Therefore, the project would not result in a cumulatively considerable increase in criteria air pollutants.

### **Greenhouse Gas Emissions**

Global climate change is primarily considered a cumulative impact, but must also be evaluated on a project-level under CEQA. A project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions. GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). GHG emissions are measured in metric tons of CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e), which account for weighted global warming potential (GWP) factors for CH<sub>4</sub> and N<sub>2</sub>O.

### ***Project-Generated Construction and Operational Greenhouse Gas Emissions***

The threshold applied to assess the potential for the project to generate GHG emissions either directly or indirectly that may have a significant impact on the environment was the SCAQMD

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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recommended threshold of 4.8 MT CO<sub>2</sub>e per service population per year. Pursuant to SCAQMD recommendation, construction emissions were amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008).

Construction of the project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Total project-generated GHG emissions during construction were estimated to be 996 MT CO<sub>2</sub>e over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 33 MT CO<sub>2</sub>e per year.

The project would generate operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. Estimated annual project-generated operational GHG emissions would be approximately 2,334 MT CO<sub>2</sub>e per year. Estimated annual project-generated operational emissions in 2022 and amortized project construction emissions would be approximately 2,367 MT CO<sub>2</sub>e per year.

Pursuant to the SCAG 2016 RTP/SCS population and household data, the average persons per household for the City in 2022 is estimated to be 3.58 (SCAG 2016). Based on the assumption of 3.58 persons per household, the proposed 176 residential units would generate 631 persons when the project is built out in 2022. Estimated annual GHG emissions of 2,367 MT CO<sub>2</sub>e per year divided by a service population of 631 persons is 3.75 MT CO<sub>2</sub>e per service population per year. As such, annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD threshold of 4.8 MT CO<sub>2</sub>e per service population per year. Therefore, the project-generated GHG emissions would result in a less than significant impact.

### ***Consistency with Applicable Greenhouse Gas Reduction Plans***

The City has not adopted a comprehensive climate action plan and there is currently no local guidance that would be applicable to the project. At this time, no mandatory GHG plans, policies, or regulations or finalized agency guidelines would apply to implementation of the project. Nonetheless, development of the project site would support the overarching intent of the SCAG 2016 RTP/SCS by avoiding sprawling development. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and no mitigation is required. This impact would be less than significant.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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## 1 INTRODUCTION

### 1.1 Report Purpose and Scope

The purpose of this technical report is to assess the potential air quality and greenhouse gas (GHG) emissions impacts associated with implementation of the proposed Victoria Greens Project (project). This assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and is based on the emissions-based significance thresholds recommended by the South Coast Air Quality Management District (SCAQMD) and other applicable thresholds of significance.

This introductory section provides a description of the project and the project location. Section 2, Air Quality, describes the air quality–related environmental setting, regulatory setting, existing air quality conditions, and thresholds of significance and analysis methodology, and presents an air quality impact analysis per Appendix G of the CEQA Guidelines. Section 3, Greenhouse Gas Emissions, follows the same format as Section 2 and similarly describes the GHG emissions–related environmental setting, regulatory setting, existing climate changes conditions, and thresholds of significance and analysis methodology, and presents a GHG emissions impact analysis per Appendix G of the CEQA Guidelines. Section 4, References Cited, includes a list of the references cited. Section 5, List of Preparers, includes a list of those who prepared this technical report.

The analysis in this technical report incorporates project data as provided on the site plans prepared by Urban Arena (Urban Arena 2018) and the transportation impact analysis (TIA) prepared by Fehr & Peers (F&P) (F&P 2018).

### 1.2 Regional and Local Setting

The approximately 8.07-acre site is located at the northeast corner of Victoria Street and Central Avenue within the City of Carson (City) in Los Angeles County, approximately 17 miles south of downtown Los Angeles and approximately 10 miles east of the Pacific Ocean (Figure 1, Project Location). The project site is bounded by East Victoria Street to the south, South Central Avenue to the west, and developed land to the north and east. The project site is located immediately adjacent to the California State University, Dominguez Hills campus and opposite Dominguez Hills Village, approximately 0.4 miles south of the Gardena Freeway (State Route 91), and 0.5 miles east of the Stub Hub Center.

The project is part of the Dominguez Hills Specific Plan and is comprised of three planning areas currently zoned for Tank Farm and Oil Production, Neighborhood Serving Retail Center and Industrial Development, and Manufacturing and Distribution. The project is proposing to revise the land use designations from the existing commercial and industrial zoning to Multifamily zoning

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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similar to Housing Type D as defined in the Dominguez Hills Specific Plan. In addition to the zone change, the amended Specific Plan will modify the existing parking requirement from 2.5 parking spaces per unit to 2.35 parking spaces per unit for multifamily housing.

The project site is located within the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

### 1.3 Project Description

The project is a 176-unit multifamily residential development, which includes 50 two-bedroom units and 126 three-bedroom units. Additionally, the project would include a recreation center, a dog park, a linear park, and 62-space surface parking lot. A total of 87,788 square feet would be paved. Table 1 provides a summary of the proposed residential units and parking spaces provided.

**Table 1**  
**Project Residential and Parking Land Use Breakdown**

<b>Residential Units and Amenities</b>			
<i>Plan Description</i>	<i>Quantity (number of dwelling units)</i>	<i>Gross Unit Area (square feet)</i>	<i>Floor Area (square feet)</i>
UA Row – Plan 1	26	1,517	39,442
UA Row – Plan 2	26	1,578	41,028
UA Row – Plan 3	18	1,857	33,426
UA Row – Plan 4	20	1,999	39,980
UA Level – Plan 1	24	1,453	34,872
UA Level – Plan 2	24	1,558	37,392
UA Level – Plan 3	19	1,811	34,409
UA Level – Plan 4	19	2,072	39,368
<b>Building Area Total<sup>a</sup></b>			<b>299,917</b>
<b>Parking</b>			
<i>Parking Area</i>			<i>Parking Provided (number of spaces)</i>
Surface parking lot			62

**Source:** Urban Arena 2018.

**Notes:**

<sup>a</sup> Building area total square footage does not include parking garage or patio and balcony space, which is not included as habitable space in this analysis.

### 1.4 Dust Control Strategies

The project would include various construction dust control strategies as a project design feature. Compliance with these dust control measures would be identified on grading plan approvals. The following dust control strategies are proposed:



## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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- a. During clearing, grading, earthmoving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.
- b. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning, after work is completed for the day, and whenever winds exceed 15 miles per hour during active operations. Watering of active disturbance areas, including active grading areas and unpaved roads, would occur approximately every two hours of active operations, approximately three times per work day (at a minimum).
- c. Speeds on unpaved roads shall be reduced to less than 15 miles per hour.
- d. All grading and excavation operations shall be halted when wind speeds exceed 25 miles per hour.
- e. Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/or washed at the end of each workday.
- f. All trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be covered and/or a minimum 2 feet of freeboard shall be maintained.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Figure 1      Project Location

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## 2 AIR QUALITY

### 2.1 Environmental Setting

As stated previously, the project site is located within SCAB. SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

#### 2.1.1 Meteorological and Topographical Conditions

The primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted. Meteorological and topographical conditions, however, are also important. Factors such as wind speed and direction, air temperature gradients and sunlight, and precipitation and humidity interact with physical landscape features to determine the movement and dispersal of air pollutants. SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second largest urban area, meteorological conditions adverse to the dispersion of those emissions, and mountainous terrain surrounding the SCAB that traps pollutants as they are pushed inland with the sea breeze (SCAQMD 2017). Meteorological and topographical factors that affect air quality in the SCAB are described below.<sup>1</sup>

#### Climate

SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The general region lies in the semi-permanent high-pressure zone of the eastern Pacific; as a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) and of manufactured influences (e.g., development patterns and lifestyle). Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in SCAB. The average annual temperature varies little throughout the SCAB, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of SCAB show greater variability in annual minimum and maximum temperatures. All portions of SCAB have recorded temperatures over 100°F in recent years. January is usually the coldest month, while July and August are usually the hottest months of the year. Precipitation is limited to a few storms during the winter season (i.e., November through April). Rainfall averages around 9 to 14 inches per year in the City (City of Carson 2002).

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<sup>1</sup> The discussion of meteorological and topographical conditions of SCAB is based on information provided in the *Final 2016 Air Quality Management Plan* (SCAQMD 2017).

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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Although SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into SCAB by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as “high fog,” are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of SCAB. Precipitation in SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail because of typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of SCAB.

### **Sunlight**

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain “primary” pollutants (mainly reactive hydrocarbons and oxides of nitrogen (NO<sub>x</sub>)<sup>2</sup>) react to form “secondary” pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O<sub>3</sub>) and a substantial portion of fine particulate matter (PM<sub>2.5</sub>, particles less than 2.5 microns in diameter). In SCAB, high concentrations of O<sub>3</sub> are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

### **Temperature Inversions**

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level (amsl), the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet amsl, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet

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<sup>2</sup> NO<sub>x</sub> is a general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and other oxides of nitrogen.

# **Air Quality and Greenhouse Gas Emissions Analysis**

## **Technical Report for the Victoria Greens Project**

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amsl, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O<sub>3</sub> observed during summer months in SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The SCAB has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other cities within the SCAB, the City is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated particles less than 10 microns in diameter (PM<sub>10</sub>) and PM<sub>2.5</sub> concentrations can occur in SCAB throughout the year, but occur most frequently in fall and winter. Although there are some changes in emissions by day-of-week and season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

### **2.1.2 Pollutants and Effects**

#### **2.1.2.1 Criteria Air Pollutants**

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O<sub>3</sub>, nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following paragraphs.<sup>3</sup> In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

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<sup>3</sup> The descriptions of each of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's (EPA's) Criteria Air Pollutants (2016a) and the California Air Resources Board's (CARB's) Glossary of Air Pollutant Terms (2016a), and CARB's "Fact Sheet: Air Pollution Sources, Effects, and Control" (CARB 2009).

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Ozone.** O<sub>3</sub> is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O<sub>3</sub> precursors. These precursors are mainly NO<sub>x</sub> and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O<sub>3</sub> concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O<sub>3</sub> formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O<sub>3</sub> exists in the upper atmosphere O<sub>3</sub> layer (stratospheric ozone) and at the Earth's surface in the troposphere (ozone).<sup>4</sup> The O<sub>3</sub> that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O<sub>3</sub> is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O<sub>3</sub>. Stratospheric, or "good," O<sub>3</sub> occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O<sub>3</sub> layer, plant and animal life would be seriously harmed.

O<sub>3</sub> in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O<sub>3</sub> at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (U.S. Environmental Protection Agency (EPA) 2013). These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

**Nitrogen Dioxide.** NO<sub>2</sub> is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO<sub>2</sub> in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO<sub>x</sub> plays a major role, together with VOCs, in the atmospheric reactions that produce O<sub>3</sub>. NO<sub>x</sub> is formed from fuel combustion under high temperature or pressure. In addition, NO<sub>x</sub> is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

NO<sub>2</sub> can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections (EPA 2016b).

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<sup>4</sup> The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Carbon Monoxide.** CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

**Sulfur Dioxide.** SO<sub>2</sub> is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO<sub>2</sub> are coal and oil used in power plants and industries; as such, the highest levels of SO<sub>2</sub> are generally found near large industrial complexes. In recent years, SO<sub>2</sub> concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO<sub>2</sub> and limits on the sulfur content of fuels.

SO<sub>2</sub> is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO<sub>2</sub> can injure lung tissue and reduce visibility and the level of sunlight. SO<sub>2</sub> can also yellow plant leaves and erode iron and steel.

**Particulate Matter.** Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM<sub>2.5</sub> and PM<sub>10</sub> represent fractions of particulate matter. Coarse particulate matter (PM<sub>10</sub>) consists of particulate matter that is 10 microns or less in diameter and is about 1/7 the thickness of a human hair. Major sources of PM<sub>10</sub> include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter (PM<sub>2.5</sub>) consists of particulate matter that is 2.5 microns or less in diameter and is roughly 1/28 the diameter of a human hair. PM<sub>2.5</sub> results from fuel combustion (e.g., from motor vehicles and power generation

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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and industrial facilities), residential fireplaces, and woodstoves. In addition, PM<sub>2.5</sub> can be formed in the atmosphere from gases such as sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, and VOCs.

PM<sub>2.5</sub> and PM<sub>10</sub> pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM<sub>2.5</sub> and PM<sub>10</sub> can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM<sub>10</sub> tends to collect in the upper portion of the respiratory system, PM<sub>2.5</sub> is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM<sub>10</sub> and PM<sub>2.5</sub> (EPA 2009).

**Lead.** Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

**Sulfates.** Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO<sub>2</sub> in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

**Vinyl Chloride.** Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

**Hydrogen Sulfide.** Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

**Visibility-Reducing Particles.** Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for PM<sub>2.5</sub> described above.

**Volatile Organic Compounds.** Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O<sub>3</sub> are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O<sub>3</sub> and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

### **2.1.2.2 Non-Criteria Air Pollutants**

**Toxic Air Contaminants.** A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

**Diesel Particulate Matter.** Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair), and thus is a subset of PM<sub>2.5</sub> (CARB 2016b). DPM is typically composed of carbon particles (“soot,” also called black carbon, or BC) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2016b). The CARB classified “particulate emissions from diesel-fueled engines” (i.e., DPM; 17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of PM<sub>2.5</sub>, DPM also contributes to the same non-cancer health effects as PM<sub>2.5</sub> exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2016b). Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

**Odorous Compounds.** Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor

# **Air Quality and Greenhouse Gas Emissions Analysis**

## **Technical Report for the Victoria Greens Project**

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that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

### **2.1.3 Sensitive Receptors**

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). One industrial complex on the north side of the site has been converted into a childcare center, and a multifamily residential neighborhood is located across Central Avenue to the west.

## **2.2 Regulatory Setting**

### **2.2.1 Federal Regulations**

#### **2.2.1.1 Criteria Air Pollutants**

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O<sub>3</sub> protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and those based on annual averages or arithmetic mean) are not to be exceeded more than once

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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per year. NAAQS for O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

### **2.2.1.2 Hazardous Air Pollutants**

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

## **2.2.2 State Regulations**

### **2.2.2.1 Criteria Air Pollutants**

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 2.

**Table 2  
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>a</sup>	National Standards <sup>b</sup>
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## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

		Concentration <sup>c</sup>	Primary <sup>c,d</sup>	Secondary <sup>c,e</sup>
O <sub>3</sub>	1 hour	0.09 ppm (180 µg/m <sup>3</sup> )	—	Same as Primary Standard <sup>f</sup>
	8 hours	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm (137 µg/m <sup>3</sup> ) <sup>f</sup>	
NO <sub>2</sub> <sup>g</sup>	1 hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm (188 µg/m <sup>3</sup> )	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	
CO	1 hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	None
	8 hours	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	
SO <sub>2</sub> <sup>h</sup>	1 hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm (196 µg/m <sup>3</sup> )	—
	3 hours	—	—	0.5 ppm (1,300 µg/m <sup>3</sup> )
	24 hours	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (for certain areas) <sup>g</sup>	—
	Annual	—	0.030 ppm (for certain areas) <sup>g</sup>	—
PM <sub>10</sub> <sup>i</sup>	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	—	
PM <sub>2.5</sub> <sup>i</sup>	24 hours	—	35 µg/m <sup>3</sup>	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	
Lead <sup>j,k</sup>	30-day Average	1.5 µg/m <sup>3</sup>	—	—
	Calendar Quarter	—	1.5 µg/m <sup>3</sup> (for certain areas) <sup>k</sup>	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m <sup>3</sup>	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m <sup>3</sup> )	—	—
Vinyl chloride <sup>l</sup>	24 hours	0.01 ppm (26 µg/m <sup>3</sup> )	—	—
Sulfates	24- hours	25 µg/m <sup>3</sup>	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016c.

**Notes:** µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup>= milligrams per cubic meter; ppm = parts per million by volume; O<sub>3</sub> = ozone; NO<sub>2</sub> = nitrogen dioxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter with an aerodynamic diameter less than or equal to 10 microns; PM<sub>2.5</sub> = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

<sup>a</sup> California standards for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, suspended particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

<sup>b</sup> National standards (other than O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than 1. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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- <sup>c</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- <sup>d</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- <sup>e</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- <sup>f</sup> On October 1, 2015, the national 8-hour O<sub>3</sub> primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- <sup>g</sup> To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- <sup>h</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- <sup>i</sup> On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35 µg/m<sup>3</sup>, as was the annual secondary standard of 15 µg/m<sup>3</sup>. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150 µg/m<sup>3</sup> were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- <sup>j</sup> CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- <sup>k</sup> The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

### 2.2.2.2 Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel,



## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

### **California Health and Safety Code Section 41700**

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

### **2.2.3 Local Regulations**

#### **2.2.3.1 South Coast Air Quality Management District**

SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the project is located. SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD governing board on March 3, 2017. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017). Because mobile sources are the principal contributor to the SCAB's air quality challenges, the SCAQMD has been and will continue to be closely engaged with CARB and the EPA, who have primary responsibility for these sources. The 2016 AQMP recognizes the

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality but also local businesses and the regional economy. These “win-win” scenarios are key to implementation of this 2016 AQMP with broad support from a wide range of stakeholders.

The previous AQMP was the 2012 AQMP, which was adopted in February 2013 (SCAQMD 2013). The 2012 AQMP proposed policies and measures to achieve federal and state standards for improved air quality in the SCAB and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction. The 2012 AQMP is designed to meet applicable federal and state requirements for O<sub>3</sub> and particulate matter. The 2012 AQMP documents that attainment of the federal 24-hour PM<sub>2.5</sub> standard is impracticable by 2015 and the SCAB should be classified as a Serious nonattainment area along with the appropriate federal requirements. The 2012 AQMP includes the planning requirements to meet the 1-hour O<sub>3</sub> standard. The 2012 AQMP demonstrates attainment of the federal 24-hour PM<sub>2.5</sub> standard by 2014 in the SCAB through adoption of all feasible measures. Finally, the 2012 AQMP updates the EPA-approved 8-hour O<sub>3</sub> control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO<sub>x</sub> and VOC reductions. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The EPA, with a final ruling on April 14, 2016, approved the Clean Air Act planning requirements for the 24-hour PM<sub>2.5</sub> standard portion and on September 3, 2014, approved the 1-hour ozone Clean Air Act planning requirements.

### **Applicable Rules**

Emissions that would result from mobile, area, and stationary sources during construction and operation of the project are subject to the rules and regulations of the SCAQMD. The SCAQMD rules applicable to the project may include the following:

- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:** This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- **Rule 403 – Fugitive Dust:** This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM<sub>10</sub>

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

- **Rule 431.2 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO<sub>x</sub> and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines:** This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO<sub>x</sub>, VOCs, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

### **2.2.3.2 Southern California Association of Governments**

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

With respect to air quality planning and other regional issues, SCAG has prepared the 2008 Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future (2008 RCP) for the region (SCAG 2008). The 2008 RCP sets the policy context in which SCAG participates in and responds to the SCAQMD air quality plans and builds off the SCAMQD AQMP processes that are designed to meet health-based criteria pollutant standards in several ways (SCAG 2008). First, it complements AQMPs by providing guidance and incentives for public agencies to consider best practices that support the technology-based control measures in AQMPs. Second, the 2008 RCP emphasizes the need for local initiatives that can reduce the region's GHG emissions that

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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contribute to climate change, an issue that is largely outside the focus of local attainment plans, which is assessed in Section 3. Third, the 2008 RCP emphasizes the need for better coordination of land use and transportation planning, which heavily influences the emissions inventory from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

On April 7, 2016, SCAG's Regional Council adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2016 RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration and the Federal Transit Administration indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 Federal Transportation Improvement Program Consistency Amendment through Amendment 15-12 have been met (SCAG 2016). The SCAQMD 2016 AQMP applies the updated SCAG growth forecasts assumed in the 2016 RTP/SCS.

### **2.2.3.3 City of Carson**

The City's General Plan (2004) includes various goals and policies designed to help improve air quality within the City under the Air Quality Element. In regards to reducing mobile source emissions, trip reduction strategies including walking, cycling, use of public transit, and carpooling to work are under Transportation and Infrastructure Element of the General Plan as a means to improve air quality and to minimize congestion on the local and regional network. Energy efficiency in buildings is addressed under the Open Space and Conservation Element in the General Plan. The City is currently in the process of updating the General Plan, and the General Plan Update and the accompanying EIR are anticipated to be adopted in late 2019.

As discussed in the General Plan, policies pertaining to improving air quality are addressed in multiple chapters of the General Plan. Goals and associated policies are presented below (City of Carson 2004).

**Goal AQ-1:** Reduced particulate emissions from paved and unpaved surfaces and during building construction.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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- **Policy AQ-1.1:** Continue to enforce ordinances, which address dust generation and mandate the use of dust control measures to minimize nuisance.

**Goal AQ-2:** Air quality which meets state and federal standards.

- **Policy AQ-2.1:** Coordinate with other agencies in the region, particularly SCAQMD and SCAG, to implement provision of the regions' AQMP, as amended.
- **Policy AQ-12.2:** Utilize incentives, regulations, and implement the Transportation Demand Management (TDM) requirements in cooperation with other jurisdiction to eliminate vehicle trips which would otherwise be made and to reduce vehicle miles traveled for automobile trips which still need to be made.
- **Policy AQ-2.3:** Cooperate and participate in regional air quality management plans, programs, and enforcement measures.
- **Policy AQ-2.4:** Continue to work to relieve congestion on major arterials and thereby reduce emissions.
- **Policy AQ-2.5:** Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalks and bicycle trail improvements and parkways for new developments.
- **Policy AQ-2.7:** Reduce air pollutant emissions by mitigating air quality impacts associated with development projects to the greatest extent possible.

**Goal AQ-3:** Increased use of alternate fuel vehicles.

- **Policy AQ-3.1:** Continue to promote the use of alternative clean fueled vehicles for personal and business use. To this end, consider the use of electric, fuel cell, or other non-polluting fuels for Carson Circuit buses and other City vehicles.
- **Policy AQ-3.2:** Continue to promote ridership on the Carson Circuit and Los Angeles County Metropolitan Transportation Authority (MTA) bus and metro rail lines.

**Goal AQ-4:** Increased community awareness and participation in efforts to reduce air pollution and enhance air quality.

- **Policy AQ-4.1:** Work with the City's Public Information Office to increase public awareness regarding air quality, implementation issues, reporting, and enforcement.
- **Policy AQ-4.2:** Promote and encourage ridesharing activities within the community, including such programs as preferential parking, park-and-ride lots, alternative work week/flexible working hours and telecommuting, as well as other trip reduction strategies.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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**Goal TI-2:** Provide a sustainable, safe, convenient, and cost-effective circulation system to serve the present and future transportation needs of the Carson community.

- **Policy TI-2.1:** Require the new projects not cause the Level of Service for intersections to drop more than one level if it is at Level A, B, or C, and not drop at all if it is at D or below, except when necessary to achieve sustainable City development goals.
- **Policy TI-2.7:** Provide all residential, commercial, and industrial areas with efficient and safe access to major regional transportation facilities.
- **Policy TI-2.8:** Provide traffic calming, landscape, and pedestrian improvements in non-truck route streets and other streets as appropriate.

**Goal TI-5:** Use TDM measures throughout the City, where appropriate, to discourage single-occupant vehicles, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.

- **Policy TI-5.1:** Ensure that TDM policies are considered during the evaluation of new developments within the City, including but not limited to: ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

**Goal OSC-3:** Conservation of scarce energy resources.

- **Policy OSC-3.1:** Promote incentives for the use of site planning, techniques, building orientation, building materials, and other measures which reduce energy consumption.
- **Policy OSC-3.2:** Support the development of alternative sources of energy such as roof-mounted solar panels, fuel cells or new technology.
- **Policy OSC-3.4:** Support energy conservation via alternative forms of transportation.

**Goal OSC-4:** Minimize solid waste generated within Carson.

- **Policy OSC-4.1:** Reduce the generation of solid waste from sources in the City in accordance with the Source Reduction and Recycling Element for Carson and state regulations.
- **Policy OSC-4.2:** Develop a public education program to address waste management and proper household waste sorting and handling.
- **Policy OSC-4.3:** Facilitate physical collection of recyclable waste.

Many air quality strategies result in co-benefits with reducing GHG emissions. See Section 3.2.3.4, City of Carson, for a discussion of the City's GHG emission reduction policies.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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## 2.3 Regional and Local Air Quality Conditions

### 2.3.1 South Coast Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as “attainment” or “nonattainment,” but based on CAAQS rather than the NAAQS. Table 3 depicts the current attainment status of the project site with respect to the NAAQS and CAAQS. The attainment classifications for the criteria pollutants are outlined in Table 3.

**Table 3**  
**South Coast Air Basin Attainment Classification**

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone (O <sub>3</sub> ) – 1 hour	No Federal Standard	<b>Nonattainment</b>
Ozone (O <sub>3</sub> ) – 8 hour	<b>Extreme Nonattainment</b>	<b>Nonattainment</b>
Nitrogen Dioxide (NO <sub>2</sub> )	Unclassifiable/Attainment	Attainment
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Unclassifiable/Attainment	Attainment
Coarse Particulate Matter (PM <sub>10</sub> )	Attainment/Maintenance	<b>Nonattainment</b>
Fine Particulate Matter (PM <sub>2.5</sub> )	<b>Serious Nonattainment</b>	<b>Nonattainment</b>
Lead (Pb)	Nonattainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility-Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	No designation

**Sources:** EPA 2016c (federal); CARB 2016d (state).

**Notes:** Bold text = not in attainment; Attainment = meets the standards; Attainment/Maintenance = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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In summary, the SCAB is designated as a nonattainment area for federal and state O<sub>3</sub> standards and federal and state PM<sub>2.5</sub> standards. The SCAB is designated as a nonattainment area for state PM<sub>10</sub> standards; however, it is designated as an attainment area for federal PM<sub>10</sub> standards. The SCAB is designated as an attainment area for federal and state CO standards, federal and state NO<sub>2</sub> standards, and federal and state SO<sub>2</sub> standards. While the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard (EPA 2016c; CARB 2016d).

Despite the current non-attainment status, air quality within the SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly due to lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. Despite this growth, air quality has improved significantly over the years, primarily due to the impacts of the region's air quality control program. PM<sub>10</sub> levels have declined almost 50% since 1990, and PM<sub>2.5</sub> levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O<sub>3</sub>, although the rate of O<sub>3</sub> decline has slowed in recent years.

### **2.3.2 Local Ambient Air Quality**

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The SCAQMD monitors local ambient air quality at the project site. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2015 to 2017 are presented in Table 4. The Compton monitoring station, located at 700 North Bullis Road in Compton, California 90221, is the nearest air quality monitoring station to the project site, located approximately 3.1 miles northeast from the project site. The data collected at this station are considered representative of the air quality experienced in the project vicinity. Air quality data for O<sub>3</sub>, NO<sub>2</sub>, CO, and PM<sub>2.5</sub> from the Compton monitoring station are provided in Table 4. Because PM<sub>10</sub> and SO<sub>2</sub> are not monitored at the Compton monitoring station, PM<sub>10</sub> and SO<sub>2</sub> measurements were taken from the Long Beach monitoring station (2425 Webster Street Long Beach, California, 90810, approximately 4.8 miles southeast from the project site). The number of days exceeding the ambient air quality standards is also shown in Table 4.



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

**Table 4  
Local Ambient Air Quality Data**

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2015	2016	2017	2015	2016	2017
<i>Ozone (O<sub>3</sub>)</i>										
Compton	ppm	Maximum 1-hour concentration	State	0.09	0.091	0.098	0.092	0	1	0
	ppm	Maximum 8-hour concentration	State	0.070	0.072	0.071	0.076	1	1	5
Federal			0.070	0.072	0.071	0.076	1	1	5	
<i>Nitrogen Dioxide (NO<sub>2</sub>)</i>										
Compton	ppm	Maximum 1-hour concentration	State	0.18	0.073	0.063	0.099	0	0	0
			Federal	0.100	0.073	0.063	0.099	0	0	0
	ppm	Annual concentration	State	0.030	–	–	–	–	–	–
			Federal	0.053	0.017	0.016	0.016	0	0	0
<i>Carbon Monoxide (CO)</i>										
Compton	ppm	Maximum 1-hour concentration	State	20	–	–	–	–	–	–
			Federal	35	4.4	4.4	6.1	0	0	0
	ppm	Maximum 8-hour concentration	State	9.0	–	–	–	–	–	–
			Federal	9	3.3	3.9	4.6	0	0	0
<i>Sulfur Dioxide (SO<sub>2</sub>)</i>										
Long Beach	ppm	Maximum 1-hour concentration	Federal	0.075	0.038	0.018	0.020	0	0	0
	ppm	Maximum 24-hour concentration	Federal	0.14	0.005	0.004	0.003	0	0	0
	ppm	Annual concentration	Federal	0.030	0.0099 <sup>a</sup>	0.0092	0.0085	0	0	0
<i>Coarse Particulate Matter (PM<sub>10</sub>)<sup>b</sup></i>										
Long Beach	µg/m <sup>3</sup>	Maximum 24-hour concentration	State	50	79.0	ND	ND	37.6 (6)	ND (ND)	ND (ND)
			Federal	150	80.0	75.0	79.0	0.0 (0)	0.0 (0)	0.0 (0)
	µg/m <sup>3</sup>	Annual concentration	State	20	31.3	ND	ND	–	ND	ND
<i>Fine Particulate Matter (PM<sub>2.5</sub>)<sup>b</sup></i>										
Compton	µg/m <sup>3</sup>	Maximum 24-hour concentration	Federal	35	41.3	36.3	66.7	9.0 (3)	3.3 (1)	15.4 (5)

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

**Table 4  
Local Ambient Air Quality Data**

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2015	2016	2017	2015	2016	2017
	µg/m <sup>3</sup>	Annual concentration	State	12	ND	ND	ND	ND	ND	ND
			Federal	12.0	11.7	11.0	12.3	–	–	–

**Sources:** CARB 2017a; EPA 2016d.

**Notes:** — = not available; µg/m<sup>3</sup> = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million  
Data taken from CARB iADAM (<http://www.arb.ca.gov/adam>) and EPA AirData (<http://www.epa.gov/airdata/>) represent the highest concentrations experienced over a given year.

Exceedances of federal and state standards are only shown for O<sub>3</sub> and particulate matter. Daily exceedances for particulate matter are estimated days because PM<sub>10</sub> and PM<sub>2.5</sub> are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM<sub>10</sub>, or 24-hour SO<sub>2</sub>, nor is there a state 24-hour standard for PM<sub>2.5</sub>.

Compton Monitoring Station is located at 700 North Bullis Road, Compton, California 90221.

Long Beach Monitoring Station is located at 2425 Webster Street, Long Beach, California 90810.

<sup>a</sup> Mean does not satisfy minimum data completeness criteria.

<sup>b</sup> Measurements of PM<sub>10</sub> and PM<sub>2.5</sub> are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

## 2.4 Significance Criteria and Methodology

### 2.4.1 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality is based on the recommendations provided in Appendix G of CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the project would (14 CCR 15000 et seq.):

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
4. Expose sensitive receptors to substantial pollutant concentrations.
5. Create objectionable odors affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

control district may be relied upon to determine whether the project would have a significant impact on air quality.

SCAQMD has established Air Quality Significance Thresholds, as revised in March 2015, which set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality under existing and cumulative conditions. The quantitative air quality analysis provided herein applies SCAQMD thresholds identified in Table 5 to determine the potential for the project to result in a significant impact under CEQA.

**Table 5  
SCAQMD Air Quality Significance Thresholds**

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (pounds per day)	Operation (pounds per day)
VOCs	75	55
NO <sub>x</sub>	100	55
CO	550	550
SO <sub>x</sub>	150	150
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55
Lead <sup>a</sup>	3	3
TACs and Odor Thresholds		
TACs <sup>b</sup>	Maximum incremental cancer risk $\geq$ 10 in 1 million Chronic and acute hazard index $\geq$ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants <sup>c</sup>		
NO <sub>2</sub> 1-hour average NO <sub>2</sub> annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
PM <sub>10</sub> 24-hour average PM <sub>10</sub> annual average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>d</sup> 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$	
PM <sub>2.5</sub> 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>d</sup> 2.5 $\mu\text{g}/\text{m}^3$ (operation)	

**Source:** SCAQMD 2015.

**Notes:** SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; TAC = toxic air contaminant; NO<sub>2</sub> = nitrogen dioxide; ppm = parts per million;  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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GHG emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not included in Table 5 as they are addressed within the GHG emissions analysis and not the air quality study.

- <sup>a</sup> The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
- <sup>b</sup> TACs include carcinogens and noncarcinogens.
- <sup>c</sup> Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
- <sup>d</sup> Ambient air quality thresholds are based on SCAQMD Rule 403.

The evaluation of whether the project would conflict with or obstruct implementation of the applicable air quality plan (Impact AQ-1) is based on the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993), Chapter 12, Sections 12.2 and 12.3. The first criterion assesses if the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP, which is addressed in detail under Impact AQ-2 in Section 2.5.2. The second criterion is if the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase, as discussed further in Section 2.5.1.

To evaluate the potential for the project to violate any air quality standard or contribute substantially to an existing or projected air quality violation (Impact AQ-2), this analysis applies the SCAQMD's construction and operational criteria pollutants mass daily thresholds, as shown in Table 5. A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O<sub>3</sub>, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO<sub>x</sub> thresholds shown in Table 5. These emissions-based thresholds for O<sub>3</sub> precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O<sub>3</sub> impacts to occur). This approach is used because O<sub>3</sub> is not emitted directly (see the discussion of O<sub>3</sub> and its sources in Section 2.1.2 Pollutants and Effects), and the effects of an individual project's emissions of O<sub>3</sub> precursors (VOC and NO<sub>x</sub>) on O<sub>3</sub> levels in ambient air cannot be determined through air quality models or other quantitative methods.

The assessment of the project's potential to expose sensitive receptors to substantial pollutant concentrations (Impact AQ-3) includes a localized significance threshold (LST) analysis, as recommended by the SCAQMD, to evaluate the potential of localized air quality impacts to sensitive receptors in the immediate vicinity of the project. For project sites of 5 acres or less, the SCAQMD LST Methodology (2009) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) without performing project-specific dispersion modeling. Although the proposed development area of the site is greater than 5 acres (estimated to be 8.07 acres), the

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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project would disturb less than 5 acres in 1 day, as discussed in detail in the following text, so it is appropriate to use the lookup tables for the LST evaluation.

The LST significance thresholds for NO<sub>2</sub> and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM<sub>10</sub> represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for PM<sub>2.5</sub> is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the PM<sub>2.5</sub> ambient air quality standards. The allowable emission rates depend on the following parameters:

- Source-receptor area (SRA) in which the project is located
- Size of the project site
- Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The project site is located in SRA 4 (South Coastal Los Angeles County). The SCAQMD provides guidance for applying California Emissions Estimator Model (CalEEMod) to the LSTs. LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. The maximum number of acres disturbed on the peak day was estimated using the “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds” (SCAQMD 2011), which provides estimated acres per 8-hour day for crawler tractors, graders, rubber tired dozers, and scrapers. Based on the SCAQMD guidance, and assuming an excavator can grade 0.5 acres per 8-hour day (similar to graders, dozers, and tractors), it was estimated that the maximum acres on the project site that would be disturbed by off-road equipment would be 3 acre per day (two excavators, one grader, one dozer, and two tractors operating during the grading phase). Because the total disturbed acreage would be 8.07 acres over approximately 30 days, the estimate of 3 acre per day of disturbance is conservative. Because the SCAQMD does not provide lookup table values for 3 acre sites, the LST values for a 5 acre within SRA 4 were used.

The nearest sensitive-receptor land use (a residence) is located approximately 150 feet west of the project site. As such, the LST receptor distance was assumed to be 164 feet (50 meters), which is the shortest distance provided by the SCAQMD lookup tables. The LST values from the SCAQMD lookup tables for SRA 4 (South Coastal Los Angeles County) for a 5-acre project site and a receptor distance of 50 meters are shown in Table 6.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 6**  
**Localized Significance Thresholds for Source Receptor Area 4**  
**(South Coastal Los Angeles County)**

Pollutant	Threshold (pounds per day)
NO <sub>2</sub>	118
CO	1,982
PM <sub>10</sub>	42
PM <sub>2.5</sub>	10

**Source:** SCAQMD 2009.

**Notes:** NO<sub>2</sub> = nitrogen dioxide; CO = carbon monoxide; LST – localized significance threshold; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter.

LST thresholds were determined based on the values for 5-acre site at a distance of 50 meters from the nearest sensitive receptor.

The methodology to evaluate of CO hotspots is detailed in Section 2.4.2.3, below. Similarly, the construction HRA methodology and assumptions are presented in Section 2.4.2.4. The construction HRA applies the SCAQMD risk thresholds presented in Table 5, which are a maximum incremental cancer risk greater than or equal to 10 in 1 million and a chronic hazard index greater than or equal to 1.0 (project increment). The CO hotspot assessment and construction HRA are evaluated under the potential for the project to expose sensitive receptors to substantial pollutant concentrations (Section 2.5.4), along with the LST analysis.

The potential for the project to result in an odor impact (Section 2.5.5) is based on the project’s land use type and anticipated construction activity, and the potential for the project to create an odor nuisance pursuant to SCAQMD Rule 402.

## **2.4.2 Approach and Methodology**

### **2.4.2.1 Construction Emissions**

Emissions from the construction phase of the project were estimated using CalEEMod Version 2016.3.2. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant and CalEEMod default values when project specifics were not known.

For purposes of estimating project emissions, and based on information provided by the project applicant, it is assumed that construction of the project would commence in June 2019<sup>5</sup> and would

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<sup>5</sup> The analysis assumes a construction start date of June 2019, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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last approximately 36 months, ending in December 2020. The analysis contained herein was based on the following assumptions (duration of phases is approximate):

- Demolition: 4 weeks (June 2019 – June 2019)
- Site preparation: 2 weeks (June 2019 – July 2019)
- Grading: 1 month (July 2019 – August 2019)
- Building Construction: 13 months (August 2019 – October 2020)
- Paving: 1 month (October 2020 – November 2020)
- Application of Architectural Coatings: 1 month (November 2020 – December 2020)

Construction-worker estimates and vendor truck trips by construction phase were based on data provided by the project applicant. Haul truck trips during the grading phase were based on project applicant-provided earthwork quantities. Grading is currently estimated to involve 62,884 cubic yards (CY) of cut and 93,123 CY of fill, resulting in 30,239 CY of soil for export. Assuming a haul truck capacity of 16 CY per truck, earth-moving activities would result in approximately 3,780 one-way trips (1,890 round trips) during the grading phase. Approximately 7,000 square feet of existing asphalt parking lot would be demolished, which is approximately 127 tons of asphalt. CalEEMod default trip length values were used for the distances for all construction-related trips.

The construction equipment mix and vehicle trips used for estimating the project-generated construction emissions are shown in Table 7. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month), during project construction.

**Table 7  
Construction Scenario Assumptions**

Construction Phase	One-way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition	15	0	13	Excavator	3	8
				Rubber Tired Dozers	2	8
				Concrete/Industrial Saw	1	8
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/Backhoes	4	8

less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 7  
Construction Scenario Assumptions**

Construction Phase	One-way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Grading	15	0	3,780	Excavator	1	8
				Rubber tired loaders	4	8
Building construction	147	27	0	Crane	1	7
				Forklifts	3	8
				Generator Set	1	8
				Tractors/loaders/backhoes	3	7
				Welder	1	8
Paving	15	0	0	Pavers	2	8
				Paving equipment	2	8
				Rollers	2	8
Architectural coating	29	0	0	Air Compressor	1	6

**Notes:** See Appendix A for details.

As discussed in Section 1.4, Dust Control Strategies, the project would implement dust control strategies as a project design feature. To reflect implementation of proposed dust control strategies, the following was assumed in CalEEMod:

- Water exposed area three times per day (61% reduction in PM<sub>10</sub> and PM<sub>2.5</sub>).
- As a surrogate for watering unpaved road three times per day, the “soil stabilizer for unpaved” option was used assuming a 61% reduction in PM<sub>10</sub> and PM<sub>2.5</sub>.
- Limit vehicle travel on unpaved roads to 15 miles per hour.

### **2.4.2.2 Operational Emissions**

Emissions from the operational phase of the project were estimated using CalEEMod Version 2016.3.2. Operational year 2022 was assumed upon completion of construction.

#### **Area Sources**

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text. The project would not include woodstoves or fireplaces (wood or natural gas). As such, area source emissions associated with hearths were not included.



## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (California Air Pollution Control Officers Association (CAPCOA) 2016). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of VOC per building square foot per day. For parking lot land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2016).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. For Los Angeles County, the average annual "summer" days are estimated to 365 days; however, it is assumed that landscaping equipment would likely only operate during the week (not weekends), so operational days were assumed to be 250 days per year in CalEEMod (CAPCOA 2016).

### **Energy Sources**

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

# **Air Quality and Greenhouse Gas Emissions Analysis**

## **Technical Report for the Victoria Greens Project**

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CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Study.

### **Mobile Sources**

Mobile sources for the project would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the project site. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. Based on the TIA prepared for the project by F&P, the proposed residential development is anticipated to generate 7.32 trips per dwelling unit (F&P 2018), which was assumed for the weekday trip rate.<sup>6</sup> Accordingly, the 176 dwelling units would generate approximately 1,288 trips per day during the week. The weekend trip rates were adjusted based on default CalEEMod weekend trip rates. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs to estimate daily emissions from proposed vehicular sources. Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2022 were used to estimate emissions associated with full buildout of the project.

#### **2.4.2.3 Carbon Monoxide Hotspots**

Mobile source impacts occur on two scales of motion. Regionally, project-related travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SCAB. Locally, project generated traffic would be added to the City's roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. The potential for CO hotspots is evaluated based on the results of the TIA (F&P 2018) and the California Department of

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<sup>6</sup> The TIA used the trip rates provided in the *Institute of Transportation Engineers Trip Generation Manual, 10<sup>th</sup> Edition*, using the low-rise residential land use type.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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Transportation Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol; 1997) was followed. For projects located within an area designated as attainment or unclassified under the CAAQS or NAAQS, the CO Protocol identifies screening criteria for consideration. The first screening criteria focuses on projects that are likely to worsen air quality, which would occur if: a) the project significantly increases the percentage of vehicles operating in cold start mode (greater than 2%), b) the project significantly increases traffic volumes (greater than 5%), and/or c) the project worsens traffic flow. In addition to consideration of whether the project would worsen air quality, CO hotspots are typically evaluated when (1) the level of service (LOS) of an intersection or roadway decreases to LOS E or worse; (2) signalization and/or channelization is added to an intersection; and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment.

### **2.4.2.4 Construction Health Risk Assessment**

A HRA was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B.

For risk assessment purposes, PM<sub>10</sub> in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction health risk assessment, the CalEEMod scenario for the project was adjusted to reduce diesel truck one-way trip distances to 1,000 feet to estimate emissions from truck travel on-site and pass-by at proximate receptors.

The air dispersion modeling methodology was based on generally accepted modeling practices of the SCAQMD (SCAQMD 2018). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 18081 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.6.0. The HRA followed the Office of Environmental Health Hazard Assessment (OEHHA) 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors are further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 8.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 8**  
**AERMOD Principle Construction Parameters**

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Long Beach Airport air monitoring station (KLGB) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines
Terrain Characteristics	The elevation of the site is 160 feet (48.7 meters) above sea level.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1/3 degree (approximately 10 meters), consistent with the SCAQMD guidance (SCAQMD 2018).
Source Release Characterizations	The modeled source area was approximately 8 acres. An initial lateral dimension of 1 meter and a release height of 5 meters was assumed for off-road equipment and diesel trucks.

**Note:** See Appendix B.

Regarding receptors, the construction scenario used a 2-kilometer by 2-kilometer Cartesian receptor grid with 100-meter spacing to establish the impact area and evaluate locations of maximum health risk impact.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT, dated 17320). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations and 25 years for off-site worker receptor locations. For the construction HRA, the TAC exposure period was assumed to be 3 years for all receptor locations (i.e., the assumed duration of project construction). While construction of the project would last approximately 1.5 years, average annual construction emissions estimated over 1.5 years were conservatively assumed to occur continuously over 3 years based on the HARP2 input options. The exposure pathway for DPM is inhalation-only.

The SCAQMD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase non-cancer health risk due to long-term (chronic) exposures and some TACs increase non-cancer health risk due to short-term (acute) exposures. No short-term, acute relative

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in the HRA. Chronic exposure is evaluated in the construction HRA. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level, which is a concentration at or below which health effects are not likely to occur. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less than one (1.0) means that adverse health effects are not expected.

The construction HRA calculated Residential Maximum Individual Cancer Risk and Residential Chronic Hazard Index.

### **2.4.2.5 Cumulative Health Risk Assessment**

The project includes residential land uses in close proximity to industrial/warehouse land uses. These types of land uses emit TAC emission via heavy-duty trucks and emergency generators. A HRA was performed to evaluate potential health risk associated with the surrounding sources on the future project residential receptors. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B.

Emissions of DPM from motor vehicles on State Route (SR-) 91 have the highest potential for cancer risk due to the high-volume of heavy-duty vehicle traffic and proximity to the project site. A composite DPM emission factor was developed using EMFAC2017 in Los Angeles County for the earliest project buildout year 2022. Traffic data was attained from Caltrans 2016 Traffic Volumes on California State Highways. The annual level of VMT for the eastbound and westbound portions of SR-91 was calculated based on the segment length and traffic count volumes for 2016. At the time of this report, 2016 is the most recent traffic data available. The DPM emission factor from EMFAC2017 for each vehicle fleet representative of Los Angeles County were multiplied by the annual VMT to develop the composite annual emission rate, expressed in pounds per year.

In addition, delivery trucks and transport refrigeration units (TRUs) at loading docks or loading areas would be associated with the surrounding industrial and warehouses. Truck idling emission rates were obtained from EMFAC2014 because idling emission rates were not available from EMFAC2017. Dudek staff interviewed the warehouse manager of each warehouse and observed the frequency of truck deliveries and the duration of their visits (Dudek 2018a, Dudek 2018b). Some of the delivery trucks transport refrigerated food products and are equipped with TRUs, which generate emissions of DPM. TRU emission rates were obtained from OFFROAD2017. Delivery truck idling would be limited to 5 minutes in accordance with CARB's adopted

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Airborne Toxic Control Measure. TRUs are designed to maintain the temperature inside delivery truck trailers. Each TRU was assumed to operate for 30 minutes per visit (San Joaquin Valley Air Pollution Control District (SJVAPCD) 2007).

CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) encourages consideration of the health impacts of distribution centers that accommodates more than 100 trucks per day on sensitive receptors sited within 1,000 feet from the source in the land use decision-making process (CARB 2005). The distribution centers and commercial land uses to the north, east, and south of the project site generate emissions of DPM from truck activity. DPM emitted by idling delivery trucks and idling from TRUs at loading areas were included in the analysis. Delivery truck idling emissions were modeled in accordance with San Joaquin Valley Air Pollution Control District (SJVAPCD) modeling guidance (SJVAPCD 2007).

The air dispersion modeling methodology was based on generally accepted modeling practices of the SCAQMD (SCAQMD 2018). Air dispersion modeling was performed using AERMOD Version 18081 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.6.0. The HRA followed OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at on-site residential receptors. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 9.

**Table 9  
AERMOD Principle Cumulative Parameters**

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Long Beach Airport air monitoring station (KLGB) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines
Terrain Characteristics	The elevation of the site is 160 feet (48.7 meters) above sea level.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey’s National Elevation Dataset format with a resolution of 1/3 degree (approximately 10 meters), consistent with the SCAQMD guidance (SCAQMD 2018).
Source Release Characterizations	SR-91 was modeled as a line of separated volume sources for each direction of the freeway. Width at 48 feet plus 10 feet to account for wake of moving vehicles. Release height was modeled at 5 meters. The truck idling emissions was modeled as a stationary source with 12.6 feet exhaust height and 0.1 meter exhaust diameter (SJVAPCD 2007). TRU idling emissions was modeled as a stationary source with 13 feet exhaust height and 0.04 meter exhaust diameter (SJVAPCD 2007).

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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Note: See Appendix B.

Regarding receptors, a Cartesian receptor grid was placed over the project area with 20-meter spacing to establish the impact area and evaluate locations of maximum health risk impact.

The health risk calculations were performed using HARP2 ADMRT. AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations. The exposure pathway for DPM is inhalation-only.

The SCAQMD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase non-cancer health risk due to long-term (chronic) exposures and some TACs increase non-cancer health risk due to short-term (acute) exposures. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in the HRA. Chronic exposure is evaluated in the construction HRA. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level, which is a concentration at or below which health effects are not likely to occur. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less than one (1.0) means that adverse health effects are not expected.

The operational HRA for cumulative sources of TACs calculated Residential Maximum Individual Cancer Risk and Residential Chronic Hazard Index at the proposed project.

## 2.5 Impact Analysis

### 2.5.1 *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

As previously discussed, the project site is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the AQMP, currently the 2016 AQMP, in Chapter 12, Sections 12.2 and

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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12.3, in the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

### **Consistency Criterion No. 1**

Section 2.5.2 evaluates the project's potential impacts in regards to CEQA Guidelines Appendix G Threshold 2 (the project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation impact analysis). As discussed in Section 2.5.2, the project would not result in a significant and unavoidable impact associated with the violation of an air quality standard. Because the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, the project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

### **Consistency Criterion No. 2**

While striving to achieve the NAAQS for O<sub>3</sub> and PM<sub>2.5</sub> and the CAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the SCAG for its RTP/SCS (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).<sup>7</sup> The SCAG 2016 RTP/SCS,

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<sup>7</sup> Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, the California Department of Transportation (Caltrans), and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socio-economic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans. As discussed in Section 1.2, Regional and Local Setting, the project is part of the Dominguez Hills Specific Plan and is comprised of three planning areas currently zoned for Tank Farm and Oil Production, Neighborhood Serving Retail Center and Industrial Development, and Manufacturing and Distribution. The project is proposing to revise the land use designations from the existing commercial and industrial zoning to Multifamily zoning similar to Housing Type D as defined in the Dominguez Hills Specific Plan.

The SCAG 2016 RTP/SCS provides population and household estimates for the years 2012 and 2040. To provide an interim year comparison, this analysis interpolates the City’s projected population and households in the project’s operational year (2022) based on the average growth rate to compare with the estimated increase in population and households generated by the project. The SCAG 2016 RTP/SCS estimates that the City’s population will increase approximately 17.28% between 2012 and 2040, or approximately 0.62% annually. Regarding households, SCAG 2016 RTP/SCS estimates that the City’s total households will increase approximately 21.74% between 2012 and 2040, or approximately 0.78% annually.

The SCAG 2016 RTP/SCS forecasted values for 2012 and 2040 along with the interpolated 2022 values for the City’s population and households is presented in Table 10.

**Table 10**  
**SCAG 2016 RTP/SCS Regional Growth Forecast**

Year	Population Estimate	Household Estimate
2012	92,000	25,300
2022	97,679 <sup>a</sup>	27,264 <sup>b</sup>
2040	107,900	30,800

Source: SCAG 2016.

**Note:**

<sup>a</sup> The population estimate for 2022 was interpolated based on the population forecast values for 2012 and 2040 provided in the SCAG 2016 RTP/SCS.

<sup>b</sup> The household estimate for 2022 was interpolated based on the household forecast values for 2012 and 2040 provided in the SCAG 2016 RTP/SCS.

Pursuant to the household estimates provided in the SCAG 2016 RTP/SCS, the average household size in the City in the year 2022 is 3.58 persons per household (SCAG 2016).<sup>8</sup>

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emissions inventory. SCAG incorporates these data into their Travel Demand Model for estimating/projecting vehicle miles traveled (VMT) and driving speeds. SCAG’s socio-economic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

<sup>8</sup> Based on the SCAG 2016 RTP/SCS population and household estimates, the persons per household in 2012 would be 3.64 (92,000 persons ÷ 25,300 households), the persons per household in 2022 would be 3.58 (97,679

# **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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Based on this assumption, the proposed 176 multifamily residential units would generate 631 persons when it is built out in 2022. The addition of 631 persons to the 2012 population estimate of 92,000 persons would not exceed the SCAG 2016 RTP/SCS 2022 interpolated population estimate of 97,679 persons. Because the addition of project-generated residents to the City's estimated population would not exceed the SCAG 2016 RTP/SCS forecasted population, implementation of the project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan (i.e., SCAQMD 2016 AQMP). Accordingly, the project would meet Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook.

Therefore, implementation of the project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan (i.e., the 2016 AQMP). Accordingly, the project would meet Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook.

## **Summary**

As described previously, the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, and would not conflict with Consistency Criterion No. 1. Implementation of the project would not exceed the demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, the project would also be consistent with the SCAQMD 2016 AQMP, which based future emission estimates on the SCAG 2016 RTP/SCS. Thus, the project would not conflict with Consistency Criterion No. 2. Based on these considerations, impacts related to the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

## **Mitigation Measures**

None required.

## **Level of Significance After Mitigation**

Impacts would be less than significant without mitigation.

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persons ÷ 27,264 households), and the persons per household in 2040 would be 3.50 (107,900 persons ÷ 30,800 households).

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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### **2.5.2 *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

#### **Construction Emissions**

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 2.4.2.1, Construction, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2019 through 2020). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the project applicant and is intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available.

Implementation of the project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM<sub>10</sub> and PM<sub>2.5</sub> emissions. The project would implement various dust control strategies and would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Proposed construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites and unpaved roads three times per day depending on weather conditions and restricting vehicle speed on unpaved roads to 15 miles per hour. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Table 11 presents the estimated maximum daily construction emissions generated during construction of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

**Table 11**  
**Estimated Maximum Daily Construction Criteria Air Pollutant Emissions**

Year	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	<i>pounds per day</i>					
2019	6.00	9393.69	42.82	0.16	9.64	6.13
2020	41.66	22.59	24.04	0.05	2.96	1.56
<b>Maximum Daily Emissions</b>	<b>41.66</b>	<b>93.69</b>	<b>42.82</b>	<b>0.16</b>	<b>9.64</b>	<b>6.13</b>
<i>SCAQMD Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Notes:** VOC = volatile organic compound; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

See Appendix A for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod “mitigated” output, which accounts for compliance with SCAQMD Rule 1113 (Architectural Coatings) and implementation of the project’s fugitive dust control strategies, including watering of the project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour.

Maximum daily emissions of NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions would occur during the grading phase in 2019 as a result of off-road equipment operation and on-road vendor trucks and haul trucks. The overlap of the building construction phase and the architectural coatings phases in 2020 would produce the maximum daily VOC emissions. As shown in Table 11, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts would be less than significant.

### Operational Emissions

The project involves development of 176 multifamily residential units and associated parking spaces. Operation of the project would generate VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from mobile sources, including vehicle trips from future residents; area sources, including the use of consumer products, architectural coatings for repainting, and landscape maintenance equipment; and energy sources, including combustion of fuels used for space and water heating and cooking appliances. As discussed in Section 2.4.2.2, Operation, pollutant emissions associated with long-term operations were quantified using CalEEMod. Project-generated mobile source emissions were estimated in CalEEMod based on project-specific trip rates. CalEEMod default values were used to estimate emissions from the project area and energy sources.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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Table 12 presents the maximum daily area, energy, and mobile source emissions associated with operation (year 2022) of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

**Table 12**  
**Estimated Maximum Daily Operational Criteria Air Pollutant Emissions**

Emission Source	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	<i>pounds per day</i>					
Area	3.22	0.17	14.55	<0.01	0.08	0.08
Energy	0.09	0.81	0.35	<0.01	0.07	0.07
Mobile	2.32	11.40	31.64	0.12	9.45	2.59
<b>Total</b>	<b>5.64</b>	<b>12.38</b>	<b>46.54</b>	<b>0.12</b>	<b>9.60</b>	<b>2.74</b>
SCAQMD Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Notes:** VOC = volatile organic compound; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

See Appendix A for complete results.

Totals may not sum due to rounding.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod “mitigated” output and operational year 2022.

As shown in Table 12, the combined daily area, energy, and mobile source emissions would not exceed the SCAQMD operational thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Impacts associated with project-generated operational criteria air pollutant emissions would be less than significant.

### Mitigation Measures

None required.

### Level of Significance After Mitigation

Impacts would be less than significant without mitigation.

**2.5.3** *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

In considering cumulative impacts from the project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SCAB is designated as nonattainment for the CAAQS and NAAQS. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. The basis for analyzing the project's cumulatively considerable contribution is if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact) and consistency with the SCAQMD 2016 AQMP, which addresses the cumulative emissions in the SCAB.

As discussed in Section 2.3.1, South Coast Air Basin Attainment Designation, the SCAB has been designated as a federal nonattainment area for O<sub>3</sub> and PM<sub>2.5</sub> and a state nonattainment area for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operation of the project would generate VOC and NO<sub>x</sub> emissions (which are precursors to O<sub>3</sub>) and emissions of PM<sub>10</sub> and PM<sub>2.5</sub>. However, as indicated in Tables 11 and 12, project-generated construction and operational emissions, respectively, would not exceed the SCAQMD emission-based significance thresholds for VOC, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. As discussed in the analysis of the project's potential to conflict with or obstruct implementation of the applicable air quality plan (Section 2.5.1), the project would not conflict with the SCAQMD 2016 AQMP.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative.<sup>9</sup> However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed SCAQMD thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM<sub>10</sub> and PM<sub>2.5</sub> emissions would be

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<sup>9</sup> The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This discussion is nonetheless provided in an effort to show good-faith analysis and comply with CEQA's information disclosure requirements.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD.

Based on the previous considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Impacts would be less than significant.

### **Mitigation Measures**

None required.

### **Level of Significance After Mitigation**

Impacts would be less than significant without mitigation.

#### ***2.5.4 Would the project expose sensitive receptors to substantial pollutant concentrations?***

### **Localized Significance Thresholds Analysis**

As discussed in Section 2.1.3, Sensitive Receptors, sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Residential land uses are located to the west of the project. The closest off-site sensitive receptors to the project site include residences located approximately 150 feet west of the project site boundary.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the project. As indicated in the discussion of the thresholds of significance (Section 2.4), the SCAQMD also recommends the evaluation of localized NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (2009). According to the *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2009). Hauling of soils and construction materials associated with the project construction are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Emissions from the trucks would be relatively brief in nature and would cease once the trucks pass through the main streets.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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Construction activities associated with the project would result in temporary sources of on-site fugitive dust and construction equipment emissions. Off-site emissions from vendor trucks, haul trucks, and worker vehicle trips are not included in the LST analysis. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 4 are presented in Table 13 and compared to the maximum daily on-site construction emissions generated during the project.

**Table 13**  
**Localized Significance Thresholds Analysis for Project Construction**

Maximum Onsite Emissions	NO <sub>2</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
	<i>Pounds per Day</i>			
Construction Emissions	93.69	42.82	9.64	6.13
<i>SCAQMD LST</i>	<i>118</i>	<i>1,982</i>	<i>42</i>	<i>10</i>
<b>LST Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Source:** SCAQMD 2009.

**Notes:**

NO<sub>2</sub> = nitrogen dioxide; CO = carbon monoxide; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

See Appendix A for complete results.

Localized significance thresholds are shown for 5-acre project sites corresponding to a distance to a sensitive receptor of 50 meters.

These estimates implementation of the project's fugitive dust control strategies, including watering of the project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour.

Greatest on-site NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions are associated with the overlap between the grading phase and building construction phase 2019.

As shown in Table 13, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific construction impacts during construction of the project would be less than significant. In addition, diesel equipment would also be subject to the CARB air toxic control measures for in-use off-road diesel fleets, which would minimize DPM emissions.

### Dust Exposure

The project would include various dust control strategies to minimize fugitive dust during earth moving activities. The proposed dust control strategies are presented in Section 1.4, Dust Control Strategies. In addition, the project would be required to comply with SCAQMD Rule 403 (Fugitive Dust), which requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

As explained under the LST analysis, onsite PM<sub>10</sub> and PM<sub>2.5</sub> emissions, including fugitive dust and exhaust particulate matter, would not exceed the SCAQMD's LSTs for SRA 4. LSTs



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptors, which take into account ambient concentrations in each SRA, the area of project disturbance, and the distance to the nearest sensitive receptor (SCAQMD 2014). The SCAQMD developed the LSTs in response to environmental justice concerns raised by the public regarding exposure of individuals to criteria air pollutants in local communities (SCAQMD 2014). Accordingly, LSTs were design to provide assistance and guidance for other public agencies to determine whether emissions from projects could generate significant adverse localized air quality impacts (SCAQMD 2014). Because the project would not generate onsite emissions of fugitive dust (as included in the estimated onsite PM<sub>10</sub> and PM<sub>2.5</sub> emissions along with exhaust particulate matter) that would exceed the SCAQMD LSTs, estimated project-generated fugitive dust would result in a less than significant localized impact at sensitive receptors near the project site.

### Health Impacts of Carbon Monoxide

As explained in Section 2.4.2.3, Carbon Monoxide Hotspots, to verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted based on the TIA (F&P 2018) results and the California Department of Transportation Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol; 1997).

The TIA evaluated whether there would be a decrease in the LOS (e.g., congestion) at the six intersections affected by the project, based on existing traffic volumes and current street geometry. With the addition of project-generated traffic, the study intersections were calculated to continue to operate acceptably at LOS C or better during AM and PM peak hours. Therefore, the project would not exceed SCAQMD's screening threshold and would not result in a CO hotspot. The impact would be **less than significant**.

### Health Impacts of Toxic Air Contaminants

#### *Construction Health Risk*

As discussed in Section 2.4.2.4, an HRA was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for existing residential receptors as a result of project construction. Results of the construction HRA are presented in Table 14.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 14**  
**Construction Health Risk Assessment Results - Unmitigated**

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk—Residential	Per Million	13.79	10	<b>Potentially Significant</b>
Chronic Hazard Index—Residential	Index Value	0.011	1.0	Less than Significant

**Source:** SCAQMD 2015.

**Note:** See Appendix B.

As shown in Table 14, project construction activities would result in a Residential Maximum Individual Cancer Risk of 13.79 in 1 million, which exceeds the significance threshold of 10 in 1 million. Project construction would also result in a Residential Chronic Hazard Index of 0.011, which is well below the 1.0 significance threshold. The project construction TAC health risk impact would be **potentially significant**.

### *Cumulative Health Risk*

The project includes residential land uses in close proximity to industrial/warehouse land uses. The CARB Air Quality and Land Use Handbook: A Community Health Perspective (2005) recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center that accommodates more than 100 trucks per day. As discussed in Section 2.4.2.5, an HRA was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for proposed future residential receptors as a result of TAC-emitting sources surrounding the project site. Results of the cumulative HRA are presented in Table 15.

**Table 15**  
**Cumulative Health Risk Assessment Results - Unmitigated**

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk—Residential	Per Million	29.50	10	<b>Potentially Significant</b>
Chronic Hazard Index—Residential	Index Value	0.007	1.0	Less than Significant

**Source:** SCAQMD 2015.

**Note:** See Appendix B.

As shown in Table 15, TAC-emitting surrounding sources on project future sensitive (residential) receptors would result in a Residential Maximum Individual Cancer Risk of 29.50 in 1 million, which exceeds the significance threshold of 10 in 1 million. Project construction would also result in a Residential Chronic Hazard Index of 0.07, which is well below the 1.0 significance threshold. The cumulative TAC health risk impact would be **potentially significant**.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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### Health Impacts of Other Criteria Air Pollutants

Construction and operation of the project would result in emissions that would not exceed the SCAQMD thresholds for any criteria air pollutants including VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. VOCs would be associated with motor vehicles, construction equipment, and architectural coatings; however, project-generated VOC emissions would not result in the exceedances of the SCAQMD thresholds as shown in Table 8. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SCAQMD Rule 1113 restricts the VOC content of coatings for both construction and operational applications.

VOCs and NO<sub>x</sub> are precursors to O<sub>3</sub>, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. The contribution of VOCs and NO<sub>x</sub> to regional ambient O<sub>3</sub> concentrations is the result of complex photochemistry. The increases in O<sub>3</sub> concentrations in the SCAB due to O<sub>3</sub> precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O<sub>3</sub> concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O<sub>3</sub> AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O<sub>3</sub> precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO<sub>x</sub> emissions associated with project construction and operation could minimally contribute to regional O<sub>3</sub> concentrations and the associated health impacts. Because of the minimal contribution during construction and operation, health impacts would be considered less than significant.

Construction and operation of the project would also not exceed thresholds for PM<sub>10</sub> or PM<sub>2.5</sub> and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the SCAB from coming into attainment for these pollutants. Additionally, the project would implement dust control strategies and be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered less than significant.

Construction and operation of the project would not contribute to exceedances of the NAAQS and CAAQS for NO<sub>2</sub>. Health impacts that result from NO<sub>2</sub> and NO<sub>x</sub> include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO<sub>2</sub> concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of the

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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project would not require use of any stationary sources (e.g., diesel generators, boilers) that would create substantial, localized NO<sub>x</sub> impacts. Therefore, potential health impacts associated with NO<sub>2</sub> and NO<sub>x</sub> would be considered less than significant.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed previously and are determined to be a less-than-significant impact. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant. In summary, construction and operation of the project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants and potential health impacts associated with criteria air pollutants would be less than significant.

### **Mitigation Measures**

In order to reduce project construction TAC emissions, the following mitigation measure (MM) would be implemented:

**MM-AQ-1:** To reduce the potential for health risks as a result of construction of the project, the applicant shall:

- A. Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with CARB certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City that Tier 4 Interim equipment is not available.
- B. All other diesel-powered construction equipment will be classified as Tier 3 or higher, at a minimum, except where the project applicant establishes to the satisfaction of the City that Tier 3 equipment is not available.

In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate (from Tier 4 Interim to Tier 4 Final). Engine Tier requirements in accordance with this measure shall be incorporated on all construction plans.

The following mitigation measures would reduce significant impacts associated with cancer risk levels below the SCAQMD thresholds:

**MM-AQ-2** The applicant or its successor shall install high-efficiency return air filters on all heating, ventilation, and air conditioning (HVAC) systems serving any residential unit located at the project site. The air filtration system shall reduce at least 80% of particulate matter emissions, such as can be achieved with a Minimum Efficiency

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Reporting Value 13 (MERV 13) air filtration system installed on return vents in residential units. The Homeowners Association (HOA) property management for these multifamily residential receptors shall maintain the air filtration system on any HVAC system installed for the specified residential units in accordance with the manufacturer’s recommendations for the 30-year life of the project.

### Level of Significance After Mitigation

As shown in Table 14, the HRA results from the unmitigated scenario show cancer risks exceeding the 10 in 1 million threshold and thus a potentially significant impact at the maximally exposed individual existing residential receptors. These potentially significant health risk impacts triggered the requirement of MM-AQ-1 in order to reduce project construction-generated DPM emissions to the extent feasible. The HRA results after incorporation of MM-AQ-1 are presented in Table 16.

**Table 16  
Construction Health Risk Assessment Results - Mitigated**

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk—Residential	Per Million	1.49	10	Less than Significant
Chronic Hazard Index—Residential	Index Value	0.001	1.0	Less than Significant

**Source:** SCAQMD 2015.

**Note:** See Appendix B.

Implementing mitigation measure MM-AQ-2 would reduce the maximum cancer risks at the project future sensitive (residential) receptors as shown in Table 17.

**Table 17  
Cumulative Health Risk Assessment Results - Mitigated**

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk—Residential	Per Million	9.00	10	Less than Significant
Chronic Hazard Index—Residential	Index Value	0.002	1.0	Less than Significant

**Source:** SCAQMD 2015.

**Note:** See Appendix B.

Additionally, although traffic volumes are forecast to increase with time due to growth, vehicular emission factors are expected to decrease with time due to California’s statewide regulation to increase fuel efficiency (AB 1493, the Pavley I standard) and other State and federal regulations aimed at vehicles emissions reduction. Impacts would be **less than significant** with mitigation.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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### **2.5.5 *Would the project create objectionable odors affecting a substantial number of people?***

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The project entails operation of a residential development and would not result in the creation of a land use that is commonly associated with odors. Therefore, project operations would result in an odor impact that is less than significant.

#### **Mitigation Measures**

None required.

#### **Level of Significance After Mitigation**

Impacts would be less than significant without mitigation.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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### 3 GREENHOUSE GAS EMISSIONS

#### 3.1 Environmental Setting

##### 3.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (Intergovernmental Panel on Climate Change (IPCC) 2013; EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 3.3.2, Potential Effects of Climate Change.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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### 3.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code section 38505(g) for purposes of administering many of the State's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>). (See also CEQA Guidelines section 15364.5.)<sup>10</sup> Some GHGs, such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as HFCs, PFCs, and SF<sub>6</sub>, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.<sup>11</sup>

**Carbon Dioxide.** CO<sub>2</sub> is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO<sub>2</sub> include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic outgassing; and decomposition of dead organic matter. Human activities that generate CO<sub>2</sub> are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

**Methane.** CH<sub>4</sub> is produced through both natural and human activities. CH<sub>4</sub> is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

**Nitrous Oxide.** N<sub>2</sub>O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N<sub>2</sub>O. Sources of N<sub>2</sub>O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N<sub>2</sub>O as a propellant (such as in rockets, racecars, and aerosol sprays).

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<sup>10</sup> Climate forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code 38505 as impacts associated with other climate forcing substances are not evaluated herein.

<sup>11</sup> The descriptions of GHGs are summarized from the IPCC Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's "Glossary of Terms Used in GHG Inventories" (2015a), and EPA's "Glossary of Climate Change Terms" (2016e).



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Fluorinated Gases.** Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF<sub>6</sub> is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF<sub>6</sub> is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF<sub>3</sub> is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

### 3.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016g). IPCC developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO<sub>2</sub>; therefore, GWP-weighted emissions are measured in metric tons of CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e).

The current version of CalEEMod (Version 2016.3.2) assumes that the GWP for CH<sub>4</sub> is 25 (so emissions of 1 MT of CH<sub>4</sub> are equivalent to emissions of 25 MT of CO<sub>2</sub>), and the GWP for N<sub>2</sub>O

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

---

is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the project.

### 3.2 Regulatory Setting

#### 3.2.1 Federal Regulations

**Massachusetts v. EPA.** In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>—in the atmosphere threaten the public health and welfare of current and future generations. This is the “endangerment finding.”
- The Administrator further found the combined emissions of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

**Energy Independence and Security Act of 2007.** The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and directs National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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**Federal Vehicle Standards.** In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO<sub>2</sub> in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018 (76 FR 57106–57513). The standards for CO<sub>2</sub> emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

### **3.2.2 State Regulations**

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

### **State Climate Change Targets**

The state has taken a number of actions to address climate change. These include executive orders, legislation, and CARB plans and requirements. These are summarized below.

**EO S-3-05.** EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010 (California Climate Action Team (CAT) 2016).

**AB 32.** In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

**SB 32 and AB 197.** Senate Bill (SB) 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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**CARB's 2007 Statewide Limit.** In 2007, in accordance with California Health and Safety Code, Section 38550, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO<sub>2</sub>e).

**CARB's Climate Change Scoping Plan.** One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The *Climate Change Scoping Plan: A Framework for Change (Scoping Plan)* included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS 17 Cal. Code Regs., Section 95480 et seq.)
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15% from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework (First Update)* defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EOs S-3-05 and B-16-2012. The *First Update* concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The *First Update* recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including: energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies. As part of the *First Update*, CARB recalculated the state's 1990 emissions level, using more recent global warming potentials identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO<sub>2</sub>e to 431 MMT CO<sub>2</sub>e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05. The Governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In January 2017, CARB released the *2017 Climate Change Scoping Plan Update (2030 Scoping Plan)* for public review and comment (CARB 2017b). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' "known commitments" include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

For local governments, the 2030 Scoping Plan replaced the initial Scoping Plan's 15% reduction goal with a recommendation to aim for a community-wide goal of no more than 6 MT CO<sub>2</sub>e per capita by 2030 and no more than 2 MT CO<sub>2</sub>e per capita by 2050, which are consistent with the state's long-term goals. These goals are also consistent with the Under 2 MOU (Under 2 2016)

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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and the Paris Agreement (United Nation Framework Convention on Climate Change (UNFCCC) 2016), which are developed around the scientifically based levels necessary to limit global warming below 2 degrees Celsius (°C). The 2030 Scoping Plan recognized the benefits of local government GHG planning (e.g., through climate action plans (CAPs)) and provide more information regarding tools CARB is working on to support those efforts. It also recognizes the CEQA streamlining provisions for project level review where there is a legally adequate CAP.<sup>12</sup> The Second Update was approved by CARB’s Governing Board on December 14, 2017.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32 and the EOs and establishes an overall framework for the measures that will be adopted to reduce California’s GHG emissions. A project is considered consistent with the statutes and EOs if it meets the general policies in reducing GHG emissions in order to facilitate the achievement of the state’s goals and does not impede attainment of those goals. As discussed in several cases, a given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent, if it will further the objectives and not obstruct their attainment.

**CARB’s Regulations for the Mandatory Reporting of Greenhouse Gas Emissions.** CARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (Title 40, Code of Federal Regulations (CFR), Part 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009, July 12, 2010, September 22, 2010, October 28, 2010, November 30, 2010, December 17, 2010, and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit over 10,000 MT CO<sub>2</sub>e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO<sub>2</sub>e per year threshold are required to have their GHG emission report verified by a CARB-accredited third-party verified.

**EO B-18-12.** EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the governor’s executive authority to take action to reduce entity-wide GHG emissions by at least

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<sup>12</sup> *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490; *San Francisco Tomorrow et al. v. City and County of San Francisco* (2015) 229 Cal.App.4th 498; *San Franciscans Upholding the Downtown Specific Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656; *Sequoiah Hills Homeowners Assn. V. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

**EO B-30-15.** EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Scoping Plan to express the 2030 target in terms of MMT CO<sub>2</sub>e. The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

**SB 605 and SB 1383.** SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs) in the state; and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its *Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy)* in March 2017. The *SLCP Reduction Strategy* establishes a framework for the statewide reduction of emissions of black carbon, methane and fluorinated gases

### Building Energy

**Title 24, Part 6.** Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). As a result, these standards save energy, increase



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2016 Title 24 building energy efficiency standards, which became effective January 1, 2017. The updated standards will further reduce energy used and associated GHG emissions compared to previous standards, such as the 2013 Title 24 standards. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a, CEC 2015b).

**Title 24, Part 11.** In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- 65% of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 80% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) performance for new construction in California. The key policy timelines include: (1) all new residential construction in California will be ZNE starting in 2020, and (2) all new commercial construction in California will be ZNE starting in 2030.<sup>13</sup>

**Title 20.** Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

**SB 1.** SB 1 (Murray) (August 2006) established a \$3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption, and placing

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<sup>13</sup> See, e.g., CPUC, California's Zero Net Energy Policies and Initiatives, Sept. 18, 2013, accessed at <http://annualmeeting.naseo.org/Data/Sites/2/presentations/Fogel-Getting-to-ZNE-CA-Experience.pdf>. It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed “Go Solar California,” was previously titled “Million Solar Roofs.”

**California AB 1470 (Solar Water Heating).** This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

### **Renewable Energy and Energy Procurement**

**SB 1078.** SB 1078 (Sher) (September 2002) established the Renewables Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and S-21-09).

**SB 1368.** SB 1368 (September 2006), required the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC).

**AB 1109.** Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

**EO S-14-08.** EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. The California Natural Resources Agency (CNRA), through collaboration with CEC and the California Department of Fish and Wildlife (formerly the California Department of Fish and Game), was directed to lead this effort.

**EO S-21-09 and SBX1-2.** EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with CPUC and CEC to ensure that the regulation builds upon the RPS program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, statutes of 2011) signed by Governor Brown in April 2011.

SB X1 2 expanded RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

SB X1-2 applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet the renewable energy goals listed above.

**SB 350.** SB 350 (October 2015) further expanded the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

### **Mobile Sources**

**AB 1493.** AB 1493 (Pavley) (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO<sub>2</sub> emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

---

**Heavy Duty Diesel.** CARB adopted the final Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014 to reduce PM and NO<sub>x</sub> emissions from heavy-duty diesel vehicles. The rule requires PM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

**EO S-1-07.** EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining LCFS for GHG emissions measured in CO<sub>2e</sub> grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered.

**SB 375.** SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB. If a MPO is unable to devise an SCS to achieve the GHG reduction target, the MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code, Section 65080(b)(2)(K), a SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for SCAG are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2013). In June 2012, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012 RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and an 18% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets

**Advanced Clean Cars Program and Zero-Emissions Vehicle Program.** The Advanced Clean Cars program (January 2012) is a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero emission vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

**EO B-16-12.** EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It ordered CARB, CEC, CPUC, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

**AB 1236.** AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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charging stations is a matter of statewide concern. The bill required electric vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations, as specified. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt this ordinance by September 30, 2017.

### **Water**

**EO B-29-15.** In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

### **Solid Waste**

**AB 939 and AB 341.** In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (Chapter 476, Statutes of 2011 (Chesbro)) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations and an evaluation of program effectiveness (CalRecycle 2012).

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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### Other State Actions

**Senate Bill 97.** SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4(a)). The Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)). The Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a Lead Agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).



# **Air Quality and Greenhouse Gas Emissions Analysis**

## **Technical Report for the Victoria Greens Project**

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**EO S-13-08.** EO S-13-08 (November 2008) is intended to hasten California’s response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state’s vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

**2015 State of the State Address.** In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals, which would further reduce GHG emissions over the next 15 years. These goals include an increase in California’s renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

**2016 State of the State Address.** In his January 2016 address, Governor Brown established a statewide goal to bring per capita GHG emission down to two tons per person, which reflects the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 MOU) to limit global warming to less than 2°C by 2050. The Under 2 MOU agreement pursues emission reductions of 80% to 95% below 1990 levels by 2050 and/or reaching a per capita annual emissions goal of less than 2 metric tons by 2050. A total of 135 jurisdictions representing 32 countries and 6 continents, including California, have signed or endorsed the Under 2 MOU (Under 2 2016).

### **3.2.3 Local Regulations**

#### **3.2.3.1 South Coast Air Quality Management District**

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). As discussed in Section 3.4.1.3, Proposed South Coast Air Quality Management District Thresholds,

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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SCAQMD has recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects; however, these thresholds were not adopted. See Section 2.2.3.1, South Coast Air Quality Management District, for additional discussion on the SCAQMD.

### **3.2.3.2 Southern California Association of Governments**

SB 375 requires metropolitan planning organizations to prepare an SCS in their RTP. The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012 (SCAG 2012), and the 2016–2040 RTP/SCS (2016 RTP/SCS) was adopted in April 2016. Both the 2012 and 2016 RTP/SCSs establish a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). Specifically, the 2012 RTP/SCS links the goals of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging all residents affected by socioeconomic, geographic, and commercial limitations to be provided with fair access. The 2012 and 2016 RTP/SCSs do not require that local general plans, specific plans, or zoning be consistent with it but provide incentives for consistency for governments and developers. Because the current SCAQMD AQMP (2012 AQMP) is based on the SCAG 2012 RTP/SCS demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2012–2035 RTP/SCS, the SCAG 2012 RTP/SCS is discussed in Section 3.4. See Section 2.2.3.2, Southern California Association of Governments, for an additional discussion of the SCAG.

### **3.2.3.3 South Bay Cities Council of Governments**

The South Bay Cities Council of Governments (SBCCOG) is a joint powers authority of 16 cities and the County of Los Angeles that share the goal of maximizing the quality of life and productivity of the South Bay area. The SBCCOG has been working on climate action planning since 2008, employing a subregional approach to the management and coordination of climate action planning to assist its cities in complying with legislation such as AB 32 and SB 375. The SBCCOG completed the South Bay Sustainable Strategy to address land use and mobility in an area that is transit poor. While the SBCCOG does not intend to produce an SCS, it hopes to use its South Bay Sustainable Strategy as a guide to develop a scenario-planning model that will allow the SBCCOG to independently plan and evaluate its member cities' development scenarios. This approach will supplement the regional SCS with a concrete tool to demonstrate a strategy that best fits the conditions in the South Bay to SCAG, the Los Angeles County Metropolitan Transportation Authority, and the South Bay cities' planning staffs.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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### **3.2.3.4 City of Carson**

The City's General Plan (2004) does not include goals or policies to reduce GHG emissions within the City; however, many air quality strategies result in co-benefits with reducing GHG emissions. The primary avenues to address climate change in urban areas are by lowering transportation emissions and encouraging energy conservation and efficiency. In addition, cities should address the urban heat island effect resulting from land use patterns, and encourage recycling, which reduces the amount of trash sent to landfills, thereby lowering methane emissions. Recycling also reduces the amount of energy needed to produce products. The City is currently in the process of updating the General Plan, and the General Plan Update and the accompanying EIR are anticipated to be adopted in late 2019.

The air quality strategies that result in co-benefits with reducing GHG emissions are presented below (City of Carson 2004).

**Goal AQ-2:** Air quality which meets state and federal standards.

- **Policy AQ-2.1:** Coordinate with other agencies in the region, particularly SCAQMD and SCAG, to implement provision of the regions' AQMP, as amended.
- **Policy AQ-12.2:** Utilize incentives, regulations, and implement TDM requirements in cooperation with other jurisdiction to eliminate vehicle trips which would otherwise be made and to reduce vehicle miles traveled for automobile trips which still need to be made.
- **Policy AQ-2.3:** Cooperate and participate in regional air quality management plans, programs, and enforcement measures.
- **Policy AQ-2.4:** Continue to work to relieve congestion on major arterials and thereby reduce emissions.
- **Policy AQ-2.5:** Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalks and bicycle trail improvements and parkways for new developments.

**Goal AQ-3:** Increased use of alternate fuel vehicles.

- **Policy AQ-3.1:** Continue to promote the use of alternative clean fueled vehicles for personal and business use. To this end, consider the use of electric, fuel cell, or other non-polluting fuels for Carson Circuit buses and other City vehicles.
- **Policy AQ-3.2:** Continue to promote ridership on the Carson Circuit and Los Angeles County MTA bus and metro rail lines.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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**Goal AQ-4:** Increased community awareness and participation in efforts to reduce air pollution and enhance air quality.

- **Policy AQ-4.1:** Work with the City’s Public Information Office to increase public awareness regarding air quality, implementation issues, reporting, and enforcement.
- **Policy AQ-4.2:** Promote and encourage ridesharing activities within the community, including such programs as preferential parking, park-and-ride lots, alternative work week/flexible working hours and telecommuting, as well as other trip reduction strategies.

**Goal TI-2:** Provide a sustainable, safe, convenient, and cost-effective circulation system to serve the present and future transportation needs of the Carson community.

- **Policy TI-2.7:** Provide all residential, commercial, and industrial areas with efficient and safe access to major regional transportation facilities.
- **Policy TI-2.8:** Provide traffic calming, landscape, and pedestrian improvements in non-truck route streets and other streets as appropriate.

**Goal TI-5:** Use TDM measures throughout the City, where appropriate, to discourage single-occupant vehicles, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.

- **Policy TI-5.1:** Ensure that TDM policies are considered during the evaluation of new developments within the City, including but not limited to: ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

**Goal OSC-3:** Conservation of scarce energy resources.

- **Policy OSC-3.1:** Promote incentives for the use of site planning, techniques, building orientation, building materials, and other measures which reduce energy consumption.
- **Policy OSC-3.2:** Support the development of alternative sources of energy such as roof-mounted solar panels, fuel cells or new technology.
- **Policy OSC-3.4:** Support energy conservation via alternative forms of transportation.

**Goal OSC-4: Minimize solid waste generated within Carson.**

- **Policy OSC-4.1:** Reduce the generation of solid waste from sources in the City in accordance with the Source Reduction and Recycling Element for Carson and state regulations.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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- **Policy OSC-4.2:** Develop a public education program to address waste management and proper household waste sorting and handling.
- **Policy OSC-4.3:** Facilitate physical collection of recyclable waste.

### 3.3 Greenhouse Gas Inventories and Climate Change Conditions

#### 3.3.1 Sources of Greenhouse Gas Emissions

Per the EPA’s *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2016* (2018), total United States GHG emissions were approximately 6,511.3 MMT CO<sub>2</sub>e in 2016. The primary GHG emitted by human activities in the United States was CO<sub>2</sub>, which represented approximately 81.6% of total GHG emissions (5,310.9 MMT CO<sub>2</sub>e). The largest source of CO<sub>2</sub>, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.5% of CO<sub>2</sub> emissions in 2016 (4,966.0 MMT CO<sub>2</sub>e). Relative to 1990, gross United States GHG emissions in 2016 are higher by 2.4%; down from a high of 15.7% above 1990 levels in 2007. GHG emissions decreased from 2015 to 2016 by 1.9% (126.8 MMT CO<sub>2</sub>e) and overall, net emissions in 2016 were 11.1% below 2005 levels (EPA 2018).

According to California’s 2000–2017 GHG emissions inventory (2018 edition), California emitted 429.4 MMT CO<sub>2</sub>e in 2016, including emissions resulting from out-of-state electrical generation (CARB 2018). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high global-warming potential substances, and recycling and waste. The California GHG emission source categories (as defined in CARB’s 2008 Scoping Plan) and their relative contributions in 2016 are presented in Table 18.

**Table 18**  
**GHG Emissions Sources in California**

Source Category	Annual GHG Emissions (MMT CO <sub>2</sub> e)	Percent of Total <sup>a</sup>
Transportation	169.38	41%
Industrial	89.61	23%
Electric power <sup>b</sup>	68.58	16%
Commercial and residential	39.36	12%
Agriculture	33.84	8%
High global-warming potential substances	19.78	4%
Recycling and waste	8.81	2%
<b>Total</b>	<b>429.4</b>	<b>100%</b>

**Source:** CARB 2018.

**Notes:** Emissions reflect the 2016 California GHG inventory.

% = percent; GHG = greenhouse gas; MMT CO<sub>2</sub>e = million metric tons of carbon dioxide equivalent per year

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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<sup>a</sup> Percentage of total has been rounded, and total may not sum due to rounding.

<sup>b</sup> Includes emissions associated with imported electricity, which account for 26.28 MMT CO<sub>2e</sub> annually.

During the 2000 to 2016 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MT per person to 10.8 MT per person in 2016, representing a 23% decrease. In addition, total GHG emissions in 2016 were approximately 12 MMT CO<sub>2e</sub> less than 2015 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is just below the 2020 target of 431 MMT CO<sub>2e</sub> (CARB 2018).

### 3.3.2 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 *Intergovernmental Panel on Climate Change Synthesis Report* (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (California Climate Change Center (CCCC) 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights. Shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year. Sea levels have risen, and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra Nevada snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late twenty-first century in central, and most notably, Southern California. By the late century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in the *Safeguarding California: Reducing Climate Risk* (CNRA 2014), is provided below.

**Agriculture.** Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availability and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production.

**Biodiversity and Habitat.** Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a “tipping point” beyond which irreversible damage or loss has occurred).

**Energy.** Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise.

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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**Forestry.** The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions.

**Ocean and Coastal Ecosystems and Resources.** Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands.

**Public Health.** Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first Century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves are likely to increase the risk of mortality due to heat related illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies.

**Transportation.** While the transportation industry is a source of GHG emissions it is also vulnerable to climate change risks. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

**Water.** Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public



# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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safety, property damage, displacement and post-disaster mental health problems. Prolonged and intensified droughts can also negatively groundwater reserves and result in increased overdraft and subsidence. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality.

In March 2016, the CNRA released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the 2014 *Safeguarding California* plan into action (CNRA 2016). Additionally, in May 2017, CNRA released the draft *Safeguarding California Plan: 2017 Update*, which is a survey of current programmatic responses for climate change and contains recommendations for further actions (CNRA 2017).

The CNRA released *Safeguarding California Plan: 2018 Update* in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018). As with previous state adaptation plans, the 2018 Update addresses the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming.

### 3.4 Significance Criteria and Methodology

#### 3.4.1 Thresholds of Significance

The significance criteria used to evaluate the project's GHG emissions impacts is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this GHG emissions analysis, the project would have a significant environmental impact if it would (14 CCR 15000 et seq.):

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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emissions of a project, such as the project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009a). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory titled "CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review" states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

To address Impact GHG-1, this analysis uses the SCAQMD recommended (not adopted) numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects.

In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008). This guidance document, which builds on the previous guidance prepared by the CAPCOA, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO<sub>2</sub>e per-year screening level

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

- Tier 1** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO<sub>2e</sub> per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO<sub>2e</sub> per year), commercial projects (1,400 MT CO<sub>2e</sub> per year), and mixed-use projects (3,000 MT CO<sub>2e</sub> per year). Under option 2, a single numerical screening threshold of 3,000 MT CO<sub>2e</sub> per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO<sub>2e</sub> per service population for project level analyses and 6.6 MT CO<sub>2e</sub> per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Because the project consists of a residential development, this analysis applies the recommended SCAQMD efficiency threshold of 4.8 MT CO<sub>2e</sub> per service population per year. Per the SCAQMD

# **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 4.8 MT CO<sub>2e</sub> per service population per year.

## **3.4.2 Approach and Methodology**

### **3.4.2.1 Construction**

CalEEMod Version 2016.3.2 was used to estimate potential project-generated GHG emissions during construction. Construction of the project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 2.4.2.1, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 2.4.2.1 for a discussion of construction emissions calculation methodology and assumptions.

### **3.4.2.2 Operation**

CalEEMod Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. Emissions from each category are discussed in the following text with respect to the project. For additional details, see Section 2.4.2.3, Operation, for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Operational year 2022 was assumed upon completion of construction.

#### **Area Sources**

CalEEMod was used to estimate GHG emissions from the project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. See Section 2.4.2.2, for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and little to no GHG emissions.

#### **Energy Sources**

The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the project's land uses. The energy use from residential land uses is calculated in CalEEMod based on the Residential Appliance

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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Saturation Study. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO<sub>2</sub> and other GHGs. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for Southern California Edison, which would be the energy source provider for the project.

CalEEMod default energy intensity factors (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O mass emissions per kilowatt hour) for Southern Californian Edison (SCE) is based on the value for SCE's energy mix in 2012. As explained in Section 3.2.2, SB X1 2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020 and SB 350 calls for further development of renewable energy, with a target of 50% by 2030. The CO<sub>2</sub> emissions intensity factor for utility energy use in CalEEMod was adjusted consistent with SCE's 2016 Power Content Label, which reported that 28% of the power mix was generated by eligible renewable sources (SCE 2017). Because SCE is striving to meet the 33% RPS by December 31, 2020, the CO<sub>2</sub> emissions intensity factor is anticipated to be less than assumed in CalEEMod at project operation (2022), which would reflect the increase in percentage of renewable energy in SCE's energy portfolio.

### **Mobile Sources**

All details for criteria air pollutants discussed in Section 2.4.2.2 are also applicable for the estimation of operational mobile source GHG emissions.

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated by using the CalEEMod emission factors for motor vehicles in 2022 to the extent it was captured in EMFAC 2014.

The Low Carbon Fuel Standard calls for a 10% reduction in the "carbon intensity" of motor vehicle fuels by 2020, which would further reduce GHG emissions. However, the carbon intensity reduction associated with the Low Carbon Fuel Standard was not assumed in EMFAC2014 and thus, was not included in CalEEMod Version 2016.3.2 or the calculations below.

# Air Quality and Greenhouse Gas Emissions Analysis

## Technical Report for the Victoria Greens Project

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### Solid Waste

The project would generate solid waste, and therefore, result in CO<sub>2</sub>e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste. Per AB 341 (requiring mandatory commercial recycling beginning July 1, 2012), multi-family dwellings of 5 units or more must recycle. Private haulers providing collection services in the City are required to offer recycling services and provide each residential unit at least one recycling container, at no cost to the resident (City of Carson 2018). While AB 341 aims for a statewide 75% diversion rate by 2020, project compliance with the 50% diversion rate, consistent with the solid waste diversion requirements of AB 939, Integrated Waste Management Act, has been included in the GHG assessment.

### Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

## 3.5 Impact Analysis

### 3.5.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

#### Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The SCAQMD *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (2009) recommends that “construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.” Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 4.8 MT CO<sub>2</sub>e per service population per year. The determination of significance, therefore, is addressed in the operational emissions discussion following the estimated construction emissions.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 2.4.2.1. Construction of the project is anticipated to commence in June 2019 and reach completion in December 2020, lasting a total of 18 months. On-site sources of GHG emissions include off-road equipment and off-site sources including vendor trucks and worker vehicles. Table 19 presents construction emissions for the project in 2019 and 2020 from on-site and off-site emission sources.

**Table 19**  
**Estimated Annual Construction GHG Emissions**

Year	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
	<i>Metric Tons per Year</i>			
2019	498.27	0.08	0.00	500.35
2020	493.85	0.07	0.00	495.73
<b>Total</b>	<b>992.12</b>	<b>0.16</b>	<b>0.00</b>	<b>996.07</b>

**Notes:** CO<sub>2</sub> = carbon dioxide; CH<sub>4</sub> = methane; N<sub>2</sub>O = nitrous oxide; CO<sub>2</sub>e = carbon dioxide equivalent; GHG = greenhouse gas  
See Appendix A for complete results.

As shown in Table 19, the estimated total GHG emissions during construction of would be approximately 500 MT CO<sub>2</sub>e in 2019 and 496 MT CO<sub>2</sub>e in 2020, for a total of 996 MT CO<sub>2</sub>e over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 33 MT CO<sub>2</sub>e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

### Operational Emissions

Operation of the project would generate GHG emissions through motor vehicle trips to and from the project site; landscape maintenance equipment operation; energy use (natural gas and generation of electricity consumed by the project); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.4.2.2, Operation.

The estimated operational (year 2022) project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, and water usage and wastewater generation are shown in Table 20.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 20**  
**Estimated Annual Operational GHG Emissions**

Emission Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2e</sub>
	<i>metric tons per year</i>			
Area	2.97	<0.01	0.00	3.04
Energy	395.79	0.01	<0.01	397.64
Mobile	1,815.95	0.09	0.00	1,818.28
Solid waste	16.43	0.97	0.00	40.71
Water supply and wastewater	61.80	0.38	<0.01	73.99
<b>Total</b>	<b>2,292.95</b>	<b>1.46</b>	<b>0.01</b>	<b>2,333.67</b>
<i>Amortized Construction Emissions</i>				33.20
<b>Operation + Amortized Construction Total</b>				<b>2,366.87</b>

**Notes:** CO<sub>2</sub> = carbon dioxide; CH<sub>4</sub> = methane; N<sub>2</sub>O = nitrous oxide; CO<sub>2e</sub> = carbon dioxide equivalent; GHG = greenhouse gas  
See Appendix A for complete results.  
These emissions reflect operational year 2022.

As shown in Table 20, estimated annual project-generated GHG emissions would be approximately 2,334 MT CO<sub>2e</sub> per year as a result of project operations only. Estimated annual project-generated operational emissions in 2022 plus amortized project construction emissions would be approximately 2,367 MT CO<sub>2e</sub> per year.

As discussed in Section 2.5.1, regarding the potential for the project to conflict with or obstruct implementation of the applicable air quality plan, pursuant to the SCAG 2016 RTP/SCS population and household data, the average persons per household for the City in 2022 is estimated to be 3.58 (SCAG 2016). Based on the assumption of 3.58 persons per household, the proposed 176 multifamily residential units would generate 631 persons at buildout in 2022.

Estimated annual GHG emissions of 2,367 MT CO<sub>2e</sub> per year divided by a service population of 631 persons is 3.75 MT CO<sub>2e</sub> per service population per year. As such, annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD threshold of 4.8 MT CO<sub>2e</sub> per service population per year. Therefore, the project's GHG contribution would not be cumulatively considerable and is less than significant.

## Mitigation Measures

None required.

## Level of Significance After Mitigation

Impacts would be less than significant without mitigation.



## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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### 3.5.2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City has not adopted a comprehensive climate action plan and there is currently no local guidance that would be applicable to the project. At this time, no mandatory GHG plans, policies, or regulations or finalized agency guidelines would apply to implementation of the project.

As discussed in Section 3.2.2, the Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California’s GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.<sup>14</sup> Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California’s GHG emissions. Table 21 highlights measures that have been, or will be, developed under the Scoping Plan and the project’s consistency with Scoping Plan measures. To the extent that these regulations are applicable to the project, its inhabitants, or uses, the project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

**Table 21**  
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

Scoping Plan Measure	Measure Number	Project Consistency
<i>Transportation Sector</i>		
Advanced Clean Cars	T-1	Consistent. The project’s residents would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.

<sup>14</sup> The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that “[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (CNRA 2009a).

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

**Table 21**  
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

Scoping Plan Measure	Measure Number	Project Consistency
Low Carbon Fuel Standard	T-2	Consistent. Motor vehicles driven by the project's residents would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	Consistent. The proposed project's location near mass transit services which would reduce dependence on passenger vehicle trips and shorter trip lengths, which would reduce GHG emissions.
Advanced Clean Transit	Proposed	Not applicable.
Last-Mile Delivery	Proposed	Not applicable.
Reduction in VMT	Proposed	Not applicable.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Consistent. Motor vehicles driven by the project's residents would maintain proper tire pressure when their vehicles are serviced. The project's residents would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. Motor vehicles driven by the project's residents would use low-friction oils when their vehicles are serviced. The project's residents would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	Not applicable.
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	Not applicable.
Medium and Heavy-Duty GHG Phase 2	Proposed	Not applicable.
High-Speed Rail	T-9	Not applicable.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

**Table 21**  
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

Scoping Plan Measure	Measure Number	Project Consistency
<i>Electricity and Natural Gas Sector</i>		
Energy Efficiency Measures (Electricity)	E-1	Consistent. The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	CR-1	Consistent. The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for natural gas appliances and other devices at the time of building construction.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Not applicable.
Combined Heat and Power	E-2	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	Consistent. The electricity used by the project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Not feasible. Based on information provided by the project applicant, on-site generation of renewable energy using solar panels is not feasible given the minimal rooftop space available to provide the electricity needed to make rooftop solar economically feasible and reliable for future residents. Roof space is limited because it would be used to house project systems, primarily the heating, ventilation, and air conditioning systems, that would serve the entire project, and because of the multistory nature of the project, the ratio of roof space to residential space is small.
<i>Water Sector</i>		
Water Use Efficiency	W-1	Consistent. The project would be required to comply with statewide water conservation requirements reducing water usage by 20%.
Water Recycling	W-2	Not feasible. Recycled water is not available to the site.
Water System Energy Efficiency	W-3	Not applicable. This is applicable for the transmission and treatment of water, but it is not applicable for the project.
Reuse Urban Runoff	W-4	Not applicable. The project would not reuse urban water on-site.
Renewable Energy Production	W-5	Not applicable. Applicable for wastewater treatment systems. Not applicable for the project.
<i>Green Buildings</i>		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Consistent. The project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The project's buildings would meet green building standards that are in effect at the time of design and construction.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public	GB-1	Consistent. The project would be required to be constructed in compliance with local green building standards in effect at the

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

**Table 21**  
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

Scoping Plan Measure	Measure Number	Project Consistency
Schools, Residential and Commercial Buildings)		time of building construction.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. This is applicable for existing buildings only. It is not applicable for the project except as future standards may become applicable to existing buildings.
<i>Industry Sector</i>		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.
Reduce GHG Emissions by 20% in Oil Refinery Sector	Proposed	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable.
<i>Recycling and Waste Management Sector</i>		
Landfill Methane Control Measure	RW-1	Not applicable.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable.
Mandatory Commercial Recycling	RW-3	Consistent. During both construction and operation of the project, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable (applicable to product designer and producers).
Environmentally Preferable Purchasing	RW-3	Not applicable (applicable to product designer and producers).
<i>Forests Sector</i>		
Sustainable Forest Target	F-1	Not applicable.
<i>High GWP Gases Sector</i>		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	Consistent. The project's residents would be prohibited from performing air conditioning repairs and would be required to use professional servicing.
SF <sub>6</sub> Limits in Non-Utility and Non-	H-2	Not applicable.

## Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**Table 21**  
**Project Consistency with Scoping Plan GHG Emission Reduction Strategies**

Scoping Plan Measure	Measure Number	Project Consistency
Semiconductor Applications		
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	Not applicable.
Limit High GWP Use in Consumer Products	H-4	Consistent. The project's residents would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Consistent. Motor vehicles driven by the project's residents would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable.
SF <sub>6</sub> Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.
40% reduction in methane and HFC emissions	Proposed	Not applicable.
<i>Agriculture Sector</i>		
Methane Capture at Large Dairies	A-1	Not applicable.

**Source:** CARB 2010 and CARB 2017b.

**Notes:** CARB = California Air Resources Board; CCR = California Code of Regulations; GHG = greenhouse gas; GWP = global warming potential; HFC = hydrofluorocarbon; SB = Senate Bill; SF<sub>6</sub> = sulfur hexafluoride.

Based on the analysis in Table 21, the project would be consistent with the applicable strategies and measures in the Scoping Plan.

SCAG's 2016 RTP/SCS is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2016 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans. The 2016 RTP/SCS is not directly applicable to the project because the underlying purpose of the 2016 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. However, the development of the project site would support the overarching intent of the 2016 RTP/SCS by avoiding sprawling development.

The project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-3-05 and SB 32. As discussed in Section 3.2.2, EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis; CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

To begin, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that “California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the 2017 Scoping Plan, which states (CARB 2017b):

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The project would not interfere with implementation of any of the above-described GHG reduction goals for 2030 or 2050 because the project would not exceed the SCAQMD’s recommended draft interim threshold of 4.8 MT CO<sub>2</sub>e per service population per year (SCAQMD 2008). As discussed in Section 3.4.1, this efficiency threshold was established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. Because the

## **Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project**

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project would not exceed the threshold, this analysis provides support for the conclusion that the project would not impede the state's trajectory toward the above-described statewide GHG reduction goals for 2030 or 2050.

In addition, as discussed previously, the project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the project would be speculative and cannot be identified at this time. The project's consistency would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40% reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. Based on the above considerations, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

### **Mitigation Measures**

None required.

### **Level of Significance After Mitigation**

Impacts would be less than significant without mitigation.

# Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Victoria Greens Project

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**APPENDIX A**  
*CalEEMod Output Files*

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**Victoria Greens Unmitigated**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	87.79	1000sqft	2.02	87,788.00	0
Parking Lot	62.00	Space	0.56	24,800.00	0
Condo/Townhouse	176.00	Dwelling Unit	8.07	126,890.00	503

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	558.44	<b>CH4 Intensity (lb/MW hr)</b>	0.023	<b>N2O Intensity (lb/MW hr)</b>	0.005

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

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Project Characteristics - Interpolated RPS 2022

Land Use - Data provided by applicant.

Trips and VMT - Based on applicant data.

Demolition - Caltrans guidance specifies 0.25 feet asphalt parking thickness. Equivalent tonnage based on asphalt density of 145 lb/cubic feet  
[http://www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=144&Itemid=330](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330)

Grading - data provided by applicant.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Provided by applicant.

Energy Use -

Woodstoves - Data provided by applicant.

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	149.60	0.00
tblFireplaces	NumberNoFireplace	17.60	176.00
tblFireplaces	NumberWood	8.80	0.00
tblGrading	AcresOfGrading	75.00	8.07
tblGrading	MaterialExported	0.00	30,239.00
tblLandUse	LandUseSquareFeet	87,790.00	87,788.00
tblLandUse	LandUseSquareFeet	176,000.00	126,890.00
tblLandUse	LotAcreage	11.00	8.07
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	558.44
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	37.00	27.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	174.00	147.00
tblTripsAndVMT	WorkerTripNumber	35.00	29.00
tblVehicleTrips	ST_TR	5.67	7.14
tblVehicleTrips	SU_TR	4.84	6.10
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	NumberCatalytic	8.80	0.00
tblWoodstoves	NumberNoncatalytic	8.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2960	3.1502	2.1168	5.4100e-003	0.3076	0.1287	0.4364	0.1325	0.1199	0.2524	0.0000	498.2724	498.2724	0.0829	0.0000	500.3455
2020	0.7353	2.5157	2.6469	5.5500e-003	0.1900	0.1277	0.3177	0.0509	0.1200	0.1709	0.0000	493.8520	493.8520	0.0749	0.0000	495.7253
<b>Maximum</b>	<b>0.7353</b>	<b>3.1502</b>	<b>2.6469</b>	<b>5.5500e-003</b>	<b>0.3076</b>	<b>0.1287</b>	<b>0.4364</b>	<b>0.1325</b>	<b>0.1200</b>	<b>0.2524</b>	<b>0.0000</b>	<b>498.2724</b>	<b>498.2724</b>	<b>0.0829</b>	<b>0.0000</b>	<b>500.3455</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2960	3.1502	2.1168	5.4100e-003	0.1929	0.1287	0.3217	0.0713	0.1199	0.1913	0.0000	498.2721	498.2721	0.0829	0.0000	500.3452
2020	0.7353	2.5157	2.6469	5.5500e-003	0.1900	0.1277	0.3177	0.0509	0.1200	0.1709	0.0000	493.8516	493.8516	0.0749	0.0000	495.7250
<b>Maximum</b>	<b>0.7353</b>	<b>3.1502</b>	<b>2.6469</b>	<b>5.5500e-003</b>	<b>0.1929</b>	<b>0.1287</b>	<b>0.3217</b>	<b>0.0713</b>	<b>0.1200</b>	<b>0.1913</b>	<b>0.0000</b>	<b>498.2721</b>	<b>498.2721</b>	<b>0.0829</b>	<b>0.0000</b>	<b>500.3452</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	23.05	0.00	15.21	33.35	0.00	14.44	0.00	0.00	0.00	0.01	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2019	8-31-2019	2.2140	2.2140
2	9-1-2019	11-30-2019	0.9116	0.9116
3	12-1-2019	2-29-2020	0.8588	0.8588
4	3-1-2020	5-31-2020	0.8371	0.8371
5	6-1-2020	8-31-2020	0.8356	0.8356
6	9-1-2020	9-30-2020	0.2725	0.2725
		Highest	2.2140	2.2140

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5621	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3902	2.0549	5.3849	0.0197	1.6252	0.0164	1.6417	0.4357	0.0153	0.4510	0.0000	1,815.945 <sub>2</sub>	1,815.945 <sub>2</sub>	0.0934	0.0000	1,818.279 <sub>3</sub>
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>0.9696</b>	<b>2.2239</b>	<b>7.2668</b>	<b>0.0207</b>	<b>1.6252</b>	<b>0.0385</b>	<b>1.6637</b>	<b>0.4357</b>	<b>0.0374</b>	<b>0.4730</b>	<b>20.0721</b>	<b>2,272.873<sub>1</sub></b>	<b>2,292.945<sub>2</sub></b>	<b>1.4561</b>	<b>0.0145</b>	<b>2,333.666<sub>0</sub></b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5621	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3902	2.0549	5.3849	0.0197	1.6252	0.0164	1.6417	0.4357	0.0153	0.4510	0.0000	1,815.9452	1,815.9452	0.0934	0.0000	1,818.2793
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>0.9696</b>	<b>2.2239</b>	<b>7.2668</b>	<b>0.0207</b>	<b>1.6252</b>	<b>0.0385</b>	<b>1.6637</b>	<b>0.4357</b>	<b>0.0374</b>	<b>0.4730</b>	<b>20.0721</b>	<b>2,272.8731</b>	<b>2,292.9452</b>	<b>1.4561</b>	<b>0.0145</b>	<b>2,333.6660</b>

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

**3.0 Construction Detail**

**Construction Phase**



## Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/12/2019	5	10	
3	Grading	Grading	7/13/2019	8/23/2019	5	30	
4	Building Construction	Building Construction	8/24/2019	10/16/2020	5	300	
5	Paving	Paving	10/17/2020	11/13/2020	5	20	
6	Architectural Coating	Architectural Coating	11/14/2020	12/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 8.07**

**Acres of Paving: 2.58**

**Residential Indoor: 256,952; Residential Outdoor: 85,651; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,755 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	13.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	15.00	0.00	3,780.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	147.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3600e-003	0.0000	1.3600e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>	<b>1.3600e-003</b>	<b>0.0180</b>	<b>0.0193</b>	<b>2.1000e-004</b>	<b>0.0167</b>	<b>0.0169</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8672</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.0600e-003	4.4000e-004	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5062	0.5062	4.0000e-005	0.0000	0.5070
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	6.3000e-004	6.8100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5800	1.5800	5.0000e-005	0.0000	1.5814
<b>Total</b>	<b>8.1000e-004</b>	<b>2.6900e-003</b>	<b>7.2500e-003</b>	<b>3.0000e-005</b>	<b>1.7500e-003</b>	<b>2.0000e-005</b>	<b>1.7800e-003</b>	<b>4.7000e-004</b>	<b>2.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>2.0862</b>	<b>2.0862</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.0884</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>	<b>5.3000e-004</b>	<b>0.0180</b>	<b>0.0185</b>	<b>8.0000e-005</b>	<b>0.0167</b>	<b>0.0168</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8671</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.0600e-003	4.4000e-004	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5062	0.5062	4.0000e-005	0.0000	0.5070
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	6.3000e-004	6.8100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5800	1.5800	5.0000e-005	0.0000	1.5814
<b>Total</b>	<b>8.1000e-004</b>	<b>2.6900e-003</b>	<b>7.2500e-003</b>	<b>3.0000e-005</b>	<b>1.7500e-003</b>	<b>2.0000e-005</b>	<b>1.7800e-003</b>	<b>4.7000e-004</b>	<b>2.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>2.0862</b>	<b>2.0862</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.0884</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.8000e-004	4.0900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9480	0.9480	3.0000e-005	0.0000	0.9488
<b>Total</b>	<b>4.5000e-004</b>	<b>3.8000e-004</b>	<b>4.0900e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.9480</b>	<b>0.9480</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.9488</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0352</b>	<b>0.0120</b>	<b>0.0472</b>	<b>0.0194</b>	<b>0.0110</b>	<b>0.0304</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.8000e-004	4.0900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9480	0.9480	3.0000e-005	0.0000	0.9488
<b>Total</b>	<b>4.5000e-004</b>	<b>3.8000e-004</b>	<b>4.0900e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.9480</b>	<b>0.9480</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.9488</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0963	0.0000	0.0963	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0963</b>	<b>0.0357</b>	<b>0.1321</b>	<b>0.0504</b>	<b>0.0329</b>	<b>0.0833</b>	<b>0.0000</b>	<b>83.5520</b>	<b>83.5520</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2129</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0180	0.5982	0.1271	1.5000e-003	0.0325	2.1400e-003	0.0346	8.9200e-003	2.0500e-003	0.0110	0.0000	147.1715	147.1715	0.0104	0.0000	147.4310
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	9.4000e-004	0.0102	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.3701	2.3701	8.0000e-005	0.0000	2.3721
<b>Total</b>	<b>0.0191</b>	<b>0.5991</b>	<b>0.1373</b>	<b>1.5300e-003</b>	<b>0.0350</b>	<b>2.1600e-003</b>	<b>0.0371</b>	<b>9.5700e-003</b>	<b>2.0700e-003</b>	<b>0.0116</b>	<b>0.0000</b>	<b>149.5416</b>	<b>149.5416</b>	<b>0.0105</b>	<b>0.0000</b>	<b>149.8031</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0376	0.0000	0.0376	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0376</b>	<b>0.0357</b>	<b>0.0733</b>	<b>0.0197</b>	<b>0.0329</b>	<b>0.0525</b>	<b>0.0000</b>	<b>83.5519</b>	<b>83.5519</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2128</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0180	0.5982	0.1271	1.5000e-003	0.0325	2.1400e-003	0.0346	8.9200e-003	2.0500e-003	0.0110	0.0000	147.1715	147.1715	0.0104	0.0000	147.4310
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	9.4000e-004	0.0102	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.3701	2.3701	8.0000e-005	0.0000	2.3721
<b>Total</b>	<b>0.0191</b>	<b>0.5991</b>	<b>0.1373</b>	<b>1.5300e-003</b>	<b>0.0350</b>	<b>2.1600e-003</b>	<b>0.0371</b>	<b>9.5700e-003</b>	<b>2.0700e-003</b>	<b>0.0116</b>	<b>0.0000</b>	<b>149.5416</b>	<b>149.5416</b>	<b>0.0105</b>	<b>0.0000</b>	<b>149.8031</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9696	0.7895	1.2400e-003		0.0593	0.0593		0.0558	0.0558	0.0000	108.1479	108.1479	0.0264	0.0000	108.8066
<b>Total</b>	<b>0.1086</b>	<b>0.9696</b>	<b>0.7895</b>	<b>1.2400e-003</b>		<b>0.0593</b>	<b>0.0593</b>		<b>0.0558</b>	<b>0.0558</b>	<b>0.0000</b>	<b>108.1479</b>	<b>108.1479</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8066</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2600e-003	0.1467	0.0401	3.2000e-004	7.8200e-003	9.2000e-004	8.7500e-003	2.2600e-003	8.8000e-004	3.1400e-003	0.0000	31.0580	31.0580	2.0700e-003	0.0000	31.1098
Worker	0.0339	0.0282	0.3070	7.9000e-004	0.0741	6.5000e-004	0.0748	0.0197	6.0000e-004	0.0203	0.0000	71.2280	71.2280	2.4500e-003	0.0000	71.2893
<b>Total</b>	<b>0.0391</b>	<b>0.1749</b>	<b>0.3471</b>	<b>1.1100e-003</b>	<b>0.0819</b>	<b>1.5700e-003</b>	<b>0.0835</b>	<b>0.0219</b>	<b>1.4800e-003</b>	<b>0.0234</b>	<b>0.0000</b>	<b>102.2860</b>	<b>102.2860</b>	<b>4.5200e-003</b>	<b>0.0000</b>	<b>102.3991</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9696	0.7895	1.2400e-003		0.0593	0.0593		0.0558	0.0558	0.0000	108.1478	108.1478	0.0264	0.0000	108.8065
<b>Total</b>	<b>0.1086</b>	<b>0.9696</b>	<b>0.7895</b>	<b>1.2400e-003</b>		<b>0.0593</b>	<b>0.0593</b>		<b>0.0558</b>	<b>0.0558</b>	<b>0.0000</b>	<b>108.1478</b>	<b>108.1478</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8065</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2600e-003	0.1467	0.0401	3.2000e-004	7.8200e-003	9.2000e-004	8.7500e-003	2.2600e-003	8.8000e-004	3.1400e-003	0.0000	31.0580	31.0580	2.0700e-003	0.0000	31.1098
Worker	0.0339	0.0282	0.3070	7.9000e-004	0.0741	6.5000e-004	0.0748	0.0197	6.0000e-004	0.0203	0.0000	71.2280	71.2280	2.4500e-003	0.0000	71.2893
<b>Total</b>	<b>0.0391</b>	<b>0.1749</b>	<b>0.3471</b>	<b>1.1100e-003</b>	<b>0.0819</b>	<b>1.5700e-003</b>	<b>0.0835</b>	<b>0.0219</b>	<b>1.4800e-003</b>	<b>0.0234</b>	<b>0.0000</b>	<b>102.2860</b>	<b>102.2860</b>	<b>4.5200e-003</b>	<b>0.0000</b>	<b>102.3991</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2205	1.9954	1.7522	2.8000e-003		0.1162	0.1162		0.1092	0.1092	0.0000	240.8744	240.8744	0.0588	0.0000	242.3435
<b>Total</b>	<b>0.2205</b>	<b>1.9954</b>	<b>1.7522</b>	<b>2.8000e-003</b>		<b>0.1162</b>	<b>0.1162</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>240.8744</b>	<b>240.8744</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3435</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3043	0.0824	7.2000e-004	0.0177	1.4200e-003	0.0191	5.1000e-003	1.3500e-003	6.4600e-003	0.0000	69.7581	69.7581	4.4300e-003	0.0000	69.8689
Worker	0.0706	0.0569	0.6293	1.7300e-003	0.1675	1.4300e-003	0.1690	0.0445	1.3200e-003	0.0458	0.0000	156.1441	156.1441	4.9200e-003	0.0000	156.2671
<b>Total</b>	<b>0.0808</b>	<b>0.3612</b>	<b>0.7117</b>	<b>2.4500e-003</b>	<b>0.1852</b>	<b>2.8500e-003</b>	<b>0.1881</b>	<b>0.0496</b>	<b>2.6700e-003</b>	<b>0.0523</b>	<b>0.0000</b>	<b>225.9022</b>	<b>225.9022</b>	<b>9.3500e-003</b>	<b>0.0000</b>	<b>226.1360</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2205	1.9954	1.7522	2.8000e-003		0.1162	0.1162		0.1092	0.1092	0.0000	240.8741	240.8741	0.0588	0.0000	242.3432
<b>Total</b>	<b>0.2205</b>	<b>1.9954</b>	<b>1.7522</b>	<b>2.8000e-003</b>		<b>0.1162</b>	<b>0.1162</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>240.8741</b>	<b>240.8741</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3432</b>

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3043	0.0824	7.2000e-004	0.0177	1.4200e-003	0.0191	5.1000e-003	1.3500e-003	6.4600e-003	0.0000	69.7581	69.7581	4.4300e-003	0.0000	69.8689
Worker	0.0706	0.0569	0.6293	1.7300e-003	0.1675	1.4300e-003	0.1690	0.0445	1.3200e-003	0.0458	0.0000	156.1441	156.1441	4.9200e-003	0.0000	156.2671
<b>Total</b>	<b>0.0808</b>	<b>0.3612</b>	<b>0.7117</b>	<b>2.4500e-003</b>	<b>0.1852</b>	<b>2.8500e-003</b>	<b>0.1881</b>	<b>0.0496</b>	<b>2.6700e-003</b>	<b>0.0523</b>	<b>0.0000</b>	<b>225.9022</b>	<b>225.9022</b>	<b>9.3500e-003</b>	<b>0.0000</b>	<b>226.1360</b>

**3.6 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0170</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
<b>Total</b>	<b>6.9000e-004</b>	<b>5.6000e-004</b>	<b>6.1700e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.5320</b>	<b>1.5320</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.5332</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0170</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
<b>Total</b>	<b>6.9000e-004</b>	<b>5.6000e-004</b>	<b>6.1700e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.5320</b>	<b>1.5320</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.5332</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4151</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	1.0800e-003	0.0119	3.0000e-005	3.1800e-003	3.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.9619	2.9619	9.0000e-005	0.0000	2.9643
<b>Total</b>	<b>1.3400e-003</b>	<b>1.0800e-003</b>	<b>0.0119</b>	<b>3.0000e-005</b>	<b>3.1800e-003</b>	<b>3.0000e-005</b>	<b>3.2000e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>2.9619</b>	<b>2.9619</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.9643</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4151</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	1.0800e-003	0.0119	3.0000e-005	3.1800e-003	3.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.9619	2.9619	9.0000e-005	0.0000	2.9643
<b>Total</b>	<b>1.3400e-003</b>	<b>1.0800e-003</b>	<b>0.0119</b>	<b>3.0000e-005</b>	<b>3.1800e-003</b>	<b>3.0000e-005</b>	<b>3.2000e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>2.9619</b>	<b>2.9619</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.9643</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3902	2.0549	5.3849	0.0197	1.6252	0.0164	1.6417	0.4357	0.0153	0.4510	0.0000	1,815.945 2	1,815.945 2	0.0934	0.0000	1,818.279 3
Unmitigated	0.3902	2.0549	5.3849	0.0197	1.6252	0.0164	1.6417	0.4357	0.0153	0.4510	0.0000	1,815.945 2	1,815.945 2	0.0934	0.0000	1,818.279 3

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,288.32	1,256.64	1073.60	4,282,101	4,282,101
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,288.32	1,256.64	1,073.60	4,282,101	4,282,101

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Other Asphalt Surfaces	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
NaturalGas Mitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
NaturalGas Unmitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**6.0 Area Detail**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5621	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
Unmitigated	0.5621	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>0.5621</b>	<b>0.0210</b>	<b>1.8189</b>	<b>1.0000e-004</b>		<b>0.0101</b>	<b>0.0101</b>		<b>0.0101</b>	<b>0.0101</b>	<b>0.0000</b>	<b>2.9685</b>	<b>2.9685</b>	<b>2.8700e-003</b>	<b>0.0000</b>	<b>3.0403</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>0.5621</b>	<b>0.0210</b>	<b>1.8189</b>	<b>1.0000e-004</b>		<b>0.0101</b>	<b>0.0101</b>		<b>0.0101</b>	<b>0.0101</b>	<b>0.0000</b>	<b>2.9685</b>	<b>2.9685</b>	<b>2.8700e-003</b>	<b>0.0000</b>	<b>3.0403</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	61.8043	0.3761	9.3400e-003	73.9900
Unmitigated	61.8043	0.3761	9.3400e-003	73.9900

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.4342	0.9712	0.0000	40.7149
Unmitigated	16.4342	0.9712	0.0000	40.7149

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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Victoria Greens Unmitigated - Los Angeles-South Coast County, Annual

**11.0 Vegetation**

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Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**Victoria Greens Unmitigated**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	87.79	1000sqft	2.02	87,788.00	0
Parking Lot	62.00	Space	0.56	24,800.00	0
Condo/Townhouse	176.00	Dwelling Unit	8.07	126,890.00	503

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	558.44	<b>CH4 Intensity (lb/MW hr)</b>	0.023	<b>N2O Intensity (lb/MW hr)</b>	0.005

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

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

Project Characteristics - Interpolated RPS 2022

Land Use - Data provided by applicant.

Trips and VMT - Based on applicant data.

Demolition - Caltrans guidance specifies 0.25 feet asphalt parking thickness. Equivalent tonnage based on asphalt density of 145 lb/cubic feet  
[http://www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=144&Itemid=330](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330)

Grading - data provided by applicant.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Provided by applicant.

Energy Use -

Woodstoves - Data provided by applicant.

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	149.60	0.00
tblFireplaces	NumberNoFireplace	17.60	176.00
tblFireplaces	NumberWood	8.80	0.00
tblGrading	AcresOfGrading	75.00	8.07
tblGrading	MaterialExported	0.00	30,239.00
tblLandUse	LandUseSquareFeet	87,790.00	87,788.00
tblLandUse	LandUseSquareFeet	176,000.00	126,890.00
tblLandUse	LotAcreage	11.00	8.07
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	558.44
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	37.00	27.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	174.00	147.00
tblTripsAndVMT	WorkerTripNumber	35.00	29.00
tblVehicleTrips	ST_TR	5.67	7.14
tblVehicleTrips	SU_TR	4.84	6.10
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	NumberCatalytic	8.80	0.00
tblWoodstoves	NumberNoncatalytic	8.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00



Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.9979	93.1669	42.3281	0.1645	18.2675	2.5257	20.6596	9.9840	2.3289	12.1848	0.0000	17,214.8105	17,214.8105	2.6991	0.0000	17,282.2871
2020	41.6402	22.5394	24.0373	0.0513	1.8160	1.1443	2.9603	0.4855	1.0759	1.5615	0.0000	5,029.9157	5,029.9157	0.7230	0.0000	5,047.9909
<b>Maximum</b>	<b>41.6402</b>	<b>93.1669</b>	<b>42.3281</b>	<b>0.1645</b>	<b>18.2675</b>	<b>2.5257</b>	<b>20.6596</b>	<b>9.9840</b>	<b>2.3289</b>	<b>12.1848</b>	<b>0.0000</b>	<b>17,214.8105</b>	<b>17,214.8105</b>	<b>2.6991</b>	<b>0.0000</b>	<b>17,282.2871</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.9979	93.1669	42.3281	0.1645	7.2470	2.5257	9.6391	3.9263	2.3289	6.1271	0.0000	17,214.8105	17,214.8105	2.6991	0.0000	17,282.2871
2020	41.6402	22.5394	24.0373	0.0513	1.8160	1.1443	2.9603	0.4855	1.0759	1.5615	0.0000	5,029.9157	5,029.9157	0.7230	0.0000	5,047.9909
<b>Maximum</b>	<b>41.6402</b>	<b>93.1669</b>	<b>42.3281</b>	<b>0.1645</b>	<b>7.2470</b>	<b>2.5257</b>	<b>9.6391</b>	<b>3.9263</b>	<b>2.3289</b>	<b>6.1271</b>	<b>0.0000</b>	<b>17,214.8105</b>	<b>17,214.8105</b>	<b>2.6991</b>	<b>0.0000</b>	<b>17,282.2871</b>

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.87	0.00	46.66	57.86	0.00	44.07	0.00	0.00	0.00	0.00	0.00	0.00

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Energy	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Mobile	2.3231	11.1224	31.6395	0.1151	9.3614	0.0928	9.4542	2.5053	0.0865	2.5918		11,714.9239	11,714.9239	0.5857		11,729.5656
<b>Total</b>	<b>5.6369</b>	<b>12.1014</b>	<b>46.5359</b>	<b>0.1211</b>	<b>9.3614</b>	<b>0.2387</b>	<b>9.6002</b>	<b>2.5053</b>	<b>0.2325</b>	<b>2.7378</b>	<b>0.0000</b>	<b>12,776.7080</b>	<b>12,776.7080</b>	<b>0.6308</b>	<b>0.0190</b>	<b>12,798.1366</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Energy	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Mobile	2.3231	11.1224	31.6395	0.1151	9.3614	0.0928	9.4542	2.5053	0.0865	2.5918		11,714.9239	11,714.9239	0.5857		11,729.5656
<b>Total</b>	<b>5.6369</b>	<b>12.1014</b>	<b>46.5359</b>	<b>0.1211</b>	<b>9.3614</b>	<b>0.2387</b>	<b>9.6002</b>	<b>2.5053</b>	<b>0.2325</b>	<b>2.7378</b>	<b>0.0000</b>	<b>12,776.7080</b>	<b>12,776.7080</b>	<b>0.6308</b>	<b>0.0190</b>	<b>12,798.1366</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/12/2019	5	10	
3	Grading	Grading	7/13/2019	8/23/2019	5	30	
4	Building Construction	Building Construction	8/24/2019	10/16/2020	5	300	
5	Paving	Paving	10/17/2020	11/13/2020	5	20	
6	Architectural Coating	Architectural Coating	11/14/2020	12/11/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.07

Acres of Paving: 2.58

Residential Indoor: 256,952; Residential Outdoor: 85,651; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,755 (Architectural Coating – sqft)

#### OffRoad Equipment

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	13.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	15.00	0.00	3,780.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	147.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1359	0.0000	0.1359	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
<b>Total</b>	<b>3.5134</b>	<b>35.7830</b>	<b>22.0600</b>	<b>0.0388</b>	<b>0.1359</b>	<b>1.7949</b>	<b>1.9308</b>	<b>0.0206</b>	<b>1.6697</b>	<b>1.6902</b>		<b>3,816.8994</b>	<b>3,816.8994</b>	<b>1.0618</b>		<b>3,843.4451</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.1100e-003	0.1991	0.0425	5.2000e-004	0.0114	7.3000e-004	0.0121	3.1200e-003	7.0000e-004	3.8100e-003		56.1933	56.1933	3.8700e-003		56.2900
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0551	0.7233	1.8300e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		181.9429	181.9429	6.2500e-003		182.0992
<b>Total</b>	<b>0.0810</b>	<b>0.2542</b>	<b>0.7657</b>	<b>2.3500e-003</b>	<b>0.1790</b>	<b>2.1800e-003</b>	<b>0.1812</b>	<b>0.0476</b>	<b>2.0300e-003</b>	<b>0.0496</b>		<b>238.1362</b>	<b>238.1362</b>	<b>0.0101</b>		<b>238.3892</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0530	0.0000	0.0530	8.0200e-003	0.0000	8.0200e-003			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
<b>Total</b>	<b>3.5134</b>	<b>35.7830</b>	<b>22.0600</b>	<b>0.0388</b>	<b>0.0530</b>	<b>1.7949</b>	<b>1.8479</b>	<b>8.0200e-003</b>	<b>1.6697</b>	<b>1.6777</b>	<b>0.0000</b>	<b>3,816.8994</b>	<b>3,816.8994</b>	<b>1.0618</b>		<b>3,843.4451</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.1100e-003	0.1991	0.0425	5.2000e-004	0.0114	7.3000e-004	0.0121	3.1200e-003	7.0000e-004	3.8100e-003		56.1933	56.1933	3.8700e-003		56.2900
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0551	0.7233	1.8300e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		181.9429	181.9429	6.2500e-003		182.0992
<b>Total</b>	<b>0.0810</b>	<b>0.2542</b>	<b>0.7657</b>	<b>2.3500e-003</b>	<b>0.1790</b>	<b>2.1800e-003</b>	<b>0.1812</b>	<b>0.0476</b>	<b>2.0300e-003</b>	<b>0.0496</b>		<b>238.1362</b>	<b>238.1362</b>	<b>0.0101</b>		<b>238.3892</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
<b>Total</b>	<b>0.0899</b>	<b>0.0661</b>	<b>0.8679</b>	<b>2.1900e-003</b>	<b>0.2012</b>	<b>1.7300e-003</b>	<b>0.2029</b>	<b>0.0534</b>	<b>1.6000e-003</b>	<b>0.0550</b>		<b>218.3315</b>	<b>218.3315</b>	<b>7.5000e-003</b>		<b>218.5190</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>7.0458</b>	<b>2.3904</b>	<b>9.4362</b>	<b>3.8730</b>	<b>2.1991</b>	<b>6.0721</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
<b>Total</b>	<b>0.0899</b>	<b>0.0661</b>	<b>0.8679</b>	<b>2.1900e-003</b>	<b>0.2012</b>	<b>1.7300e-003</b>	<b>0.2029</b>	<b>0.0534</b>	<b>1.6000e-003</b>	<b>0.0550</b>		<b>218.3315</b>	<b>218.3315</b>	<b>7.5000e-003</b>		<b>218.5190</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4214	0.0000	6.4214	3.3583	0.0000	3.3583			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>6.4214</b>	<b>2.3827</b>	<b>8.8040</b>	<b>3.3583</b>	<b>2.1920</b>	<b>5.5503</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1840	38.5917	8.2281	0.1007	2.2030	0.1416	2.3446	0.6039	0.1355	0.7393		10,892.8481	10,892.8481	0.7502		10,911.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0551	0.7233	1.8300e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		181.9429	181.9429	6.2500e-003		182.0992
<b>Total</b>	<b>1.2590</b>	<b>38.6468</b>	<b>8.9514</b>	<b>0.1025</b>	<b>2.3706</b>	<b>0.1431</b>	<b>2.5137</b>	<b>0.6483</b>	<b>0.1368</b>	<b>0.7851</b>		<b>11,074.7910</b>	<b>11,074.7910</b>	<b>0.7564</b>		<b>11,093.7017</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5043	0.0000	2.5043	1.3097	0.0000	1.3097			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>2.5043</b>	<b>2.3827</b>	<b>4.8870</b>	<b>1.3097</b>	<b>2.1920</b>	<b>3.5018</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1840	38.5917	8.2281	0.1007	2.2030	0.1416	2.3446	0.6039	0.1355	0.7393		10,892.8481	10,892.8481	0.7502		10,911.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0551	0.7233	1.8300e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		181.9429	181.9429	6.2500e-003		182.0992
<b>Total</b>	<b>1.2590</b>	<b>38.6468</b>	<b>8.9514</b>	<b>0.1025</b>	<b>2.3706</b>	<b>0.1431</b>	<b>2.5137</b>	<b>0.6483</b>	<b>0.1368</b>	<b>0.7851</b>		<b>11,074.7910</b>	<b>11,074.7910</b>	<b>0.7564</b>		<b>11,093.7017</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1122	3.1247	0.8291	7.0600e-003	0.1729	0.0199	0.1928	0.0498	0.0191	0.0688		752.7995	752.7995	0.0482		754.0055
Worker	0.7344	0.5397	7.0878	0.0179	1.6431	0.0142	1.6573	0.4358	0.0131	0.4488		1,783.0407	1,783.0407	0.0612		1,784.5719
<b>Total</b>	<b>0.8466</b>	<b>3.6644</b>	<b>7.9169</b>	<b>0.0250</b>	<b>1.8160</b>	<b>0.0341</b>	<b>1.8501</b>	<b>0.4855</b>	<b>0.0321</b>	<b>0.5176</b>		<b>2,535.8402</b>	<b>2,535.8402</b>	<b>0.1095</b>		<b>2,538.5774</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1122	3.1247	0.8291	7.0600e-003	0.1729	0.0199	0.1928	0.0498	0.0191	0.0688		752.7995	752.7995	0.0482		754.0055
Worker	0.7344	0.5397	7.0878	0.0179	1.6431	0.0142	1.6573	0.4358	0.0131	0.4488		1,783.0407	1,783.0407	0.0612		1,784.5719
<b>Total</b>	<b>0.8466</b>	<b>3.6644</b>	<b>7.9169</b>	<b>0.0250</b>	<b>1.8160</b>	<b>0.0341</b>	<b>1.8501</b>	<b>0.4855</b>	<b>0.0321</b>	<b>0.5176</b>		<b>2,535.8402</b>	<b>2,535.8402</b>	<b>0.1095</b>		<b>2,538.5774</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0960	2.8721	0.7525	7.0000e-003	0.1729	0.0135	0.1864	0.0498	0.0129	0.0627		747.9667	747.9667	0.0456		749.1078
Worker	0.6765	0.4813	6.4363	0.0174	1.6431	0.0137	1.6569	0.4358	0.0127	0.4484		1,728.8859	1,728.8859	0.0545		1,730.2486
<b>Total</b>	<b>0.7725</b>	<b>3.3533</b>	<b>7.1888</b>	<b>0.0244</b>	<b>1.8160</b>	<b>0.0273</b>	<b>1.8432</b>	<b>0.4855</b>	<b>0.0256</b>	<b>0.5111</b>		<b>2,476.8526</b>	<b>2,476.8526</b>	<b>0.1002</b>		<b>2,479.3564</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0960	2.8721	0.7525	7.0000e-003	0.1729	0.0135	0.1864	0.0498	0.0129	0.0627		747.9667	747.9667	0.0456		749.1078
Worker	0.6765	0.4813	6.4363	0.0174	1.6431	0.0137	1.6569	0.4358	0.0127	0.4484		1,728.8859	1,728.8859	0.0545		1,730.2486
<b>Total</b>	<b>0.7725</b>	<b>3.3533</b>	<b>7.1888</b>	<b>0.0244</b>	<b>1.8160</b>	<b>0.0273</b>	<b>1.8432</b>	<b>0.4855</b>	<b>0.0256</b>	<b>0.5111</b>		<b>2,476.8526</b>	<b>2,476.8526</b>	<b>0.1002</b>		<b>2,479.3564</b>

**3.6 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6945</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.6 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
<b>Total</b>	<b>0.0690</b>	<b>0.0491</b>	<b>0.6568</b>	<b>1.7700e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>176.4169</b>	<b>176.4169</b>	<b>5.5600e-003</b>		<b>176.5560</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6945</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.6 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
<b>Total</b>	<b>0.0690</b>	<b>0.0491</b>	<b>0.6568</b>	<b>1.7700e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>176.4169</b>	<b>176.4169</b>	<b>5.5600e-003</b>		<b>176.5560</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>41.5068</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1335	0.0949	1.2698	3.4300e-003	0.3242	2.7100e-003	0.3269	0.0860	2.5000e-003	0.0885		341.0727	341.0727	0.0108		341.3416
<b>Total</b>	<b>0.1335</b>	<b>0.0949</b>	<b>1.2698</b>	<b>3.4300e-003</b>	<b>0.3242</b>	<b>2.7100e-003</b>	<b>0.3269</b>	<b>0.0860</b>	<b>2.5000e-003</b>	<b>0.0885</b>		<b>341.0727</b>	<b>341.0727</b>	<b>0.0108</b>		<b>341.3416</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>41.5068</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1335	0.0949	1.2698	3.4300e-003	0.3242	2.7100e-003	0.3269	0.0860	2.5000e-003	0.0885		341.0727	341.0727	0.0108		341.3416
<b>Total</b>	<b>0.1335</b>	<b>0.0949</b>	<b>1.2698</b>	<b>3.4300e-003</b>	<b>0.3242</b>	<b>2.7100e-003</b>	<b>0.3269</b>	<b>0.0860</b>	<b>2.5000e-003</b>	<b>0.0885</b>		<b>341.0727</b>	<b>341.0727</b>	<b>0.0108</b>		<b>341.3416</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3231	11.1224	31.6395	0.1151	9.3614	0.0928	9.4542	2.5053	0.0865	2.5918		11,714.9239	11,714.9239	0.5857		11,729.5656
Unmitigated	2.3231	11.1224	31.6395	0.1151	9.3614	0.0928	9.4542	2.5053	0.0865	2.5918		11,714.9239	11,714.9239	0.5857		11,729.5656

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,288.32	1,256.64	1073.60	4,282,101	4,282,101
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,288.32	1,256.64	1,073.60	4,282,101	4,282,101

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Other Asphalt Surfaces	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
NaturalGas Unmitigated	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	8802.65	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0949</b>	<b>0.8112</b>	<b>0.3452</b>	<b>5.1800e-003</b>		<b>0.0656</b>	<b>0.0656</b>		<b>0.0656</b>	<b>0.0656</b>		<b>1,035.6061</b>	<b>1,035.6061</b>	<b>0.0199</b>	<b>0.0190</b>	<b>1,041.7602</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	8.80265	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0949</b>	<b>0.8112</b>	<b>0.3452</b>	<b>5.1800e-003</b>		<b>0.0656</b>	<b>0.0656</b>		<b>0.0656</b>	<b>0.0656</b>		<b>1,035.6061</b>	<b>1,035.6061</b>	<b>0.0199</b>	<b>0.0190</b>	<b>1,041.7602</b>

**6.0 Area Detail**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Unmitigated	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108



Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4405	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804		26.1780	26.1780	0.0253		26.8108
<b>Total</b>	<b>3.2189</b>	<b>0.1678</b>	<b>14.5512</b>	<b>7.7000e-004</b>		<b>0.0804</b>	<b>0.0804</b>		<b>0.0804</b>	<b>0.0804</b>	<b>0.0000</b>	<b>26.1780</b>	<b>26.1780</b>	<b>0.0253</b>	<b>0.0000</b>	<b>26.8108</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4405	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804		26.1780	26.1780	0.0253		26.8108
<b>Total</b>	<b>3.2189</b>	<b>0.1678</b>	<b>14.5512</b>	<b>7.7000e-004</b>		<b>0.0804</b>	<b>0.0804</b>		<b>0.0804</b>	<b>0.0804</b>	<b>0.0000</b>	<b>26.1780</b>	<b>26.1780</b>	<b>0.0253</b>	<b>0.0000</b>	<b>26.8108</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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Victoria Greens Unmitigated - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**Victoria Greens Unmitigated**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	87.79	1000sqft	2.02	87,788.00	0
Parking Lot	62.00	Space	0.56	24,800.00	0
Condo/Townhouse	176.00	Dwelling Unit	8.07	126,890.00	503

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	558.44	<b>CH4 Intensity (lb/MW hr)</b>	0.023	<b>N2O Intensity (lb/MW hr)</b>	0.005

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

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

Project Characteristics - Interpolated RPS 2022

Land Use - Data provided by applicant.

Trips and VMT - Based on applicant data.

Demolition - Caltrans guidance specifies 0.25 feet asphalt parking thickness. Equivalent tonnage based on asphalt density of 145 lb/cubic feet  
[http://www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=144&Itemid=330](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330)

Grading - data provided by applicant.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Provided by applicant.

Energy Use -

Woodstoves - Data provided by applicant.

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	149.60	0.00
tblFireplaces	NumberNoFireplace	17.60	176.00
tblFireplaces	NumberWood	8.80	0.00
tblGrading	AcresOfGrading	75.00	8.07
tblGrading	MaterialExported	0.00	30,239.00
tblLandUse	LandUseSquareFeet	87,790.00	87,788.00
tblLandUse	LandUseSquareFeet	176,000.00	126,890.00
tblLandUse	LotAcreage	11.00	8.07
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	558.44
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	37.00	27.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	174.00	147.00
tblTripsAndVMT	WorkerTripNumber	35.00	29.00
tblVehicleTrips	ST_TR	5.67	7.14
tblVehicleTrips	SU_TR	4.84	6.10
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	NumberCatalytic	8.80	0.00
tblWoodstoves	NumberNoncatalytic	8.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.0357	93.6878	42.8246	0.1627	18.2675	2.5284	20.6596	9.9840	2.3314	12.1848	0.0000	17,019.44 51	17,019.44 51	2.7273	0.0000	17,087.62 75
2020	41.6550	22.5903	23.5733	0.0501	1.8160	1.1445	2.9605	0.4855	1.0761	1.5617	0.0000	4,908.483 5	4,908.483 5	0.7228	0.0000	4,926.553 9
<b>Maximum</b>	<b>41.6550</b>	<b>93.6878</b>	<b>42.8246</b>	<b>0.1627</b>	<b>18.2675</b>	<b>2.5284</b>	<b>20.6596</b>	<b>9.9840</b>	<b>2.3314</b>	<b>12.1848</b>	<b>0.0000</b>	<b>17,019.44 51</b>	<b>17,019.44 51</b>	<b>2.7273</b>	<b>0.0000</b>	<b>17,087.62 75</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.0357	93.6878	42.8246	0.1627	7.2470	2.5284	9.6391	3.9263	2.3314	6.1271	0.0000	17,019.44 51	17,019.44 51	2.7273	0.0000	17,087.62 75
2020	41.6550	22.5903	23.5733	0.0501	1.8160	1.1445	2.9605	0.4855	1.0761	1.5617	0.0000	4,908.483 5	4,908.483 5	0.7228	0.0000	4,926.553 9
<b>Maximum</b>	<b>41.6550</b>	<b>93.6878</b>	<b>42.8246</b>	<b>0.1627</b>	<b>7.2470</b>	<b>2.5284</b>	<b>9.6391</b>	<b>3.9263</b>	<b>2.3314</b>	<b>6.1271</b>	<b>0.0000</b>	<b>17,019.44 51</b>	<b>17,019.44 51</b>	<b>2.7273</b>	<b>0.0000</b>	<b>17,087.62 75</b>

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.87	0.00	46.66	57.86	0.00	44.07	0.00	0.00	0.00	0.00	0.00	0.00



Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Energy	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Mobile	2.2548	11.3956	29.9764	0.1095	9.3614	0.0932	9.4547	2.5053	0.0870	2.5923		11,151.3850	11,151.3850	0.5836		11,165.9760
<b>Total</b>	<b>5.5686</b>	<b>12.3746</b>	<b>44.8728</b>	<b>0.1155</b>	<b>9.3614</b>	<b>0.2392</b>	<b>9.6006</b>	<b>2.5053</b>	<b>0.2329</b>	<b>2.7382</b>	<b>0.0000</b>	<b>12,213.1691</b>	<b>12,213.1691</b>	<b>0.6288</b>	<b>0.0190</b>	<b>12,234.5469</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Energy	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Mobile	2.2548	11.3956	29.9764	0.1095	9.3614	0.0932	9.4547	2.5053	0.0870	2.5923		11,151.3850	11,151.3850	0.5836		11,165.9760
<b>Total</b>	<b>5.5686</b>	<b>12.3746</b>	<b>44.8728</b>	<b>0.1155</b>	<b>9.3614</b>	<b>0.2392</b>	<b>9.6006</b>	<b>2.5053</b>	<b>0.2329</b>	<b>2.7382</b>	<b>0.0000</b>	<b>12,213.1691</b>	<b>12,213.1691</b>	<b>0.6288</b>	<b>0.0190</b>	<b>12,234.5469</b>

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/12/2019	5	10	
3	Grading	Grading	7/13/2019	8/23/2019	5	30	
4	Building Construction	Building Construction	8/24/2019	10/16/2020	5	300	
5	Paving	Paving	10/17/2020	11/13/2020	5	20	
6	Architectural Coating	Architectural Coating	11/14/2020	12/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 8.07**

**Acres of Paving: 2.58**

**Residential Indoor: 256,952; Residential Outdoor: 85,651; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,755 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	13.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	15.00	0.00	3,780.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	147.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1359	0.0000	0.1359	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
<b>Total</b>	<b>3.5134</b>	<b>35.7830</b>	<b>22.0600</b>	<b>0.0388</b>	<b>0.1359</b>	<b>1.7949</b>	<b>1.9308</b>	<b>0.0206</b>	<b>1.6697</b>	<b>1.6902</b>		<b>3,816.8994</b>	<b>3,816.8994</b>	<b>1.0618</b>		<b>3,843.4451</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.2600e-003	0.2017	0.0453	5.1000e-004	0.0114	7.4000e-004	0.0121	3.1200e-003	7.1000e-004	3.8300e-003		55.2402	55.2402	4.0200e-003		55.3407
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.0610	0.6637	1.7200e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		171.3196	171.3196	5.8900e-003		171.4670
<b>Total</b>	<b>0.0893</b>	<b>0.2627</b>	<b>0.7090</b>	<b>2.2300e-003</b>	<b>0.1790</b>	<b>2.1900e-003</b>	<b>0.1812</b>	<b>0.0476</b>	<b>2.0400e-003</b>	<b>0.0496</b>		<b>226.5599</b>	<b>226.5599</b>	<b>9.9100e-003</b>		<b>226.8076</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0530	0.0000	0.0530	8.0200e-003	0.0000	8.0200e-003			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
<b>Total</b>	<b>3.5134</b>	<b>35.7830</b>	<b>22.0600</b>	<b>0.0388</b>	<b>0.0530</b>	<b>1.7949</b>	<b>1.8479</b>	<b>8.0200e-003</b>	<b>1.6697</b>	<b>1.6777</b>	<b>0.0000</b>	<b>3,816.8994</b>	<b>3,816.8994</b>	<b>1.0618</b>		<b>3,843.4451</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.2600e-003	0.2017	0.0453	5.1000e-004	0.0114	7.4000e-004	0.0121	3.1200e-003	7.1000e-004	3.8300e-003		55.2402	55.2402	4.0200e-003		55.3407
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.0610	0.6637	1.7200e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		171.3196	171.3196	5.8900e-003		171.4670
<b>Total</b>	<b>0.0893</b>	<b>0.2627</b>	<b>0.7090</b>	<b>2.2300e-003</b>	<b>0.1790</b>	<b>2.1900e-003</b>	<b>0.1812</b>	<b>0.0476</b>	<b>2.0400e-003</b>	<b>0.0496</b>		<b>226.5599</b>	<b>226.5599</b>	<b>9.9100e-003</b>		<b>226.8076</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
<b>Total</b>	<b>0.0997</b>	<b>0.0732</b>	<b>0.7965</b>	<b>2.0700e-003</b>	<b>0.2012</b>	<b>1.7300e-003</b>	<b>0.2029</b>	<b>0.0534</b>	<b>1.6000e-003</b>	<b>0.0550</b>		<b>205.5836</b>	<b>205.5836</b>	<b>7.0700e-003</b>		<b>205.7604</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>7.0458</b>	<b>2.3904</b>	<b>9.4362</b>	<b>3.8730</b>	<b>2.1991</b>	<b>6.0721</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
<b>Total</b>	<b>0.0997</b>	<b>0.0732</b>	<b>0.7965</b>	<b>2.0700e-003</b>	<b>0.2012</b>	<b>1.7300e-003</b>	<b>0.2029</b>	<b>0.0534</b>	<b>1.6000e-003</b>	<b>0.0550</b>		<b>205.5836</b>	<b>205.5836</b>	<b>7.0700e-003</b>		<b>205.7604</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4214	0.0000	6.4214	3.3583	0.0000	3.3583			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>6.4214</b>	<b>2.3827</b>	<b>8.8040</b>	<b>3.3583</b>	<b>2.1920</b>	<b>5.5503</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2137	39.1066	8.7841	0.0990	2.2030	0.1443	2.3472	0.6039	0.1380	0.7419		10,708.1060	10,708.1060	0.7788		10,727.5751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.0610	0.6637	1.7200e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		171.3196	171.3196	5.8900e-003		171.4670
<b>Total</b>	<b>1.2968</b>	<b>39.1676</b>	<b>9.4479</b>	<b>0.1007</b>	<b>2.3706</b>	<b>0.1457</b>	<b>2.5163</b>	<b>0.6483</b>	<b>0.1394</b>	<b>0.7877</b>		<b>10,879.4256</b>	<b>10,879.4256</b>	<b>0.7847</b>		<b>10,899.0421</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5043	0.0000	2.5043	1.3097	0.0000	1.3097			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>2.5043</b>	<b>2.3827</b>	<b>4.8870</b>	<b>1.3097</b>	<b>2.1920</b>	<b>3.5018</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2137	39.1066	8.7841	0.0990	2.2030	0.1443	2.3472	0.6039	0.1380	0.7419		10,708.1060	10,708.1060	0.7788		10,727.5751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0831	0.0610	0.6637	1.7200e-003	0.1677	1.4500e-003	0.1691	0.0445	1.3300e-003	0.0458		171.3196	171.3196	5.8900e-003		171.4670
<b>Total</b>	<b>1.2968</b>	<b>39.1676</b>	<b>9.4479</b>	<b>0.1007</b>	<b>2.3706</b>	<b>0.1457</b>	<b>2.5163</b>	<b>0.6483</b>	<b>0.1394</b>	<b>0.7877</b>		<b>10,879.4256</b>	<b>10,879.4256</b>	<b>0.7847</b>		<b>10,899.0421</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1170	3.1289	0.9139	6.8700e-003	0.1729	0.0203	0.1931	0.0498	0.0194	0.0691		732.4482	732.4482	0.0515		733.7345
Worker	0.8141	0.5977	6.5044	0.0169	1.6431	0.0142	1.6573	0.4358	0.0131	0.4488		1,678.9323	1,678.9323	0.0578		1,680.3762
<b>Total</b>	<b>0.9311</b>	<b>3.7266</b>	<b>7.4183</b>	<b>0.0237</b>	<b>1.8160</b>	<b>0.0344</b>	<b>1.8504</b>	<b>0.4855</b>	<b>0.0324</b>	<b>0.5180</b>		<b>2,411.3805</b>	<b>2,411.3805</b>	<b>0.1092</b>		<b>2,414.1108</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1170	3.1289	0.9139	6.8700e-003	0.1729	0.0203	0.1931	0.0498	0.0194	0.0691		732.4482	732.4482	0.0515		733.7345
Worker	0.8141	0.5977	6.5044	0.0169	1.6431	0.0142	1.6573	0.4358	0.0131	0.4488		1,678.9323	1,678.9323	0.0578		1,680.3762
<b>Total</b>	<b>0.9311</b>	<b>3.7266</b>	<b>7.4183</b>	<b>0.0237</b>	<b>1.8160</b>	<b>0.0344</b>	<b>1.8504</b>	<b>0.4855</b>	<b>0.0324</b>	<b>0.5180</b>		<b>2,411.3805</b>	<b>2,411.3805</b>	<b>0.1092</b>		<b>2,414.1108</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1004	2.8715	0.8299	6.8200e-003	0.1729	0.0137	0.1866	0.0498	0.0131	0.0629		727.5125	727.5125	0.0487		728.7287
Worker	0.7512	0.5328	5.8949	0.0163	1.6431	0.0137	1.6569	0.4358	0.0127	0.4484		1,627.9080	1,627.9080	0.0513		1,629.1907
<b>Total</b>	<b>0.8516</b>	<b>3.4043</b>	<b>6.7248</b>	<b>0.0232</b>	<b>1.8160</b>	<b>0.0275</b>	<b>1.8434</b>	<b>0.4855</b>	<b>0.0258</b>	<b>0.5113</b>		<b>2,355.4205</b>	<b>2,355.4205</b>	<b>0.1000</b>		<b>2,357.9194</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1004	2.8715	0.8299	6.8200e-003	0.1729	0.0137	0.1866	0.0498	0.0131	0.0629		727.5125	727.5125	0.0487		728.7287
Worker	0.7512	0.5328	5.8949	0.0163	1.6431	0.0137	1.6569	0.4358	0.0127	0.4484		1,627.9080	1,627.9080	0.0513		1,629.1907
<b>Total</b>	<b>0.8516</b>	<b>3.4043</b>	<b>6.7248</b>	<b>0.0232</b>	<b>1.8160</b>	<b>0.0275</b>	<b>1.8434</b>	<b>0.4855</b>	<b>0.0258</b>	<b>0.5113</b>		<b>2,355.4205</b>	<b>2,355.4205</b>	<b>0.1000</b>		<b>2,357.9194</b>

**3.6 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6945</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.6 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
<b>Total</b>	<b>0.0767</b>	<b>0.0544</b>	<b>0.6015</b>	<b>1.6700e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>166.1131</b>	<b>166.1131</b>	<b>5.2400e-003</b>		<b>166.2440</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6945</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.6 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
<b>Total</b>	<b>0.0767</b>	<b>0.0544</b>	<b>0.6015</b>	<b>1.6700e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>166.1131</b>	<b>166.1131</b>	<b>5.2400e-003</b>		<b>166.2440</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>41.5068</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1482	0.1051	1.1629	3.2200e-003	0.3242	2.7100e-003	0.3269	0.0860	2.5000e-003	0.0885		321.1519	321.1519	0.0101		321.4050
<b>Total</b>	<b>0.1482</b>	<b>0.1051</b>	<b>1.1629</b>	<b>3.2200e-003</b>	<b>0.3242</b>	<b>2.7100e-003</b>	<b>0.3269</b>	<b>0.0860</b>	<b>2.5000e-003</b>	<b>0.0885</b>		<b>321.1519</b>	<b>321.1519</b>	<b>0.0101</b>		<b>321.4050</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>41.5068</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1482	0.1051	1.1629	3.2200e-003	0.3242	2.7100e-003	0.3269	0.0860	2.5000e-003	0.0885		321.1519	321.1519	0.0101		321.4050
<b>Total</b>	<b>0.1482</b>	<b>0.1051</b>	<b>1.1629</b>	<b>3.2200e-003</b>	<b>0.3242</b>	<b>2.7100e-003</b>	<b>0.3269</b>	<b>0.0860</b>	<b>2.5000e-003</b>	<b>0.0885</b>		<b>321.1519</b>	<b>321.1519</b>	<b>0.0101</b>		<b>321.4050</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2548	11.3956	29.9764	0.1095	9.3614	0.0932	9.4547	2.5053	0.0870	2.5923		11,151.3850	11,151.3850	0.5836		11,165.9760
Unmitigated	2.2548	11.3956	29.9764	0.1095	9.3614	0.0932	9.4547	2.5053	0.0870	2.5923		11,151.3850	11,151.3850	0.5836		11,165.9760

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,288.32	1,256.64	1073.60	4,282,101	4,282,101
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>1,288.32</b>	<b>1,256.64</b>	<b>1,073.60</b>	<b>4,282,101</b>	<b>4,282,101</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Other Asphalt Surfaces	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
NaturalGas Unmitigated	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	8802.65	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0949</b>	<b>0.8112</b>	<b>0.3452</b>	<b>5.1800e-003</b>		<b>0.0656</b>	<b>0.0656</b>		<b>0.0656</b>	<b>0.0656</b>		<b>1,035.6061</b>	<b>1,035.6061</b>	<b>0.0199</b>	<b>0.0190</b>	<b>1,041.7602</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	8.80265	0.0949	0.8112	0.3452	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.6061	1,035.6061	0.0199	0.0190	1,041.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0949</b>	<b>0.8112</b>	<b>0.3452</b>	<b>5.1800e-003</b>		<b>0.0656</b>	<b>0.0656</b>		<b>0.0656</b>	<b>0.0656</b>		<b>1,035.6061</b>	<b>1,035.6061</b>	<b>0.0199</b>	<b>0.0190</b>	<b>1,041.7602</b>

**6.0 Area Detail**

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108
Unmitigated	3.2189	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804	0.0000	26.1780	26.1780	0.0253	0.0000	26.8108

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4405	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804		26.1780	26.1780	0.0253		26.8108
<b>Total</b>	<b>3.2189</b>	<b>0.1678</b>	<b>14.5512</b>	<b>7.7000e-004</b>		<b>0.0804</b>	<b>0.0804</b>		<b>0.0804</b>	<b>0.0804</b>	<b>0.0000</b>	<b>26.1780</b>	<b>26.1780</b>	<b>0.0253</b>	<b>0.0000</b>	<b>26.8108</b>

Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4405	0.1678	14.5512	7.7000e-004		0.0804	0.0804		0.0804	0.0804		26.1780	26.1780	0.0253		26.8108
<b>Total</b>	<b>3.2189</b>	<b>0.1678</b>	<b>14.5512</b>	<b>7.7000e-004</b>		<b>0.0804</b>	<b>0.0804</b>		<b>0.0804</b>	<b>0.0804</b>	<b>0.0000</b>	<b>26.1780</b>	<b>26.1780</b>	<b>0.0253</b>	<b>0.0000</b>	<b>26.8108</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**



Victoria Greens Unmitigated - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

---

**Southern California Edison  
Effect of 28% RPS  
Based on 2012 Baseline Data**

**2022  
Southern California Edison  
Effect of 33% RPS  
Based on 2012 Baseline Data**

2012 Emission Factor <sup>1</sup>	702.44 lb CO2/MWh
2012 Renewables <sup>2</sup>	20%
Without RPS	878.05 lb CO2/MWh
Future Renewables <sup>3</sup>	28.0%
With 28% RPS	632.19 lb CO2/MWh

2012 Emission Factor <sup>1</sup>	702.44 lb CO2/MWh
2012 Renewables <sup>2</sup>	20%
Without RPS	878.05 lb CO2/MWh
Future Renewables <sup>3</sup>	36.4%
With 36.4% RPS	558.44 lb CO2/MWh

Reduction 10.0%

Reduction 20.5%

All renewable energy is assumed to be carbon neutral (i.e. no emissions from biogenic sources).

All renewable energy is assumed to be carbon neutral (i.e. no emissions from biogenic sources).

1. CalEEMod User's Guide, Appendix D, Table 1.2
2. SCE. 2012 Power Content Label (Actual)
3. 20% RPS

1. CalEEMod User's Guide, Appendix D, Table 1.2
2. SCE. 2012 Power Content Label (Actual)
3. Interpolated RPS 33% in 2020 and 50% in 2030  
[http://www.cpuc.ca.gov/RPS\\_Homepage/](http://www.cpuc.ca.gov/RPS_Homepage/)

CH4

CH4

2012 Emission Factor <sup>1</sup>	0.029
With 28% RPS	0.026

2009 Emission Factor <sup>1</sup>	0.029
With 36.4% RPS	0.023

N2O

N2O

2012 Emission Factor <sup>1</sup>	0.00617
With 28% RPS	0.00555

2009 Emission Factor <sup>1</sup>	0.00617
With 36.4% RPS	0.0049

<b>POWER CONTENT LABEL</b>		
<b>ENERGY RESOURCES</b>	<b>2012 SCE POWER MIX (Actual)</b>	<b>2011 CA POWER MIX**</b>
<b>Eligible Renewable</b>	<b>20%</b>	<b>14%</b>
-- Biomass & waste	1%	2%
-- Geothermal	9%	5%
-- Small hydroelectric	1%	2%
-- Solar	1%	0%
-- Wind	8%	5%
<b>Coal</b>	<b>7%</b>	<b>8%</b>
<b>Large Hydroelectric</b>	<b>4%</b>	<b>13%</b>
<b>Natural Gas</b>	<b>21%</b>	<b>37%</b>
<b>Nuclear</b>	<b>7%</b>	<b>16%</b>
<b>Other</b>	<b>0%</b>	<b>0%</b>
Unspecified sources of power*	<b>41%</b>	<b>12%</b>
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>
* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.		
** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year.		
For specific information about this electricity product, contact Southern California Edison. For general information about the Power Content Label, contact the California Energy Commission at 1-800-555-7794 or <a href="http://www.energy.ca.gov/consumer">www.energy.ca.gov/consumer</a> .		

**Trip Rate from F&P**

Land Use	Weekday
Condo/Townhouse	1,288

**Trip Ratio Calculations - Weekday, Saturday, Sunday**

Default VehicleTripsLa ndUseSizeMetri VehicleTripsLandUseSubType c	CalEEMod Default Trip Rates			Percent of Weekday		Revised Trip Rates for CalEEMod			
	WD_TR	ST_TR	SU_TR	Saturday	Sunday	F&P Provided WD_TR	Calc Based on F&P & % ST_TR	Calc Based on F&P & % SU_TR	
Condo/Townhouse	176	5.81	5.67	4.84	98%	83%	7.32	7.14	6.10



**APPENDIX B**  
*Health Risk Assessment*



**Health Risk Assessment Report  
for the Victoria Greens Project  
City of Carson, California**

*Prepared for:*

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**OCTOBER 2018**





# Health Risk Assessment Report for the Victoria Greens Project

## TABLE OF CONTENTS

<b><u>Section</u></b>	<b><u>Page No.</u></b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>I</b>
<b>SUMMARY .....</b>	<b>1</b>
<b>1 INTRODUCTION.....</b>	<b>3</b>
1.1 Purpose.....	3
1.2 Project Description.....	3
1.3 Sensitive Receptors.....	3
1.4 Toxic Air Contaminants.....	4
1.5 Cancer Risk.....	5
1.6 Acute and Chronic Non-Cancer Health Impacts .....	5
<b>2 GUIDANCE AND THRESHOLDS .....</b>	<b>7</b>
2.1 Office of Environmental Health Hazard Assessment’s Guidance.....	7
2.2 South Coast Air Quality Management District Guidance.....	8
<b>3 MODELING METHODOLOGY.....</b>	<b>9</b>
3.1 Emission Calculation .....	9
3.2 Dispersion Model.....	15
3.3 Health Risk Assessment Methodology .....	19
<b>4 HEALTH RISK RESULTS .....</b>	<b>21</b>
<b>5 CONCLUSIONS .....</b>	<b>23</b>
<b>6 REFERENCES.....</b>	<b>25</b>

### FIGURE

1	Wind Rose of Meteorological Data – Long Beach Airport Station.....	17
---	--	----

### TABLES

1	SCAQMD CEQA TAC Emissions Thresholds .....	8
2	Construction Phasing Assumptions .....	9
3	Unmitigated Project Annual On-Site Construction Emissions – Exhaust Only .....	11
4	Mitigated Project Annual On-Site Construction Emissions – Exhaust Only .....	12
5	Unmitigated Cumulative Emissions .....	12
6	Summary of Maximum Construction Cancer and Chronic Health Risks – Unmitigated.....	21
7	Summary of Maximum Construction Cancer and Chronic Health Risks – Mitigated .....	21
8	Summary of Maximum Cumulative Cancer and Chronic Health Risks – Unmitigated....	22

**TABLE OF CONTENTS (CONTINUED)**

**Page No.**

**APPENDICES**

- A Emission Calculations
- B AERMOD Input and HARP2 Output Files

# Health Risk Assessment Report for the Victoria Greens Project

## ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
ASF	age-sensitivity factor
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
DBR	daily breathing rate
DPM	diesel particulate matter
EPA	U.S. Environmental Protection Agency
FAH	fraction of time at home
g/s	grams per second
HARP2	Hotspots Analysis and Reporting Program, Version 2
HOA	homeowners association
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
MERV	Minimum Efficiency Reporting Value
MM	mitigation measure
OEHHA	Office of Environmental Health Hazard Assessment
PM <sub>10</sub>	particulate matter with a diameter less the 10 microns
REL	reference exposure level
SCAQMD	South Coast Air Quality Management District
SR-	State Route
TAC	toxic air contaminant
TRU	transport refrigeration unit
µg/m <sup>3</sup>	microgram per cubic meter

# Health Risk Assessment Report for the Victoria Greens Project

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## SUMMARY

The purpose of this health risk assessment (HRA) is to determine the potential cancer risk and non-cancer health impacts to existing sensitive residential receptors in proximity to the proposed Victoria Greens Project (project) due to toxic air contaminant (TAC) emissions from construction of the project. Under the cumulative scenario, the HRA also determines the potential cancer risk and non-cancer health impacts to the future project residential receptors from the surrounding TAC-emitting sources.

Air dispersion modeling was conducted using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 18081 and the Hotspots Analysis and Reporting Program Version 2 (HARP2). The South Coast Air Quality Management District's (SCAQMD's) *Modeling Guidance for AERMOD* (SCAQMD 2018a) and the Office of Environmental Health Hazard Assessment's (OEHHA's) *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments* (2015 Risk Assessment Guidelines Manual) (OEHHA 2015) were used to prepare this HRA. For the residential health risk, the HRA assumes exposure from construction-generated TAC emissions would start in the third trimester of pregnancy and occur 8 hours per day, 5 days per week, for 1.5 years. For the health risk on the future sensitive receptors (residential), the HRA assumes exposure from surrounding TAC emission-generating sources would start in the third trimester of pregnancy and occur for 30 years.

This HRA finds that unmitigated project construction would result in potential chronic health risk at the maximally exposed residential receptor of 0.011, which is below the SCAQMD threshold of 1.0. Chronic health risk impacts would be less than significant. The unmitigated potential cancer risk at the maximally exposed residential receptor would be 13.79 in 1 million, which would exceed the SCAQMD threshold of 10 in 1 million. With implementation of mitigation, the potential cancer risk estimates at the maximally exposed residential receptor would be reduced to 1.49 in 1 million. The estimated cancer risk from project construction at the maximally exposed residential receptor would be less than the applicable SCAQMD threshold and would be considered a less-than-significant impact.

The HRA finds that unmitigated cumulative health risk from TAC-emitting surrounding sources would result in a potential cancer risk at the maximally exposed residential receptor of 29.50 in 1 million, which would exceed the SCAQMD threshold of 10 in 1 million. The HRA finds that the unmitigated chronic health risk of 0.007 would be below the SCAQMD threshold of 1.0. With implementation of mitigation, the potential cancer risk estimates at the maximally exposed residential receptor would be reduced to 9.0 in 1 million. Thus, the estimated cancer risk from surrounding sources at the maximally exposed residential receptor would be less than the applicable SCAQMD threshold and would be considered a less-than-significant impact. No short

## **Health Risk Assessment Report for the Victoria Greens Project**

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term, acute relative exposure values are established and regulated for diesel particulate matter (DPM) and are therefore not addressed in this assessment.

# **Health Risk Assessment Report for the Victoria Greens Project**

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## **1 INTRODUCTION**

### **1.1 Purpose**

In support of the air quality assessment, the health risk assessment (HRA) modeling analysis was prepared to estimate health risk impacts to existing residents from exposure to toxic air contaminant (TAC) emissions from construction of the proposed Victoria Greens Project (project). The project includes residential land uses in close proximity to industrial/warehouse land uses. These types of land uses emit TAC emission via heavy-duty trucks and emergency generators. The analysis in this HRA uses air dispersion modeling and Hotspots Analysis and Reporting Program Version 2 (HARP2) to evaluate potential health risks associated with the project. Results of the modeling analysis are compared with the most recent California Environmental Quality Act (CEQA) significance thresholds established by the South Coast Air Quality Management District (SCAQMD). Per CEQA Guidelines, Appendix G (14 CCR 15000 et seq.), the HRA directly addresses question (d): Would the project expose sensitive receptors to substantial pollutant concentrations?

### **1.2 Project Description**

The project is a 176-unit multifamily residential development on approximately 8.07 acres, which includes 50 two-bedroom units and 126 three-bedroom units. Additionally, the project would include a recreation center, a dog park, a linear park, and 62-space surface parking lot. A total of 87,788 square feet would be paved.

### **1.3 Sensitive Receptors**

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air-pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest off-site sensitive receptors to the project site include residences located approximately 140 feet west of the project site boundary.

# Health Risk Assessment Report for the Victoria Greens Project

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## 1.4 Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute (short-term) and/or chronic (long-term) non-cancer health effects. A toxic substance released into the air is considered a TAC. Examples include certain aromatic and chlorinated hydrocarbons, diesel particulate matter (DPM), certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ system and may be experienced either by acute or chronic exposure to a given TAC.

California's air toxics control program began in 1983 with the passage of the Toxic Air Contaminant Identification and Control Act, Assembly Bill (AB) 1807, better known as the Tanner Bill. The Tanner Bill established a regulatory process for the scientific and public review of individual toxic compounds. When a compound becomes listed as a TAC under the Tanner process, the California Air Resources Board (CARB) normally establishes minimum statewide emission-control measures to be adopted by air quality management districts and air pollution control districts. By 1992, 18 of the 189 federal hazardous air pollutants had been listed by CARB as state TACs. In April 1993, CARB added 171 substances to the state program to make the state TAC list equivalent to the federal list of hazardous air pollutants. In 1998, CARB designated diesel engine exhaust particulate matter (DPM) as a TAC (CARB 1998). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure values are established and regulated and are therefore not addressed in this construction-generated assessment.

The second major component of California's air toxics program, supplementing the Tanner process, was provided by the passage of AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. AB 2588 currently regulates over 600 compounds, including all of the Tanner-designated TACs.

Additionally, Proposition 65, passed by California voters in 1986, required that a list of carcinogenic and reproductive toxicants found in the environment be compiled, the discharge of these toxicants into drinking water be prohibited, and warnings of public exposure by air, land, or water be posted if a significant adverse public health risk is posed. The emission of any of listed substances by a facility would require a public warning unless health risks could be demonstrated to be less than significant. For carcinogens, Proposition 65 defines the "no significant risk level" as the level of exposure that would result in an increased cancer risk of



## Health Risk Assessment Report for the Victoria Greens Project

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greater than 10 in 1 million over a 70-year lifetime. The “no significant risk level” is 1/1,000 of the No Observable Effect Level for reproductive toxicants.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, On-Road Heavy Duty (New) Vehicle Program, In-Use Off-Road Diesel Vehicle Regulation, and New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

### 1.5 Cancer Risk

Cancer risk is defined as the increase in lifetime probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased probability in 1 million. The cancer risk from inhalation of a TAC is estimated by calculating the inhalation (and if applicable, ingestion and dermal) dose in units of milligrams per kilogram body weight per day based on an ambient concentration in units of micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), breathing rate, and exposure period and multiplying the dose by the inhalation cancer potency factor, expressed as (milligrams/kilogram body weight per day)<sup>-1</sup>. Cancer risks are typically calculated for all carcinogenic TACs and summed to calculate the overall increase in cancer risk to an individual. The calculation procedure assumes that cancer risk is proportional to concentrations at any level of exposure and that risks due to different carcinogens are additive. This approach is generally considered a conservative assumption at low doses and is consistent with the current Office of Environmental Health Hazard Assessment (OEHHA) regulatory approach. Exposure to carcinogenic TACs does not imply that the exposed individual would contract cancer; rather, the cancer risk is a probability of developing cancer if other factors (e.g., heredity, exposure to environmental or workplace risks that compromise the immune system, overall health) would result in an increased susceptibility to developing cancer.

### 1.6 Acute and Chronic Non-Cancer Health Impacts

The non-cancer health impact of an inhaled TAC is measured by the hazard quotient, which is the ratio of the ambient concentration of a TAC in units of  $\mu\text{g}/\text{m}^3$  divided by the reference exposure level (REL), also in units of  $\mu\text{g}/\text{m}^3$ . The REL is the concentration at or below which no adverse health effects are anticipated. The REL is typically based on health effects on a

## **Health Risk Assessment Report for the Victoria Greens Project**

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particular target organ system, such as the respiratory system, liver, or central nervous system. Hazard quotients of individual TACs are then summed for each target organ system to obtain a hazard index.

## 2 GUIDANCE AND THRESHOLDS

### 2.1 Office of Environmental Health Hazard Assessment's Guidance

OEHHA's most recent guidance is the 2015 Risk Assessment Guidelines Manual (OEHHA 2015), which was adopted in 2015 to replace the 2003 HRA Guidance Manual. The Children's Environmental Health Protection Act of 1999 (Senate Bill 25), which requires explicit consideration of infants and children in assessing risks from air toxics, requires revisions of the methods for both non-cancer and cancer risk assessment, and of the exposure assumptions in the 2003 HRA Guidance Manual. In response to Senate Bill 25, OEHHA released three technical support documents addressing RELs (OEHHA 2008), cancer potency (OEHHA 2009), and exposure assessment and stochastic analysis (OEHHA 2012), and it adopted the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). The technical support document for RELs and continuing work to re-evaluate TACs to ensure adequate protection for infants and children has led to revisions of RELs for approximately 10 chemicals and chemical families. The basic methodology for evaluating acute and chronic health effects using the RELs otherwise remained the same as in the previous guidance manual. Moreover, RELs are designed to protect the most sensitive individuals in the population, including infants and children, by selecting appropriate toxicological data and including margins of safety. Accordingly, the evaluation methods are assumed to protect children and other sensitive subpopulations (groups of more highly susceptible individuals) from adverse health effects in the event of exposure (OEHHA 2008).

The cancer risk methodology described in the exposure assessment and stochastic analysis technical support document and the 2015 Risk Assessment Guidelines Manual accounts for the higher sensitivity of infants and children by applying age-specific daily breathing rates (DBRs) and age-sensitivity factors (ASFs). According to the technical support document, "accounting for effects of early-in life exposure requires accounting for both the increased potency of early in life exposure to carcinogens and the greater exposure on a per [kilogram] body weight that occurs early in life due to behavioral and physiological differences between infants and children, and adults" (OEHHA 2012). In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years and an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood (OEHHA 2015). The ASF for adults is 1. In addition to the ASFs, children have higher DBRs per unit of body weight than adults. The OEHHA guidance manual considers the age-specific breathing rates in the cancer risk calculations.

In addition, OEHHA and CARB evaluated information from activity patterns databases to estimate the fraction of time at home (FAH) during the day. From the third trimester to age <2 years, 85% of time is spent at home. From age 2 through <16 years, 72% of time is spent at home. From age 16 years and greater, 73% of time is spent at home. However, for facilities with

# Health Risk Assessment Report for the Victoria Greens Project

any school within the 1 in a million or greater isopleth, the OEHHA recommends using an FAH of 100% for children under 16 years old (OEHHA 2015). Cancer risk parameters, such as ASFs, DBRs, exposure period, FAH, and cancer potency factors were based on the values and data recommended by OEHHA as implemented in HARP2.

## 2.2 South Coast Air Quality Management District Guidance

SCAQMD's *Modeling Guidance for AERMOD* (SCAQMD 2018a) provides guidance to perform dispersion modeling for use in HRAs within the South Coast Air Basin. SCAQMD's current thresholds of significance for TAC emissions are presented in Table 1.

**Table 1**  
**SCAQMD CEQA TAC Emissions Thresholds**

Carcinogens	Noncarcinogens
	<i>Acute or Chronic</i>
Maximally exposed individual risk equals or exceeds 10 in 1 million	Hazard Index equals or exceeds 1.0 for the maximally exposed individual

**Source:** SCAQMD 2015.

**Notes:** CEQA = California Environmental Quality Act; SCAQMD = South Coast Air Quality Management District; TAC = toxic air contaminant

# Health Risk Assessment Report for the Victoria Greens Project

## 3 MODELING METHODOLOGY

### 3.1 Emission Calculation

#### Construction Emissions Calculations

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the applicant and CalEEMod default values. All assumptions pertaining to construction emissions, including phasing, equipment, and vehicle trips, are based on the project's Air Quality and Greenhouse Gas Emissions Analysis Technical Report. Complete detailed construction assumptions are included in Appendix A and are summarized below.

The project is a 176-unit multifamily residential development, which includes 50 two-bedroom units and 126 three-bedroom units. Additionally, the project would include a recreation center, dog park, linear park, and 62-space surface parking lot. A total of 87,788 square feet would be paved. For the purposes of modeling, it was assumed that construction of the project would commence in June 2019 and would last approximately 18 months, ending in December 2020. The analysis contained herein is based on the following assumptions (duration of phases is approximate), as shown in Table 2.

**Table 2**  
**Construction Phasing Assumptions**

Project Construction Phase	Start Date	End Date	Duration (weeks)
Demolition	06/01/2019	06/28/2019	4
Site preparation	06/29/2019	07/12/2019	2
Grading	07/13/2019	08/23/2019	6
Building construction	08/24/2019	10/16/2020	60
Paving	10/17/2020	11/13/2020	4
Architectural coating	11/14/2020	12/11/2020	4

**Source:** See Appendix A for complete results.

For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month), during construction. For the HRA, DPM emitted from exhaust from on-site construction equipment and diesel vehicles is a concern. Notably, to include only on-site emissions from diesel haul and vendor trucks, they were conservatively assumed to operate for 0.19 miles on site (1,000 feet).

# Health Risk Assessment Report for the Victoria Greens Project

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## Cumulative Emissions Calculations

The HRA was performed to evaluate potential health risk associated with the surrounding TAC-emitting surrounding sources on the future project residential receptors.

### *State Route 91*

Emissions of DPM from motor vehicles on State Route (SR-) 91 have the highest potential for cancer risk due to the high volume of heavy-duty vehicle traffic and proximity to the project site. A composite DPM emission factor was developed using EMFAC2017 in Los Angeles County for the earliest project buildout year 2021. Traffic data was attained from California Department of Transportation 2016 traffic volumes on California state highways. The annual level of vehicle miles traveled for the eastbound and westbound portions of SR-91 was calculated based on the segment length and traffic count volumes for 2016. At the time of this report, 2016 is the most recent traffic data available. The DPM emission factor from EMFAC2017 for each vehicle fleet representative of Los Angeles County was multiplied by the annual vehicle miles traveled to develop the composite annual emission rate, expressed in pounds per year.

### *Delivery Truck Idling and Transport Refrigeration Units*

Emissions from delivery trucks and transport refrigeration units (TRUs) at loading docks or loading areas associated with the surrounding industrial and warehouses have the highest potential for cancer risk. Truck idling emission rates were obtained from EMFAC2017. Dudek staff interviewed the warehouse manager of each warehouse and observed the frequency of truck deliveries and the duration of their visits (Pak et al., pers. comm. 2018; Cruz, pers. comm. 2018). Some of the delivery trucks, equipped with TRUs, transport refrigerated food products generate emissions of DPM. TRU emission rates were obtained from OFFROAD 2017. Delivery truck idling would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measure. TRUs are designed to maintain the temperature inside delivery truck trailers. Each TRU was assumed to operate for 30 minutes per visit (SJVAPCD 2006).

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* encourages consideration of the health impacts of distribution centers that accommodate more than 100 trucks per day on sensitive receptors sited within 1,000 feet from the source in the land use decision-making process (CARB 2005). The distribution centers and commercial land uses to the north, east, and south of the project site generate emissions of DPM from truck activity. DPM emitted by idling delivery trucks and idling from TRUs at loading areas were included in the analysis. Delivery truck idling emissions were modeled in accordance with SJVAPCD modeling guidance (SJVAPCD 2006).

# Health Risk Assessment Report for the Victoria Greens Project

## Emergency Diesel Generators

Two 560-horsepower and one 535-horsepower emergency diesel generators are located adjacent to the west of the project site. Based on the SCAQMD's Permit to Operate, Permit Numbers G6144, G6145, and G30576, each generator is permitted to operate a maximum of 200 hours per year. The emission rates were calculated using the particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM<sub>10</sub>) from Tier 4 exhaust emission standards (EPA 2016).

## Unmitigated Construction Emissions

Table 3 presents the estimated unmitigated annual construction exhaust PM<sub>10</sub> emissions, a surrogate for DPM, generated during construction of the project.

**Table 3**  
**Unmitigated Project Annual On-Site Construction Emissions – Exhaust Only**

Year	PM <sub>10</sub>	
	Tons per Year	Pounds per Year
2019	0.13	250.40
2020	0.12	249.80

**Source:** See Appendix A for complete results.

**Notes:** PM<sub>10</sub> = coarse particulate matter

As shown in Section 4, the results of the HRA using the default construction emission factors in CalEEMod result in a potentially significant impact. As a result, the following mitigation is included to reduce DPM emissions from construction equipment.

## Mitigation Measures

- AQ-1:** To reduce the potential for health risks as a result of construction of the project, the applicant shall:
- A. Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all 75-horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City of Carson that Tier 4 Interim equipment is not available.
  - B. All other diesel-powered construction equipment will be classified as Tier 3 or higher, at a minimum, except where the project applicant establishes to the satisfaction of the City of Carson that Tier 3 equipment is not available.

## Health Risk Assessment Report for the Victoria Greens Project

In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate (from Tier 4 Interim to Tier 4 Final). Engine Tier requirements in accordance with this measure shall be incorporated on all construction plans.

### Mitigated Construction Emissions

The project emissions incorporating the tiered equipment as outlined in mitigation measure (MM) AQ-1 are shown in Table 4.

**Table 4**  
**Mitigated Project Annual On-Site Construction Emissions – Exhaust Only**

Year	PM <sub>10</sub>	
	Tons per Year	Pounds per Year
2019	0.009	18.04
2020	0.014	27.00

**Source:** See Appendix A for complete results.

**Notes:** PM<sub>10</sub> = coarse particulate matter

### Unmitigated Cumulative Emissions

Table 5 presents the estimated unmitigated annual and hourly DPM emissions from SR-91, truck idling, TRU idling, and the emergency diesel generator emissions.

**Table 5**  
**Unmitigated Cumulative Emissions**

Source	Exhaust PM <sub>10</sub>	
	Pounds per Year	Pounds per Hour
SR-91 Eastbound	609.12	6.95E-02
SR-91 Westbound	608.73	6.95E-02
Building 1 Truck Idling	9.34E-05	3.59E-07
Building 2 Truck Idling	9.80E-04	3.77E-06
Building 2 TRU Idling	1.30E-03	5.01E-06
Building 3 Truck Idling	4.67E-06	1.80E-08
Building 4 Truck Idling	1.87E-04	7.18E-07
Building 5 Truck Idling	2.80E-04	1.08E-06
Building 6 Truck Idling	1.96E-03	7.54E-06
Building 7 Truck Idling	8.40E-04	3.23E-06
Building 8 Truck Idling	5.60E-04	2.15E-06
Building 9 Truck Idling	1.12E-03	4.31E-06
Building 10 Truck Idling	5.60E-04	2.15E-06
Building 10 TRU Idling	2.13E-04	8.18E-07



# Health Risk Assessment Report for the Victoria Greens Project

**Table 5**  
**Unmitigated Cumulative Emissions**

Source	Exhaust PM <sub>10</sub>	
	Pounds per Year	Pounds per Hour
Diesel Emergency Generator 1	3.70	1.85E-02
Diesel Emergency Generator 2	3.70	1.85E-02
Diesel Emergency Generator 3	3.54	1.77E-02

**Source:** See Appendix A for complete results.

**Notes:** PM<sub>10</sub> = coarse particulate matter; SR- = State Route; TRU = transport refrigeration unit

## Mitigation Measures

Consistent with SCAQMD guidance, mitigation measures were evaluated to identify ways to ensure that future residents of the project would not be exposed to health risks that exceed SCAQMD's significance thresholds and to ensure that impacts related to community risk and hazards from placement of sensitive receptors proximate to major sources of TACs would be less than significant.

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) reported that the Minimum Efficiency Reporting Value (MERV) 13 filters remove 90% of particles ranging from 1 to 3 microns, and less than 75% for particles ranging from 0.3 to 1 microns (ASHRAE 2007). ASHRAE reported that MERV 16 filters remove 95% of particles ranging from 0.3 to 1 microns and larger. In a study conducted by Fisk et al. on the performance and costs of particulate air filtration technologies, it was shown that if the ventilation systems are operated with one air exchange per hour of outside air and four air exchanges per hour of recirculated air: (i) MERV 13 (ASHRAE Dust Spot 85%) filters provide an 80% or greater reduction of outdoor fine particulate matter (such as DPM); and (ii) MERV 16 (ASHRAE Dust Spot 95%) filters provide a 95% or greater reduction of outdoor fine particulate matter (Fisk et al. 2002). Additionally, to account for exposure of DPM inside and outside the residence, the emissions incorporated an 87% time spent inside factor,<sup>1</sup> which equates to the amount of time that particulate exposure would be reduced by the MERV 13 filters. For this analysis, it was assumed that a 68% total reduction of outdoor DPM exposure based on the substantial evidence that supports that MERV 13 filters can provide an 80% or greater reduction of fine particulate matter, as well as accounting for the time spent inside versus outside the residence.

The following mitigation measure would reduce the significant impacts associated with cancer risk levels below the SCAQMD thresholds:

<sup>1</sup> Based on a study conducted by CARB and University of California, Berkeley, *Activity Patterns of California Residents* (CARB 1991).

## **Health Risk Assessment Report for the Victoria Greens Project**

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**AQ-2** The applicant or its successor shall install high-efficiency return air filters on all heating, ventilation, and air conditioning (HVAC) systems serving any residential unit located at the project site. The air filtration system shall reduce at least 80% of particulate matter emissions, such as can be achieved with a Minimum Efficiency Reporting Value 13 (MERV 13) air filtration system installed on return vents in residential units. The homeowners association (HOA) property management for these multifamily residential receptors shall maintain the air filtration system on any HVAC system installed for the specified residential units in accordance with the manufacturer's recommendations for the 30-year life of the project.

## 3.2 Dispersion Model

Air dispersion models calculate the atmospheric transport and fate of pollutants from the emission source. The models calculate the concentration of selected pollutants at specific downwind ground-level points, such as residential or school receptors. The transformation (fate) of an airborne pollutant, its movement with the prevailing winds (transport), its crosswind and vertical movement due to atmospheric turbulence (dispersion), and its removal due to dry and wet deposition are influenced by the pollutant's physical and chemical properties and by meteorological and environmental conditions. Factors such as distance from the source to the receptor, meteorological conditions, intervening land use and terrain, pollutant release characteristics, and background pollutant concentrations affect the predicted air concentration of an air pollutant. Air dispersion models have the capability to take all of these factors into consideration when calculating downwind ground-level pollutant concentrations.

A dispersion modeling analysis of DPM emitted from diesel vehicles and off-road equipment was conducted on the project site for the HRA. The dispersion modeling was performed using AERMOD Version 18081, which is the model U.S. Environmental Protection Agency (EPA) approved and SCAQMD recommends for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain. Principal parameters of AERMOD for the project modeling included the following:

- **Dispersion Model:** The air dispersion model used was AERMOD Version 18081, with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.6.0. "X/Q" is a dispersion factor that is the average effluent concentration normalized by source strength, and is used as a way to simplify the representation of emissions from many sources. The maximum concentrations were determined for the 1-hour and period averaging periods.
- **Meteorological Data:** The latest 5-year meteorological data for the Long Beach Airport station (Station ID 23129) from SCAQMD were downloaded (SCAQMD 2018b) and then input to AERMOD. For cancer and chronic non-cancer risk assessments, the average cancer and chronic non-cancer risk of all years modeled was used. A wind rose is provided for this station on Figure 1.
- **Urban and Rural Options:** Typically, urban areas have more surface roughness and structures and low-albedo surfaces that absorb more sunlight, and thus, more heat, relative to rural areas. According to SCAQMD guidelines, the urban dispersion option was selected and Los Angeles County population for year 2010 (9,818,605 persons) input into AERMOD (SCAQMD 2018a).

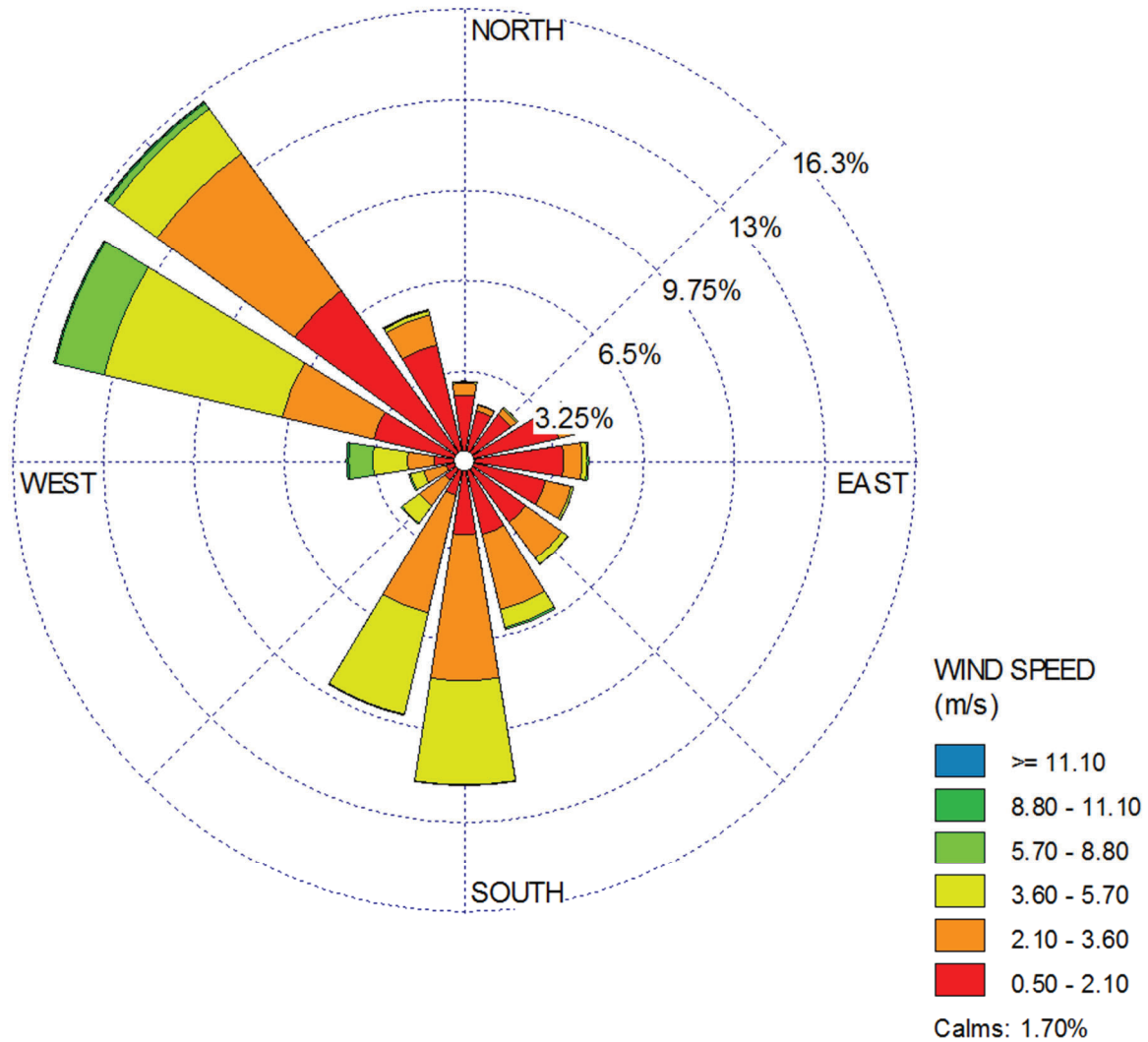
## Health Risk Assessment Report for the Victoria Greens Project

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- **Terrain Characteristics:** Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate. Per SCAQMD guidance, the National Elevation Dataset with resolution of 1/3 arc-second was used (SCAQMD 2018a).
- **Sensitive Receptors Construction Scenario:** This HRA evaluates the risk to existing residential receptor located in proximity to the project. A uniform 2-kilometer by 2-kilometer Cartesian grid with 100-meter spacing was centered over the project site and converted into discrete receptors to represent proximate receptors.
- **Sensitive Receptors Cumulative Scenario:** The HRA evaluates the risk to the project residential receptors from TAC-emitting surrounding industrial and warehouse sources. A uniform 20-meter spacing Cartesian grid was placed over the project site and converted into discrete receptors to represent future residential receptors.
- **Source Release Construction Scenario:** Air dispersion modeling of DPM emissions was conducted assuming the equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix A). The DPM emissions were modeled as a line of adjacent volume sources across the project site to represent project construction with a release height of 5 meters, plume height of 2.33 meters, and plume width of 11.63 meters. A unit emission rate of 1.0 gram per second (g/s) was normalized over the line of adjacent volume sources for the AERMOD run to obtain the “X/Q” values.
- **Source Release Cumulative Scenario:** SR-91 was modeled as a line of separated volume sources for each direction of the freeway. Width at 48 feet plus 10 feet was used to account for wake of moving vehicles. Truck idling emissions were modeled as a stationary source with 12.6-foot exhaust height and 0.1-meter exhaust diameter (SJVAPCD 2006). TRU idling emissions was modeled as a stationary source with 13-foot exhaust height and 0.04-meter exhaust diameter (SJVAPCD 2006). Diesel emergency generator emissions were modeled as a stationary source with 11-foot and 9-foot exhaust height and 0.08-meter exhaust diameter, exhaust temperature of 980 degrees Fahrenheit, and 3,190-cubic-foot-per-meter exhaust air flowrate.

# Health Risk Assessment Report for the Victoria Greens Project

**Figure 1**  
**Wind Rose of Meteorological Data – Long Beach Airport Station**



Source: SCAQMD 2018b.

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# Health Risk Assessment Report for the Victoria Greens Project

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## 3.3 Health Risk Assessment Methodology

### Construction Health Risk Assessment

In March 2015, the OEHHA approved the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). SCAQMD requires that all HRAs prepared for CEQA documents follow SCAQMD policies in conjunction with the 2015 Risk Assessment Guidelines Manual. Cancer and non-cancer health risk calculations were performed for the project using ground-level unity emission concentration (X/Q) input from AERMOD. This modeling established the emissions dispersion field to the existing sensitive receptors from atmospheric influence of the project construction DPM emissions. Plot files generated in AERMOD were then imported into HARP2, with ground-level concentrations determined by multiplication of emission rates and X/Q values for the total volume sources of emissions. HARP2 then assessed resulting cancer and non-cancer risk at the existing receptors from exposure to TAC emissions using the OEHHA-derived calculation method.

For the purposes of this assessment, given the less-than-lifetime exposure period, and the higher breathing rates and sensitivity of children to construction-generated TACs, the cancer risk calculation assumes that the exposure would affect children early in their lives. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy and occur 8 hours per day, 5 days per week, for 1.5 years.

### Cumulative Health Risk Assessment

For the residential health risk, the HRA assumes exposure would start in the third trimester to 30 years for the proposed residential receptor locations. SCAQMD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase non-cancer health risk due to long-term (chronic) exposures and some TACs increase non-cancer health risk due to short-term (acute) exposures. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or REL, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system, similarly calculated for acute hazard index.

# Health Risk Assessment Report for the Victoria Greens Project

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# Health Risk Assessment Report for the Victoria Greens Project

## 4 HEALTH RISK RESULTS

The cancer risk calculations were performed by multiplying the AERMOD-predicted DPM concentrations in  $\mu\text{g}/\text{m}^3$  per unit  $\text{g}/\text{s}$  due to DPM emissions from trucks and construction equipment by the appropriate risk values. The potential exposure pathway for DPM includes inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways (CARB 1998).

Table 6 shows the maximum cancer and chronic health risks at the maximally exposed residential receptor from project construction. AERMOD and HARP2 outputs are in Appendix B.

**Table 6**  
**Summary of Maximum Construction Cancer and Chronic Health Risks – Unmitigated**

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
<i>Maximally Exposed Individual Resident</i>					
Construction HRA	Cancer risk	Per million	13.79	10	Potentially significant
	Chronic hazard index	Index value	0.011	1.0	Less than significant

**Source:** See Appendix B for complete results.

**Notes:** CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

As shown in Table 6, the HRA results from the unmitigated scenario show cancer risks exceeding the 10 in 1 million threshold and thus a potentially significant impact at the maximally exposed individual residential receptors. These potentially significant health risk impacts triggered the requirement of MM-AQ-1 in order to reduce project construction-generated DPM emissions to the extent feasible. The HRA results after incorporation of MM-AQ-1 are presented in Table 7.

**Table 7**  
**Summary of Maximum Construction Cancer and Chronic Health Risks – Mitigated**

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
<i>Maximally Exposed Individual Resident</i>					
Construction HRA	Cancer risk	Per million	1.49	10	Less than significant
	Chronic hazard index	Index value	0.001	1.0	Less than significant

**Source:** See Appendix B for complete results.

**Notes:** CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

## Health Risk Assessment Report for the Victoria Greens Project

The cancer risk calculations were performed by multiplying the AERMOD-predicted TAC concentrations in  $\mu\text{g}/\text{m}^3$  per unit g/s due to TAC emissions from the surrounding industrial and warehouse land uses truck idling, TRU idling, and emergency diesel generators by the appropriate risk values. The mandatory potential exposure through pathways (e.g., ingestion) are selected for the cumulative scenario from the surrounding sources-generated TAC emissions. Table 8 shows the maximum cancer and chronic health risks at the maximally exposed residential receptor from the surrounding source-generated TAC emissions. AERMOD and HARP2 outputs are in Appendix B.

**Table 8**  
**Summary of Maximum Cumulative Cancer and Chronic Health Risks – Unmitigated**

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
<i>Maximally Exposed Individual Resident</i>					
Cumulative HRA	Cancer risk	Per million	29.50	10	<b>Potentially significant</b>
	Chronic hazard index	Index value	0.007	1.0	Less than significant

**Source:** See Appendix B for complete results.

**Notes:** CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

Implementing mitigation measure MM-AQ-2 would reduce the maximum cancer risks at the maximally exposed individual residential receptor to 9.0 in 1 million, which is below the SCAQMD threshold of significance. MM-AQ-2 would also reduce the chronic health risk to 0.002. Additionally, although traffic volumes are forecast to increase with time due to growth, vehicular emission factors are expected to decrease with time due to California’s statewide regulation to increase fuel efficiency (AB 1493, the Pavley I standard) and other state and federal regulations aimed at vehicles emissions reduction.

# Health Risk Assessment Report for the Victoria Greens Project

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## 5 CONCLUSIONS

The results determined in this analysis reflect reasonable estimates of source emissions and exhaust characteristics, available meteorological data near the project site, and the use of currently approved air quality models. Given the limits of available tools for such an analysis, the actual impacts may vary from the estimates in this assessment. However, the combined use of the AERMOD dispersion model and the health impact calculations required by OEHHA and SCAQMD tend to overpredict impacts, such that they produce conservative (i.e., health-protective) results. For this reason, the estimated cancer risks and non-cancer hazard indices reported in this analysis are likely upper-bound estimates for potential exposure to project-related emissions. In addition, the estimated cancer risks and non-cancer hazard indices represent the maximum exposed individual resident and school child and do not represent the risk over a broad area. The actual risks of cancer or non-cancer effects from the project are likely to be lower than presented herein.

Based on this analysis, project construction would result in potential chronic health risk at the maximally exposed residential receptor below the SCAQMD threshold without the need for mitigation. However, potential cancer health risk impacts from project construction at the proximate existing residential receptor would exceed the SCAQMD threshold. With implementation of MM-AQ-1, potential cancer risk at the maximally exposed residential receptor would be reduced to a less-than-significant level. Potential health risk at existing residential receptor from project operation would result in potential cancer health risk, chronic health risk, and acute health risk that would not exceed the applicable SCAQMD thresholds.

Based on this analysis, surrounding TAC-emissions sources on the proposed residential receptors would result in potential chronic health risk at the maximally exposed residential receptor below the SCAQMD threshold without the need for mitigation. However, potential cancer health risk impacts from project construction at the proximate existing residential receptor would exceed the SCAQMD threshold. With implementation of MM-AQ-2, potential cancer risk at the maximally exposed residential receptor would be reduced to a less-than-significant level. Potential health risk at existing residential receptor from project operation would result in potential cancer health risk, chronic health risk, and acute health risk that would not exceed the applicable SCAQMD thresholds. This would be a less-than-significant impact.

# Health Risk Assessment Report for the Victoria Greens Project

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## Health Risk Assessment Report for the Victoria Greens Project

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### 6 REFERENCES

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- 13 CCR 2449–2449.3 and Appendix A. General Requirements for In-Use Off-Road Diesel-Fueled Fleets.
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**APPENDIX A**  
*Emission Calculations*





## Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

## Victoria Greens Construction HRA Mitigated Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	87.79	1000sqft	2.02	87,788.00	0
Parking Lot	62.00	Space	0.56	24,800.00	0
Condo/Townhouse	176.00	Dwelling Unit	8.07	126,890.00	503

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	558.44	<b>CH4 Intensity (lb/MW hr)</b>	0.023	<b>N2O Intensity (lb/MW hr)</b>	0.005

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

Project Characteristics - Interpolated RPS 2022  
Construction HRA Unmitigated Emissions Only.

Land Use - Data provided by applicant.

Trips and VMT - Based on applicant data. Conservatively assumed to operate for 0.19-miles on site (1,000 feet).

Demolition - Caltrans guidance specifies 0.25 feet asphalt parking thickness. Equivalent tonnage based on asphalt density of 145 lb/cubic feet  
[http://www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=144&Itemid=330](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330)

Grading - data provided by applicant.

Construction Off-road Equipment Mitigation - MM-AQ-1





## Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	174.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	35.00	0.00

## 2.0 Emissions Summary

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Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2019	8-31-2019	1.7997	0.7449
2	9-1-2019	11-30-2019	0.8179	0.4380
3	12-1-2019	2-29-2020	0.7704	0.4341
4	3-1-2020	5-31-2020	0.7553	0.4381
5	6-1-2020	8-31-2020	0.7558	0.4386
6	9-1-2020	9-30-2020	0.2464	0.1430
		Highest	1.7997	0.7449

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>1.4656</b>	<b>1.8457</b>	<b>7.2749</b>	<b>0.0195</b>	<b>1.2900</b>	<b>0.2031</b>	<b>1.4931</b>	<b>0.3458</b>	<b>0.2022</b>	<b>0.5480</b>	<b>38.7667</b>	<b>1,934.2407</b>	<b>1,973.0074</b>	<b>1.4925</b>	<b>0.0158</b>	<b>2,015.0186</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>1.4656</b>	<b>1.8457</b>	<b>7.2749</b>	<b>0.0195</b>	<b>1.2900</b>	<b>0.2031</b>	<b>1.4931</b>	<b>0.3458</b>	<b>0.2022</b>	<b>0.5480</b>	<b>38.7667</b>	<b>1,934.2407</b>	<b>1,973.0074</b>	<b>1.4925</b>	<b>0.0158</b>	<b>2,015.0186</b>

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

**3.0 Construction Detail**

**Construction Phase**

## Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/12/2019	5	10	
3	Grading	Grading	7/13/2019	8/23/2019	5	30	
4	Building Construction	Building Construction	8/24/2019	10/16/2020	5	300	
5	Paving	Paving	10/17/2020	11/13/2020	5	20	
6	Architectural Coating	Architectural Coating	11/14/2020	12/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 8.07**

**Acres of Paving: 2.58**

**Residential Indoor: 256,952; Residential Outdoor: 85,651; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,755 (Architectural Coating – sqft)**

**OffRoad Equipment**



## Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	13.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	3,780.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	27.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3600e-003	0.0000	1.3600e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>	<b>1.3600e-003</b>	<b>0.0180</b>	<b>0.0193</b>	<b>2.1000e-004</b>	<b>0.0167</b>	<b>0.0169</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8672</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.5000e-004	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0685	0.0685	1.0000e-005	0.0000	0.0687
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0685</b>	<b>0.0685</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0687</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3600e-003	0.0000	1.3600e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8400e-003	0.1356	0.2467	3.9000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
<b>Total</b>	<b>5.8400e-003</b>	<b>0.1356</b>	<b>0.2467</b>	<b>3.9000e-004</b>	<b>1.3600e-003</b>	<b>6.2000e-004</b>	<b>1.9800e-003</b>	<b>2.1000e-004</b>	<b>6.2000e-004</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8671</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.5000e-004	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0685	0.0685	1.0000e-005	0.0000	0.0687
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0685</b>	<b>0.0685</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0687</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>3.4800e-003</b>	<b>0.0608</b>	<b>0.1148</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>3.1000e-004</b>	<b>0.0906</b>	<b>0.0497</b>	<b>3.1000e-004</b>	<b>0.0500</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0963	0.0000	0.0963	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0963</b>	<b>0.0357</b>	<b>0.1321</b>	<b>0.0504</b>	<b>0.0329</b>	<b>0.0833</b>	<b>0.0000</b>	<b>83.5520</b>	<b>83.5520</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2129</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9100e-003	0.1891	0.0294	2.0000e-004	3.5000e-004	1.6000e-004	5.0000e-004	1.0000e-004	1.5000e-004	2.5000e-004	0.0000	19.9033	19.9033	3.2900e-003	0.0000	19.9856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.1891</b>	<b>0.0294</b>	<b>2.0000e-004</b>	<b>3.5000e-004</b>	<b>1.6000e-004</b>	<b>5.0000e-004</b>	<b>1.0000e-004</b>	<b>1.5000e-004</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>19.9033</b>	<b>19.9033</b>	<b>3.2900e-003</b>	<b>0.0000</b>	<b>19.9856</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0963	0.0000	0.0963	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
<b>Total</b>	<b>0.0152</b>	<b>0.2891</b>	<b>0.5508</b>	<b>9.3000e-004</b>	<b>0.0963</b>	<b>1.5200e-003</b>	<b>0.0978</b>	<b>0.0504</b>	<b>1.5200e-003</b>	<b>0.0519</b>	<b>0.0000</b>	<b>83.5519</b>	<b>83.5519</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2128</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9100e-003	0.1891	0.0294	2.0000e-004	3.5000e-004	1.6000e-004	5.0000e-004	1.0000e-004	1.5000e-004	2.5000e-004	0.0000	19.9033	19.9033	3.2900e-003	0.0000	19.9856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.1891</b>	<b>0.0294</b>	<b>2.0000e-004</b>	<b>3.5000e-004</b>	<b>1.6000e-004</b>	<b>5.0000e-004</b>	<b>1.0000e-004</b>	<b>1.5000e-004</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>19.9033</b>	<b>19.9033</b>	<b>3.2900e-003</b>	<b>0.0000</b>	<b>19.9856</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9696	0.7895	1.2400e-003		0.0593	0.0593		0.0558	0.0558	0.0000	108.1479	108.1479	0.0264	0.0000	108.8066
<b>Total</b>	<b>0.1086</b>	<b>0.9696</b>	<b>0.7895</b>	<b>1.2400e-003</b>		<b>0.0593</b>	<b>0.0593</b>		<b>0.0558</b>	<b>0.0558</b>	<b>0.0000</b>	<b>108.1479</b>	<b>108.1479</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8066</b>



Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0779	0.0219	7.0000e-005	2.5000e-004	8.0000e-005	3.3000e-004	7.0000e-005	8.0000e-005	1.6000e-004	0.0000	7.2064	7.2064	1.1900e-003	0.0000	7.2361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1700e-003</b>	<b>0.0779</b>	<b>0.0219</b>	<b>7.0000e-005</b>	<b>2.5000e-004</b>	<b>8.0000e-005</b>	<b>3.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>7.2064</b>	<b>7.2064</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>7.2361</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0402	0.5003	0.8365	1.2400e-003		6.3300e-003	6.3300e-003		6.3300e-003	6.3300e-003	0.0000	108.1478	108.1478	0.0264	0.0000	108.8065
<b>Total</b>	<b>0.0402</b>	<b>0.5003</b>	<b>0.8365</b>	<b>1.2400e-003</b>		<b>6.3300e-003</b>	<b>6.3300e-003</b>		<b>6.3300e-003</b>	<b>6.3300e-003</b>	<b>0.0000</b>	<b>108.1478</b>	<b>108.1478</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8065</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0779	0.0219	7.0000e-005	2.5000e-004	8.0000e-005	3.3000e-004	7.0000e-005	8.0000e-005	1.6000e-004	0.0000	7.2064	7.2064	1.1900e-003	0.0000	7.2361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1700e-003</b>	<b>0.0779</b>	<b>0.0219</b>	<b>7.0000e-005</b>	<b>2.5000e-004</b>	<b>8.0000e-005</b>	<b>3.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>7.2064</b>	<b>7.2064</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>7.2361</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2205	1.9954	1.7522	2.8000e-003		0.1162	0.1162		0.1092	0.1092	0.0000	240.8744	240.8744	0.0588	0.0000	242.3435
<b>Total</b>	<b>0.2205</b>	<b>1.9954</b>	<b>1.7522</b>	<b>2.8000e-003</b>		<b>0.1162</b>	<b>0.1162</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>240.8744</b>	<b>240.8744</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3435</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3900e-003	0.1703	0.0455	1.7000e-004	5.6000e-004	1.3000e-004	6.9000e-004	1.7000e-004	1.2000e-004	2.9000e-004	0.0000	16.2943	16.2943	2.4800e-003	0.0000	16.3564
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.3900e-003</b>	<b>0.1703</b>	<b>0.0455</b>	<b>1.7000e-004</b>	<b>5.6000e-004</b>	<b>1.3000e-004</b>	<b>6.9000e-004</b>	<b>1.7000e-004</b>	<b>1.2000e-004</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>16.2943</b>	<b>16.2943</b>	<b>2.4800e-003</b>	<b>0.0000</b>	<b>16.3564</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	1.1255	1.8870	2.8000e-003		0.0130	0.0130		0.0130	0.0130	0.0000	240.8741	240.8741	0.0588	0.0000	242.3432
<b>Total</b>	<b>0.0865</b>	<b>1.1255</b>	<b>1.8870</b>	<b>2.8000e-003</b>		<b>0.0130</b>	<b>0.0130</b>		<b>0.0130</b>	<b>0.0130</b>	<b>0.0000</b>	<b>240.8741</b>	<b>240.8741</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3432</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3900e-003	0.1703	0.0455	1.7000e-004	5.6000e-004	1.3000e-004	6.9000e-004	1.7000e-004	1.2000e-004	2.9000e-004	0.0000	16.2943	16.2943	2.4800e-003	0.0000	16.3564
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.3900e-003</b>	<b>0.1703</b>	<b>0.0455</b>	<b>1.7000e-004</b>	<b>5.6000e-004</b>	<b>1.3000e-004</b>	<b>6.9000e-004</b>	<b>1.7000e-004</b>	<b>1.2000e-004</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>16.2943</b>	<b>16.2943</b>	<b>2.4800e-003</b>	<b>0.0000</b>	<b>16.3564</b>

**3.6 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0170</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3400e-003	0.1004	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.7200e-003</b>	<b>0.1004</b>	<b>0.1730</b>	<b>2.3000e-004</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Mitigated Construction Off-Site**

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

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4151</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e-004	0.0106	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4132</b>	<b>0.0106</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441,388 3	1,441,388 3	0.0741	0.0000	1,443,241 0
Unmitigated	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441,388 3	1,441,388 3	0.0741	0.0000	1,443,241 0

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,022.56	997.92	851.84	3,398,875	3,398,875
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,022.56	997.92	851.84	3,398,875	3,398,875

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Other Asphalt Surfaces	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
NaturalGas Mitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
NaturalGas Unmitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**6.0 Area Detail**

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Unmitigated	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5765	0.0457	1.1188	2.8500e-003		0.1681	0.1681		0.1681	0.1681	18.6946	35.9245	54.6191	0.0558	1.2700e-003	56.3910
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>1.1386</b>	<b>0.0666</b>	<b>2.9377</b>	<b>2.9500e-003</b>		<b>0.1781</b>	<b>0.1781</b>		<b>0.1781</b>	<b>0.1781</b>	<b>18.6946</b>	<b>38.8931</b>	<b>57.5876</b>	<b>0.0586</b>	<b>1.2700e-003</b>	<b>59.4313</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5765	0.0457	1.1188	2.8500e-003		0.1681	0.1681		0.1681	0.1681	18.6946	35.9245	54.6191	0.0558	1.2700e-003	56.3910
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>1.1386</b>	<b>0.0666</b>	<b>2.9377</b>	<b>2.9500e-003</b>		<b>0.1781</b>	<b>0.1781</b>		<b>0.1781</b>	<b>0.1781</b>	<b>18.6946</b>	<b>38.8931</b>	<b>57.5876</b>	<b>0.0586</b>	<b>1.2700e-003</b>	<b>59.4313</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	61.8043	0.3761	9.3400e-003	73.9900
Unmitigated	61.8043	0.3761	9.3400e-003	73.9900

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>



Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.4342	0.9712	0.0000	40.7149
Unmitigated	16.4342	0.9712	0.0000	40.7149

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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Victoria Greens Construction HRA Mitigated - Los Angeles-South Coast County, Annual

## 11.0 Vegetation

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# **APPENDIX B**

*AERMOD Input and HARP2 Output Files*



## Victoria Greens Construction Health Risk Assessment

### Unmitigated Construction Emissions

Year	Construction Days		Unmitigated Exhaust PM10			Mitigated Exhaust PM10		
	days/yr	hr/day	tons/yr	lb/yr	lb/hr	tons/yr	lb/yr	lb/hr
2019	152	8	0.13	250.40	0.21	0.009	18.04	0.015
2020	248	8	0.12	249.80	0.13	0.014	27.00	0.014
		<b>MAX</b>	<b>0.13</b>	<b>250.40</b>	<b>0.21</b>	<b>0.014</b>	<b>27.00</b>	<b>0.015</b>

### Conversions:

1 ton = 2000 lbs

Victoria Greens Construction HRA

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\*\* AERMOD Input Produced by:

\*\* AERMOD View Ver. 9.6.0

\*\* Lakes Environmental Software Inc.

\*\* Date: 8/2/2018

\*\* File: C:\Lakes\AERMOD View\Victoria Greens Construction HRA\Victoria Greens Construction HRA.ADI

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\*\* AERMOD Control Pathway

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CO STARTING

TITLEONE Victoria Greens Construction HRA

MODELOPT DFAULT CONC

AVERTIME PERIOD

URBANOPT 9818605 Los\_Angeles

POLLUTID HRA

RUNORNOT RUN

ERRORFIL "Victoria Greens Construction HRA.err"

CO FINISHED

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\*\*\*\*\*

\*\* AERMOD Source Pathway

\*\*\*\*\*

\*\*

\*\*

SO STARTING

\*\* Source Location \*\*

\*\* Source ID - Type - X Coord. - Y Coord. \*\*

\*\*

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\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE1

\*\* DESCRSRC

\*\* PREFIX

\*\* Length of Side = 11.63

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 2.33

\*\* SZINIT = 1.08

\*\* Nodes = 20

\*\* 384526.864, 3748371.278, 46.06, 5.00, 5.41



Victoria Greens Construction HRA

\*\* 384687.333, 3748373.256, 47.45, 5.00, 5.41  
 \*\* 384688.463, 3748352.915, 47.97, 5.00, 5.41  
 \*\* 384528.841, 3748350.655, 46.38, 5.00, 5.41  
 \*\* 384528.276, 3748328.336, 46.62, 5.00, 5.41  
 \*\* 384688.180, 3748331.161, 48.57, 5.00, 5.41  
 \*\* 384689.311, 3748309.407, 49.32, 5.00, 5.41  
 \*\* 384581.954, 3748309.125, 47.38, 5.00, 5.41  
 \*\* 384581.389, 3748286.241, 48.07, 5.00, 5.41  
 \*\* 384690.158, 3748288.218, 49.69, 5.00, 5.41  
 \*\* 384689.876, 3748265.617, 49.97, 5.00, 5.41  
 \*\* 384581.389, 3748265.052, 48.47, 5.00, 5.41  
 \*\* 384582.237, 3748248.666, 48.87, 5.00, 5.41  
 \*\* 384690.723, 3748248.384, 50.42, 5.00, 5.41  
 \*\* 384691.571, 3748229.738, 50.77, 5.00, 5.41  
 \*\* 384546.357, 3748229.738, 48.73, 5.00, 5.41  
 \*\* 384546.922, 3748216.177, 48.90, 5.00, 5.41  
 \*\* 384691.853, 3748215.329, 50.93, 5.00, 5.41  
 \*\* 384691.571, 3748200.073, 51.32, 5.00, 5.41  
 \*\* 384529.971, 3748200.073, 49.09, 5.00, 5.41

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LOCATION	VOLUME				
L0000001	VOLUME	384532.678	3748371.350	46.14	
L0000002	VOLUME	384544.307	3748371.493	46.23	
L0000003	VOLUME	384555.937	3748371.636	46.37	
L0000004	VOLUME	384567.566	3748371.780	46.49	
L0000005	VOLUME	384579.195	3748371.923	46.56	
L0000006	VOLUME	384590.824	3748372.066	46.61	
L0000007	VOLUME	384602.453	3748372.210	46.69	
L0000008	VOLUME	384614.082	3748372.353	46.78	
L0000009	VOLUME	384625.711	3748372.496	46.89	
L0000010	VOLUME	384637.340	3748372.640	46.95	
L0000011	VOLUME	384648.969	3748372.783	46.94	
L0000012	VOLUME	384660.599	3748372.926	46.99	
L0000013	VOLUME	384672.228	3748373.070	47.15	
L0000014	VOLUME	384683.857	3748373.213	47.38	
L0000015	VOLUME	384687.785	3748365.115	47.76	
L0000016	VOLUME	384688.430	3748353.503	48.01	
L0000017	VOLUME	384677.423	3748352.758	47.77	
L0000018	VOLUME	384665.794	3748352.594	47.57	
L0000019	VOLUME	384654.165	3748352.429	47.55	
L0000020	VOLUME	384642.536	3748352.264	47.33	
L0000021	VOLUME	384630.908	3748352.100	47.10	
L0000022	VOLUME	384619.279	3748351.935	46.96	
L0000023	VOLUME	384607.650	3748351.770	46.87	
L0000024	VOLUME	384596.021	3748351.606	46.75	
L0000025	VOLUME	384584.392	3748351.441	46.64	
L0000026	VOLUME	384572.763	3748351.276	46.71	
L0000027	VOLUME	384561.135	3748351.112	46.75	
L0000028	VOLUME	384549.506	3748350.947	46.66	

Victoria Greens Construction HRA

LOCATION L0000029	VOLUME	384537.877	3748350.782	46.60
LOCATION L0000030	VOLUME	384528.776	3748348.062	46.52
LOCATION L0000031	VOLUME	384528.481	3748336.436	46.66
LOCATION L0000032	VOLUME	384531.803	3748328.398	46.75
LOCATION L0000033	VOLUME	384543.432	3748328.604	46.81
LOCATION L0000034	VOLUME	384555.060	3748328.809	46.88
LOCATION L0000035	VOLUME	384566.688	3748329.014	46.97
LOCATION L0000036	VOLUME	384578.316	3748329.220	46.92
LOCATION L0000037	VOLUME	384589.944	3748329.425	46.90
LOCATION L0000038	VOLUME	384601.572	3748329.631	47.03
LOCATION L0000039	VOLUME	384613.201	3748329.836	47.29
LOCATION L0000040	VOLUME	384624.829	3748330.042	47.57
LOCATION L0000041	VOLUME	384636.457	3748330.247	47.82
LOCATION L0000042	VOLUME	384648.085	3748330.453	48.03
LOCATION L0000043	VOLUME	384659.713	3748330.658	48.17
LOCATION L0000044	VOLUME	384671.342	3748330.863	48.37
LOCATION L0000045	VOLUME	384682.970	3748331.069	48.59
LOCATION L0000046	VOLUME	384688.513	3748324.751	48.72
LOCATION L0000047	VOLUME	384689.117	3748313.137	49.00
LOCATION L0000048	VOLUME	384681.415	3748309.386	48.96
LOCATION L0000049	VOLUME	384669.785	3748309.356	48.94
LOCATION L0000050	VOLUME	384658.155	3748309.325	48.76
LOCATION L0000051	VOLUME	384646.525	3748309.295	48.57
LOCATION L0000052	VOLUME	384634.895	3748309.264	48.45
LOCATION L0000053	VOLUME	384623.265	3748309.233	48.24
LOCATION L0000054	VOLUME	384611.635	3748309.203	47.87
LOCATION L0000055	VOLUME	384600.005	3748309.172	47.46
LOCATION L0000056	VOLUME	384588.375	3748309.142	47.26
LOCATION L0000057	VOLUME	384581.826	3748303.917	47.34
LOCATION L0000058	VOLUME	384581.539	3748292.291	47.82
LOCATION L0000059	VOLUME	384586.967	3748286.342	47.98
LOCATION L0000060	VOLUME	384598.595	3748286.554	48.13
LOCATION L0000061	VOLUME	384610.223	3748286.765	48.49
LOCATION L0000062	VOLUME	384621.851	3748286.977	48.78
LOCATION L0000063	VOLUME	384633.479	3748287.188	49.02
LOCATION L0000064	VOLUME	384645.107	3748287.399	49.15
LOCATION L0000065	VOLUME	384656.735	3748287.611	49.29
LOCATION L0000066	VOLUME	384668.363	3748287.822	49.38
LOCATION L0000067	VOLUME	384679.991	3748288.034	49.40
LOCATION L0000068	VOLUME	384690.140	3748286.757	49.55
LOCATION L0000069	VOLUME	384689.994	3748275.128	49.74
LOCATION L0000070	VOLUME	384687.757	3748265.606	49.86
LOCATION L0000071	VOLUME	384676.127	3748265.546	49.84
LOCATION L0000072	VOLUME	384664.497	3748265.485	49.80
LOCATION L0000073	VOLUME	384652.868	3748265.424	49.75
LOCATION L0000074	VOLUME	384641.238	3748265.364	49.65
LOCATION L0000075	VOLUME	384629.608	3748265.303	49.55
LOCATION L0000076	VOLUME	384617.978	3748265.243	49.26

Victoria Greens Construction HRA

LOCATION L0000077	VOLUME	384606.348	3748265.182	48.89
LOCATION L0000078	VOLUME	384594.718	3748265.122	48.52
LOCATION L0000079	VOLUME	384583.089	3748265.061	48.37
LOCATION L0000080	VOLUME	384581.902	3748255.135	48.58
LOCATION L0000081	VOLUME	384587.390	3748248.653	48.68
LOCATION L0000082	VOLUME	384599.020	3748248.622	49.06
LOCATION L0000083	VOLUME	384610.650	3748248.592	49.38
LOCATION L0000084	VOLUME	384622.280	3748248.562	49.64
LOCATION L0000085	VOLUME	384633.910	3748248.532	49.90
LOCATION L0000086	VOLUME	384645.540	3748248.501	50.08
LOCATION L0000087	VOLUME	384657.170	3748248.471	50.13
LOCATION L0000088	VOLUME	384668.800	3748248.441	50.12
LOCATION L0000089	VOLUME	384680.430	3748248.410	50.19
LOCATION L0000090	VOLUME	384690.784	3748247.049	50.31
LOCATION L0000091	VOLUME	384691.312	3748235.431	50.47
LOCATION L0000092	VOLUME	384685.640	3748229.738	50.50
LOCATION L0000093	VOLUME	384674.010	3748229.738	50.41
LOCATION L0000094	VOLUME	384662.380	3748229.738	50.38
LOCATION L0000095	VOLUME	384650.750	3748229.738	50.35
LOCATION L0000096	VOLUME	384639.120	3748229.738	50.24
LOCATION L0000097	VOLUME	384627.490	3748229.738	50.25
LOCATION L0000098	VOLUME	384615.860	3748229.738	49.77
LOCATION L0000099	VOLUME	384604.230	3748229.738	49.44
LOCATION L0000100	VOLUME	384592.600	3748229.738	49.33
LOCATION L0000101	VOLUME	384580.970	3748229.738	49.16
LOCATION L0000102	VOLUME	384569.340	3748229.738	48.92
LOCATION L0000103	VOLUME	384557.710	3748229.738	48.70
LOCATION L0000104	VOLUME	384546.369	3748229.460	48.67
LOCATION L0000105	VOLUME	384546.853	3748217.840	48.84
LOCATION L0000106	VOLUME	384556.887	3748216.119	48.98
LOCATION L0000107	VOLUME	384568.517	3748216.051	49.34
LOCATION L0000108	VOLUME	384580.147	3748215.983	49.78
LOCATION L0000109	VOLUME	384591.777	3748215.915	49.88
LOCATION L0000110	VOLUME	384603.407	3748215.847	49.82
LOCATION L0000111	VOLUME	384615.036	3748215.779	49.80
LOCATION L0000112	VOLUME	384626.666	3748215.711	50.11
LOCATION L0000113	VOLUME	384638.296	3748215.642	50.18
LOCATION L0000114	VOLUME	384649.926	3748215.574	50.47
LOCATION L0000115	VOLUME	384661.556	3748215.506	50.58
LOCATION L0000116	VOLUME	384673.185	3748215.438	50.65
LOCATION L0000117	VOLUME	384684.815	3748215.370	50.77
LOCATION L0000118	VOLUME	384691.768	3748210.738	50.98
LOCATION L0000119	VOLUME	384690.607	3748200.073	51.26
LOCATION L0000120	VOLUME	384678.977	3748200.073	51.11
LOCATION L0000121	VOLUME	384667.347	3748200.073	50.91
LOCATION L0000122	VOLUME	384655.717	3748200.073	50.76
LOCATION L0000123	VOLUME	384644.087	3748200.073	50.45
LOCATION L0000124	VOLUME	384632.457	3748200.073	50.40

Victoria Greens Construction HRA

LOCATION	L0000125	VOLUME	384620.827	3748200.073	50.30
LOCATION	L0000126	VOLUME	384609.197	3748200.073	50.22
LOCATION	L0000127	VOLUME	384597.567	3748200.073	50.25
LOCATION	L0000128	VOLUME	384585.937	3748200.073	50.30
LOCATION	L0000129	VOLUME	384574.307	3748200.073	50.04
LOCATION	L0000130	VOLUME	384562.677	3748200.073	49.54
LOCATION	L0000131	VOLUME	384551.047	3748200.073	49.37
LOCATION	L0000132	VOLUME	384539.417	3748200.073	49.17

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

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000002	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000003	0.0075757576	5.00	5.41	1.08
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SRCPARAM	L0000005	0.0075757576	5.00	5.41	1.08
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SRCPARAM	L0000007	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000008	0.0075757576	5.00	5.41	1.08
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SRCPARAM	L0000011	0.0075757576	5.00	5.41	1.08
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SRCPARAM	L0000019	0.0075757576	5.00	5.41	1.08
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SRCPARAM	L0000023	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000024	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000025	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000026	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000027	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000028	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000029	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000030	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000031	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000032	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000033	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000034	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000035	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000036	0.0075757576	5.00	5.41	1.08
SRCPARAM	L0000037	0.0075757576	5.00	5.41	1.08

Victoria Greens Construction HRA

SRCPARAM L0000038	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000085	0.0075757576	5.00	5.41	1.08

Victoria Greens Construction HRA

SRCPARAM L0000086	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000087	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000088	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000090	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000091	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000092	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000093	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000094	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000095	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000097	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000099	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000100	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000101	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000103	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000112	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000114	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000115	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000117	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000118	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000119	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000120	0.0075757576	5.00	5.41	1.08
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SRCPARAM L0000123	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000124	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000125	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000126	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000127	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000128	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000129	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000130	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000131	0.0075757576	5.00	5.41	1.08
SRCPARAM L0000132	0.0075757576	5.00	5.41	1.08

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Victoria Greens Construction HRA

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\*\* No Building Downwash \*\*

\*\*

URBANSRC ALL

SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

\*\*\*\*\*

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RE STARTING

INCLUDED "Victoria Greens Construction HRA.rou"

RE FINISHED

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\*\* AERMOD Meteorology Pathway

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\*\*

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ME STARTING

SURFFILE "C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\MET  
Data\LongBeachAirportADJU\KLGB\_V9\_ADJU\KLGB\_v9.SFC"

PROFFILE "C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\MET  
Data\LongBeachAirportADJU\KLGB\_V9\_ADJU\KLGB\_v9.PFL"

SURFDATA 23129 2012

UAIRDATA 3190 2012

PROFBASE 10.0 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

\*\* Auto-Generated Plotfiles

PLOTFILE PERIOD ALL "VICTORIA GREENS CONSTRUCTION HRA.AD\PE00GALL.PLT" 31

SUMMFILE "Victoria Greens Construction HRA.sum"

OU FINISHED

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

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

A Total of 0 Fatal Error Message(s)

Victoria Greens Construction HRA

A Total of 2 Warning Message(s)  
A Total of 0 Informational Message(s)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 363 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used  
0.50  
ME W187 363 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

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

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 1  
\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 132 Source(s),  
for Total of 1 Urban Area(s):  
Urban Population = 9818605.0 ; 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.



Victoria Greens Construction HRA

- 5. No Exponential Decay.
- 6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Other Options Specified:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET  
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: HRA

\*\*Model Calculates PERIOD Averages Only

\*\*This Run Includes: 132 Source(s); 1 Source Group(s); and 726 Receptor(s)

with: 0 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 132 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: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor  
Model Outputs External File(s) of High Values for Plotting (PLOTFILE  
Keyword)  
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE  
Keyword)

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

Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay  
Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ;  
Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

Victoria Greens Construction HRA

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

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: Victoria Greens Construction HRA.err

\*\*File for Summary of Results: Victoria Greens Construction HRA.sum

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^ *** AERMOD - VERSION 18081 ***   *** Victoria Greens Construction HRA
      ***                   08/02/18
*** AERMET - VERSION 16216 ***   ***
      ***                   13:57:57
    
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PAGE 2

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE	SOURCE	EMISSION	RATE	(GRAMS/SEC)	X	ELEV.	HEIGHT	SY
SZ	ID	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY					
L0000001		0	0.75758E-02	384532.7	3748371.3	46.1	5.00	5.41
1.08	YES							
L0000002		0	0.75758E-02	384544.3	3748371.5	46.2	5.00	5.41
1.08	YES							
L0000003		0	0.75758E-02	384555.9	3748371.6	46.4	5.00	5.41
1.08	YES							
L0000004		0	0.75758E-02	384567.6	3748371.8	46.5	5.00	5.41
1.08	YES							
L0000005		0	0.75758E-02	384579.2	3748371.9	46.6	5.00	5.41
1.08	YES							
L0000006		0	0.75758E-02	384590.8	3748372.1	46.6	5.00	5.41
1.08	YES							
L0000007		0	0.75758E-02	384602.5	3748372.2	46.7	5.00	5.41
1.08	YES							
L0000008		0	0.75758E-02	384614.1	3748372.4	46.8	5.00	5.41
1.08	YES							
L0000009		0	0.75758E-02	384625.7	3748372.5	46.9	5.00	5.41

Victoria Greens Construction HRA

1.08	YES							
L0000010		0	0.75758E-02	384637.3	3748372.6	46.9	5.00	5.41
1.08	YES							
L0000011		0	0.75758E-02	384649.0	3748372.8	46.9	5.00	5.41
1.08	YES							
L0000012		0	0.75758E-02	384660.6	3748372.9	47.0	5.00	5.41
1.08	YES							
L0000013		0	0.75758E-02	384672.2	3748373.1	47.1	5.00	5.41
1.08	YES							
L0000014		0	0.75758E-02	384683.9	3748373.2	47.4	5.00	5.41
1.08	YES							
L0000015		0	0.75758E-02	384687.8	3748365.1	47.8	5.00	5.41
1.08	YES							
L0000016		0	0.75758E-02	384688.4	3748353.5	48.0	5.00	5.41
1.08	YES							
L0000017		0	0.75758E-02	384677.4	3748352.8	47.8	5.00	5.41
1.08	YES							
L0000018		0	0.75758E-02	384665.8	3748352.6	47.6	5.00	5.41
1.08	YES							
L0000019		0	0.75758E-02	384654.2	3748352.4	47.5	5.00	5.41
1.08	YES							
L0000020		0	0.75758E-02	384642.5	3748352.3	47.3	5.00	5.41
1.08	YES							
L0000021		0	0.75758E-02	384630.9	3748352.1	47.1	5.00	5.41
1.08	YES							
L0000022		0	0.75758E-02	384619.3	3748351.9	47.0	5.00	5.41
1.08	YES							
L0000023		0	0.75758E-02	384607.6	3748351.8	46.9	5.00	5.41
1.08	YES							
L0000024		0	0.75758E-02	384596.0	3748351.6	46.8	5.00	5.41
1.08	YES							
L0000025		0	0.75758E-02	384584.4	3748351.4	46.6	5.00	5.41
1.08	YES							
L0000026		0	0.75758E-02	384572.8	3748351.3	46.7	5.00	5.41
1.08	YES							
L0000027		0	0.75758E-02	384561.1	3748351.1	46.8	5.00	5.41
1.08	YES							
L0000028		0	0.75758E-02	384549.5	3748350.9	46.7	5.00	5.41
1.08	YES							
L0000029		0	0.75758E-02	384537.9	3748350.8	46.6	5.00	5.41
1.08	YES							
L0000030		0	0.75758E-02	384528.8	3748348.1	46.5	5.00	5.41
1.08	YES							
L0000031		0	0.75758E-02	384528.5	3748336.4	46.7	5.00	5.41
1.08	YES							
L0000032		0	0.75758E-02	384531.8	3748328.4	46.8	5.00	5.41
1.08	YES							
L0000033		0	0.75758E-02	384543.4	3748328.6	46.8	5.00	5.41

Victoria Greens Construction HRA

1.08	YES							
L0000034		0	0.75758E-02	384555.1	3748328.8	46.9	5.00	5.41
1.08	YES							
L0000035		0	0.75758E-02	384566.7	3748329.0	47.0	5.00	5.41
1.08	YES							
L0000036		0	0.75758E-02	384578.3	3748329.2	46.9	5.00	5.41
1.08	YES							
L0000037		0	0.75758E-02	384589.9	3748329.4	46.9	5.00	5.41
1.08	YES							
L0000038		0	0.75758E-02	384601.6	3748329.6	47.0	5.00	5.41
1.08	YES							
L0000039		0	0.75758E-02	384613.2	3748329.8	47.3	5.00	5.41
1.08	YES							
L0000040		0	0.75758E-02	384624.8	3748330.0	47.6	5.00	5.41

^ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 3

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	VARY			(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY		(METERS)	(METERS)	(METERS)	(METERS)
L0000041		0	0.75758E-02	384636.5	3748330.2	47.8	5.00	5.41
1.08	YES							
L0000042		0	0.75758E-02	384648.1	3748330.5	48.0	5.00	5.41
1.08	YES							
L0000043		0	0.75758E-02	384659.7	3748330.7	48.2	5.00	5.41
1.08	YES							
L0000044		0	0.75758E-02	384671.3	3748330.9	48.4	5.00	5.41
1.08	YES							
L0000045		0	0.75758E-02	384683.0	3748331.1	48.6	5.00	5.41
1.08	YES							
L0000046		0	0.75758E-02	384688.5	3748324.8	48.7	5.00	5.41
1.08	YES							
L0000047		0	0.75758E-02	384689.1	3748313.1	49.0	5.00	5.41

Victoria Greens Construction HRA

1.08	YES							
L0000048		0	0.75758E-02	384681.4	3748309.4	49.0	5.00	5.41
1.08	YES							
L0000049		0	0.75758E-02	384669.8	3748309.4	48.9	5.00	5.41
1.08	YES							
L0000050		0	0.75758E-02	384658.2	3748309.3	48.8	5.00	5.41
1.08	YES							
L0000051		0	0.75758E-02	384646.5	3748309.3	48.6	5.00	5.41
1.08	YES							
L0000052		0	0.75758E-02	384634.9	3748309.3	48.4	5.00	5.41
1.08	YES							
L0000053		0	0.75758E-02	384623.3	3748309.2	48.2	5.00	5.41
1.08	YES							
L0000054		0	0.75758E-02	384611.6	3748309.2	47.9	5.00	5.41
1.08	YES							
L0000055		0	0.75758E-02	384600.0	3748309.2	47.5	5.00	5.41
1.08	YES							
L0000056		0	0.75758E-02	384588.4	3748309.1	47.3	5.00	5.41
1.08	YES							
L0000057		0	0.75758E-02	384581.8	3748303.9	47.3	5.00	5.41
1.08	YES							
L0000058		0	0.75758E-02	384581.5	3748292.3	47.8	5.00	5.41
1.08	YES							
L0000059		0	0.75758E-02	384587.0	3748286.3	48.0	5.00	5.41
1.08	YES							
L0000060		0	0.75758E-02	384598.6	3748286.6	48.1	5.00	5.41
1.08	YES							
L0000061		0	0.75758E-02	384610.2	3748286.8	48.5	5.00	5.41
1.08	YES							
L0000062		0	0.75758E-02	384621.9	3748287.0	48.8	5.00	5.41
1.08	YES							
L0000063		0	0.75758E-02	384633.5	3748287.2	49.0	5.00	5.41
1.08	YES							
L0000064		0	0.75758E-02	384645.1	3748287.4	49.1	5.00	5.41
1.08	YES							
L0000065		0	0.75758E-02	384656.7	3748287.6	49.3	5.00	5.41
1.08	YES							
L0000066		0	0.75758E-02	384668.4	3748287.8	49.4	5.00	5.41
1.08	YES							
L0000067		0	0.75758E-02	384680.0	3748288.0	49.4	5.00	5.41
1.08	YES							
L0000068		0	0.75758E-02	384690.1	3748286.8	49.5	5.00	5.41
1.08	YES							
L0000069		0	0.75758E-02	384690.0	3748275.1	49.7	5.00	5.41
1.08	YES							
L0000070		0	0.75758E-02	384687.8	3748265.6	49.9	5.00	5.41
1.08	YES							
L0000071		0	0.75758E-02	384676.1	3748265.5	49.8	5.00	5.41

Victoria Greens Construction HRA

1.08	YES	L0000072	0	0.75758E-02	384664.5	3748265.5	49.8	5.00	5.41
1.08	YES	L0000073	0	0.75758E-02	384652.9	3748265.4	49.8	5.00	5.41
1.08	YES	L0000074	0	0.75758E-02	384641.2	3748265.4	49.6	5.00	5.41
1.08	YES	L0000075	0	0.75758E-02	384629.6	3748265.3	49.5	5.00	5.41
1.08	YES	L0000076	0	0.75758E-02	384618.0	3748265.2	49.3	5.00	5.41
1.08	YES	L0000077	0	0.75758E-02	384606.3	3748265.2	48.9	5.00	5.41
1.08	YES	L0000078	0	0.75758E-02	384594.7	3748265.1	48.5	5.00	5.41
1.08	YES	L0000079	0	0.75758E-02	384583.1	3748265.1	48.4	5.00	5.41
1.08	YES	L0000080	0	0.75758E-02	384581.9	3748255.1	48.6	5.00	5.41

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   \*\*\*                         08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*     \*\*\*  
   \*\*\*                         13:57:57

PAGE 4

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE	BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE		ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	(GRAMS/SEC)	X	Y	(METERS)	(METERS)
(METERS)		CATS.	VARY	(METERS)	(METERS)	(METERS)	(METERS)
		BY					
L0000081		0	0.75758E-02	384587.4	3748248.7	48.7	5.41
1.08	YES						
L0000082		0	0.75758E-02	384599.0	3748248.6	49.1	5.41
1.08	YES						
L0000083		0	0.75758E-02	384610.6	3748248.6	49.4	5.41
1.08	YES						
L0000084		0	0.75758E-02	384622.3	3748248.6	49.6	5.41
1.08	YES						
L0000085		0	0.75758E-02	384633.9	3748248.5	49.9	5.41

Victoria Greens Construction HRA

1.08	YES							
L0000086		0	0.75758E-02	384645.5	3748248.5	50.1	5.00	5.41
1.08	YES							
L0000087		0	0.75758E-02	384657.2	3748248.5	50.1	5.00	5.41
1.08	YES							
L0000088		0	0.75758E-02	384668.8	3748248.4	50.1	5.00	5.41
1.08	YES							
L0000089		0	0.75758E-02	384680.4	3748248.4	50.2	5.00	5.41
1.08	YES							
L0000090		0	0.75758E-02	384690.8	3748247.0	50.3	5.00	5.41
1.08	YES							
L0000091		0	0.75758E-02	384691.3	3748235.4	50.5	5.00	5.41
1.08	YES							
L0000092		0	0.75758E-02	384685.6	3748229.7	50.5	5.00	5.41
1.08	YES							
L0000093		0	0.75758E-02	384674.0	3748229.7	50.4	5.00	5.41
1.08	YES							
L0000094		0	0.75758E-02	384662.4	3748229.7	50.4	5.00	5.41
1.08	YES							
L0000095		0	0.75758E-02	384650.8	3748229.7	50.3	5.00	5.41
1.08	YES							
L0000096		0	0.75758E-02	384639.1	3748229.7	50.2	5.00	5.41
1.08	YES							
L0000097		0	0.75758E-02	384627.5	3748229.7	50.2	5.00	5.41
1.08	YES							
L0000098		0	0.75758E-02	384615.9	3748229.7	49.8	5.00	5.41
1.08	YES							
L0000099		0	0.75758E-02	384604.2	3748229.7	49.4	5.00	5.41
1.08	YES							
L0000100		0	0.75758E-02	384592.6	3748229.7	49.3	5.00	5.41
1.08	YES							
L0000101		0	0.75758E-02	384581.0	3748229.7	49.2	5.00	5.41
1.08	YES							
L0000102		0	0.75758E-02	384569.3	3748229.7	48.9	5.00	5.41
1.08	YES							
L0000103		0	0.75758E-02	384557.7	3748229.7	48.7	5.00	5.41
1.08	YES							
L0000104		0	0.75758E-02	384546.4	3748229.5	48.7	5.00	5.41
1.08	YES							
L0000105		0	0.75758E-02	384546.9	3748217.8	48.8	5.00	5.41
1.08	YES							
L0000106		0	0.75758E-02	384556.9	3748216.1	49.0	5.00	5.41
1.08	YES							
L0000107		0	0.75758E-02	384568.5	3748216.1	49.3	5.00	5.41
1.08	YES							
L0000108		0	0.75758E-02	384580.1	3748216.0	49.8	5.00	5.41
1.08	YES							
L0000109		0	0.75758E-02	384591.8	3748215.9	49.9	5.00	5.41

Victoria Greens Construction HRA

1.08	YES	L0000110	0	0.75758E-02	384603.4	3748215.8	49.8	5.00	5.41
1.08	YES	L0000111	0	0.75758E-02	384615.0	3748215.8	49.8	5.00	5.41
1.08	YES	L0000112	0	0.75758E-02	384626.7	3748215.7	50.1	5.00	5.41
1.08	YES	L0000113	0	0.75758E-02	384638.3	3748215.6	50.2	5.00	5.41
1.08	YES	L0000114	0	0.75758E-02	384649.9	3748215.6	50.5	5.00	5.41
1.08	YES	L0000115	0	0.75758E-02	384661.6	3748215.5	50.6	5.00	5.41
1.08	YES	L0000116	0	0.75758E-02	384673.2	3748215.4	50.6	5.00	5.41
1.08	YES	L0000117	0	0.75758E-02	384684.8	3748215.4	50.8	5.00	5.41
1.08	YES	L0000118	0	0.75758E-02	384691.8	3748210.7	51.0	5.00	5.41
1.08	YES	L0000119	0	0.75758E-02	384690.6	3748200.1	51.3	5.00	5.41
1.08	YES	L0000120	0	0.75758E-02	384679.0	3748200.1	51.1	5.00	5.41

^ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 5

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	ELEV.	HEIGHT	SY
(METERS)	ID	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)
		CATS.	BY					
L0000121		0	0.75758E-02	384667.3	3748200.1	50.9	5.00	5.41
1.08	YES	L0000122	0	0.75758E-02	384655.7	3748200.1	50.8	5.41
1.08	YES	L0000123	0	0.75758E-02	384644.1	3748200.1	50.4	5.41



Victoria Greens Construction HRA

1.08	YES							
L0000124		0	0.75758E-02	384632.5	3748200.1	50.4	5.00	5.41
1.08	YES							
L0000125		0	0.75758E-02	384620.8	3748200.1	50.3	5.00	5.41
1.08	YES							
L0000126		0	0.75758E-02	384609.2	3748200.1	50.2	5.00	5.41
1.08	YES							
L0000127		0	0.75758E-02	384597.6	3748200.1	50.2	5.00	5.41
1.08	YES							
L0000128		0	0.75758E-02	384585.9	3748200.1	50.3	5.00	5.41
1.08	YES							
L0000129		0	0.75758E-02	384574.3	3748200.1	50.0	5.00	5.41
1.08	YES							
L0000130		0	0.75758E-02	384562.7	3748200.1	49.5	5.00	5.41
1.08	YES							
L0000131		0	0.75758E-02	384551.0	3748200.1	49.4	5.00	5.41
1.08	YES							
L0000132		0	0.75758E-02	384539.4	3748200.1	49.2	5.00	5.41
1.08	YES							

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 6

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 , L0000036 , L0000037 ,
L0000038	, L0000039 , L0000040 ,

Victoria Greens Construction HRA

L0000046      L0000041      , L0000042      , L0000043      , L0000044      , L0000045      ,  
                  , L0000047      , L0000048      ,  
  
 L0000054      L0000049      , L0000050      , L0000051      , L0000052      , L0000053      ,  
                  , L0000055      , L0000056      ,  
  
 L0000062      L0000057      , L0000058      , L0000059      , L0000060      , L0000061      ,  
                  , L0000063      , L0000064      ,  
  
 L0000070      L0000065      , L0000066      , L0000067      , L0000068      , L0000069      ,  
                  , L0000071      , L0000072      ,  
  
 L0000078      L0000073      , L0000074      , L0000075      , L0000076      , L0000077      ,  
                  , L0000079      , L0000080      ,  
  
 L0000086      L0000081      , L0000082      , L0000083      , L0000084      , L0000085      ,  
                  , L0000087      , L0000088      ,  
  
 L0000094      L0000089      , L0000090      , L0000091      , L0000092      , L0000093      ,  
                  , L0000095      , L0000096      ,  
  
 L0000102      L0000097      , L0000098      , L0000099      , L0000100      , L0000101      ,  
                  , L0000103      , L0000104      ,  
  
 L0000110      L0000105      , L0000106      , L0000107      , L0000108      , L0000109      ,  
                  , L0000111      , L0000112      ,  
  
 L0000118      L0000113      , L0000114      , L0000115      , L0000116      , L0000117      ,  
                  , L0000119      , L0000120      ,  
  
 L0000126      L0000121      , L0000122      , L0000123      , L0000124      , L0000125      ,  
                  , L0000127      , L0000128      ,

L0000129      , L0000130      , L0000131      , L0000132      ,  
 ▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* Victoria Greens Construction HRA  
                  \*\*\*      08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                  \*\*\*      13:57:57

PAGE 7

\*\*\* MODELOPTs:      RegDEFAULT      CONC      ELEV      URBAN      ADJ\_U\*

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

\*\*\*

URBAN ID      URBAN POP

SOURCE IDs

Victoria Greens Construction HRA

-----

L0000005	9818605.	L0000001	,	L0000002	,	L0000003	,	L0000004	,
L0000008	, L0000006	, L0000007	,						
	,								
L0000014	L0000009	, L0000010	,	L0000011	,	L0000012	,	L0000013	,
	, L0000015	, L0000016	,						
L0000022	L0000017	, L0000018	,	L0000019	,	L0000020	,	L0000021	,
	, L0000023	, L0000024	,						
L0000030	L0000025	, L0000026	,	L0000027	,	L0000028	,	L0000029	,
	, L0000031	, L0000032	,						
L0000038	L0000033	, L0000034	,	L0000035	,	L0000036	,	L0000037	,
	, L0000039	, L0000040	,						
L0000046	L0000041	, L0000042	,	L0000043	,	L0000044	,	L0000045	,
	, L0000047	, L0000048	,						
L0000054	L0000049	, L0000050	,	L0000051	,	L0000052	,	L0000053	,
	, L0000055	, L0000056	,						
L0000062	L0000057	, L0000058	,	L0000059	,	L0000060	,	L0000061	,
	, L0000063	, L0000064	,						
L0000070	L0000065	, L0000066	,	L0000067	,	L0000068	,	L0000069	,
	, L0000071	, L0000072	,						
L0000078	L0000073	, L0000074	,	L0000075	,	L0000076	,	L0000077	,
	, L0000079	, L0000080	,						
L0000086	L0000081	, L0000082	,	L0000083	,	L0000084	,	L0000085	,
	, L0000087	, L0000088	,						
L0000094	L0000089	, L0000090	,	L0000091	,	L0000092	,	L0000093	,
	, L0000095	, L0000096	,						
L0000102	L0000097	, L0000098	,	L0000099	,	L0000100	,	L0000101	,
	, L0000103	, L0000104	,						
L0000110	L0000105	, L0000106	,	L0000107	,	L0000108	,	L0000109	,
	, L0000111	, L0000112	,						
L0000118	L0000113	, L0000114	,	L0000115	,	L0000116	,	L0000117	,
	, L0000119	, L0000120	,						

Victoria Greens Construction HRA

L0000121 , L0000122 , L0000123 , L0000124 , L0000125 ,  
 L0000126 , L0000127 , L0000128 ,

L0000129 , L0000130 , L0000131 , L0000132 ,  
 \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 8

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 383400.0,	3746100.0,	4.2,	4.2,	0.0);	( 383500.0,
3746100.0,	4.3,	4.3,	0.0);		
( 383600.0,	3746100.0,	3.5,	3.5,	0.0);	( 383700.0,
3746100.0,	4.2,	4.2,	0.0);		
( 383800.0,	3746100.0,	3.9,	3.9,	0.0);	( 383900.0,
3746100.0,	4.6,	4.6,	0.0);		
( 384000.0,	3746100.0,	4.0,	4.0,	0.0);	( 384400.0,
3746100.0,	4.7,	4.7,	0.0);		
( 384800.0,	3746100.0,	6.1,	6.1,	0.0);	( 384900.0,
3746100.0,	6.5,	6.5,	0.0);		
( 385000.0,	3746100.0,	6.6,	6.6,	0.0);	( 385100.0,
3746100.0,	6.8,	6.8,	0.0);		
( 385200.0,	3746100.0,	6.9,	6.9,	0.0);	( 385300.0,
3746100.0,	7.1,	7.1,	0.0);		
( 385400.0,	3746100.0,	6.9,	6.9,	0.0);	( 385500.0,
3746100.0,	8.1,	8.1,	0.0);		
( 385600.0,	3746100.0,	9.1,	9.1,	0.0);	( 385700.0,
3746100.0,	11.1,	11.1,	0.0);		
( 385800.0,	3746100.0,	13.8,	13.8,	0.0);	( 383000.0,
3746200.0,	6.5,	6.5,	0.0);		
( 383100.0,	3746200.0,	6.6,	6.6,	0.0);	( 383400.0,
3746200.0,	3.7,	3.7,	0.0);		
( 383500.0,	3746200.0,	3.9,	3.9,	0.0);	( 383600.0,
3746200.0,	4.6,	4.6,	0.0);		
( 383700.0,	3746200.0,	4.3,	4.3,	0.0);	( 383800.0,
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( 383900.0,	3746200.0,	4.7,	4.7,	0.0);	( 384000.0,
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( 384300.0,	3746200.0,	6.3,	6.3,	0.0);	( 384400.0,
3746200.0,	4.8,	4.8,	0.0);		
( 384600.0,	3746200.0,	6.5,	6.5,	0.0);	( 384800.0,

Victoria Greens Construction HRA

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 ( 385100.0, 3746200.0, 6.5, 6.5, 0.0); ( 385200.0,  
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 ( 385300.0, 3746200.0, 8.2, 8.2, 0.0); ( 385400.0,  
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 ( 385500.0, 3746200.0, 9.6, 9.6, 0.0); ( 385600.0,  
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 ( 385700.0, 3746200.0, 14.7, 14.7, 0.0); ( 385800.0,  
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 ( 383000.0, 3746300.0, 6.8, 6.8, 0.0); ( 383100.0,  
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 ( 383600.0, 3746300.0, 4.9, 4.9, 0.0); ( 383700.0,  
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 ( 383800.0, 3746300.0, 4.8, 4.8, 0.0); ( 383900.0,  
 3746300.0, 5.2, 5.2, 0.0);  
 ( 384000.0, 3746300.0, 5.0, 5.0, 0.0); ( 384300.0,  
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 ( 384400.0, 3746300.0, 4.9, 4.9, 0.0); ( 384600.0,  
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 ( 384700.0, 3746300.0, 6.7, 6.7, 0.0); ( 384800.0,  
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 ( 384900.0, 3746300.0, 7.1, 7.1, 0.0); ( 385000.0,  
 3746300.0, 7.4, 7.4, 0.0);  
 ( 385100.0, 3746300.0, 7.2, 7.2, 0.0); ( 385200.0,  
 3746300.0, 8.3, 10.3, 0.0);  
 ( 385300.0, 3746300.0, 9.5, 11.8, 0.0); ( 385400.0,  
 3746300.0, 10.6, 13.1, 0.0);  
 ( 385500.0, 3746300.0, 12.0, 14.9, 0.0); ( 385600.0,  
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 ( 385700.0, 3746300.0, 17.9, 21.4, 0.0); ( 385800.0,  
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 ( 383000.0, 3746400.0, 6.3, 6.3, 0.0); ( 383100.0,  
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 ( 383200.0, 3746400.0, 6.9, 6.9, 0.0); ( 383300.0,  
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 ( 383400.0, 3746400.0, 5.9, 5.9, 0.0); ( 383600.0,  
 3746400.0, 5.0, 7.0, 0.0);  
 ( 383700.0, 3746400.0, 4.8, 4.8, 0.0); ( 383800.0,  
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 ( 383900.0, 3746400.0, 4.9, 4.9, 0.0); ( 384000.0,  
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 ( 384300.0, 3746400.0, 5.1, 5.1, 0.0); ( 384600.0,  
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 ( 384700.0, 3746400.0, 7.3, 7.3, 0.0); ( 384800.0,

Victoria Greens Construction HRA

3746400.0, 7.6, 7.6, 0.0);  
( 384900.0, 3746400.0, 9.3, 9.3, 0.0); ( 385000.0,  
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( 385100.0, 3746400.0, 10.6, 10.6, 0.0); ( 385200.0,  
3746400.0, 11.8, 11.8, 0.0);  
( 385300.0, 3746400.0, 13.2, 13.2, 0.0); ( 385400.0,  
3746400.0, 15.3, 15.3, 0.0);  
( 385500.0, 3746400.0, 17.0, 18.5, 0.0); ( 385600.0,  
3746400.0, 19.9, 20.8, 0.0);  
( 385700.0, 3746400.0, 22.1, 23.3, 0.0); ( 383000.0,  
3746500.0, 6.1, 6.1, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 9

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

( 383100.0, 3746500.0, 6.8, 6.8, 0.0); ( 383200.0,  
3746500.0, 7.0, 7.0, 0.0);  
( 383300.0, 3746500.0, 6.6, 6.6, 0.0); ( 383400.0,  
3746500.0, 6.3, 6.3, 0.0);  
( 383500.0, 3746500.0, 7.3, 7.3, 0.0); ( 383600.0,  
3746500.0, 7.0, 7.0, 0.0);  
( 383700.0, 3746500.0, 6.7, 6.7, 0.0); ( 383800.0,  
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( 383900.0, 3746500.0, 5.8, 5.8, 0.0); ( 384000.0,  
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( 384200.0, 3746500.0, 6.1, 6.1, 0.0); ( 384300.0,  
3746500.0, 6.3, 6.3, 0.0);  
( 384400.0, 3746500.0, 6.6, 6.6, 0.0); ( 384600.0,  
3746500.0, 6.9, 6.9, 0.0);  
( 384700.0, 3746500.0, 7.1, 14.2, 0.0); ( 384800.0,  
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( 384900.0, 3746500.0, 10.7, 10.7, 0.0); ( 385000.0,  
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( 385100.0, 3746500.0, 13.0, 20.8, 0.0); ( 385200.0,  
3746500.0, 14.7, 23.4, 0.0);  
( 385300.0, 3746500.0, 16.3, 25.4, 0.0); ( 385400.0,  
3746500.0, 21.5, 21.5, 0.0);  
( 385500.0, 3746500.0, 24.2, 24.2, 0.0); ( 385600.0,  
3746500.0, 24.7, 24.7, 0.0);  
( 385700.0, 3746500.0, 25.0, 25.0, 0.0); ( 383000.0,

Victoria Greens Construction HRA

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 ( 383300.0, 3746600.0, 6.6, 6.6, 0.0); ( 383400.0,  
 3746600.0, 6.9, 6.9, 0.0);  
 ( 383500.0, 3746600.0, 7.6, 7.6, 0.0); ( 383600.0,  
 3746600.0, 7.2, 7.2, 0.0);  
 ( 383700.0, 3746600.0, 6.2, 6.2, 0.0); ( 383800.0,  
 3746600.0, 6.7, 6.7, 0.0);  
 ( 383900.0, 3746600.0, 6.5, 6.5, 0.0); ( 384000.0,  
 3746600.0, 6.8, 6.8, 0.0);  
 ( 384200.0, 3746600.0, 7.8, 7.8, 0.0); ( 384300.0,  
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 ( 384400.0, 3746600.0, 8.7, 8.7, 0.0); ( 384600.0,  
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 ( 384700.0, 3746600.0, 13.6, 14.6, 0.0); ( 384800.0,  
 3746600.0, 14.3, 14.3, 0.0);  
 ( 384900.0, 3746600.0, 15.2, 15.2, 0.0); ( 385000.0,  
 3746600.0, 17.3, 17.3, 0.0);  
 ( 385100.0, 3746600.0, 19.5, 19.5, 0.0); ( 385200.0,  
 3746600.0, 21.7, 21.7, 0.0);  
 ( 385300.0, 3746600.0, 23.8, 26.9, 0.0); ( 385400.0,  
 3746600.0, 26.2, 26.2, 0.0);  
 ( 385500.0, 3746600.0, 27.5, 27.5, 0.0); ( 385600.0,  
 3746600.0, 28.7, 28.7, 0.0);  
 ( 385700.0, 3746600.0, 29.1, 29.1, 0.0); ( 383000.0,  
 3746700.0, 7.0, 7.0, 0.0);  
 ( 383100.0, 3746700.0, 7.3, 7.3, 0.0); ( 383200.0,  
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 ( 383300.0, 3746700.0, 7.3, 7.3, 0.0); ( 383400.0,  
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 ( 383500.0, 3746700.0, 7.7, 7.7, 0.0); ( 383600.0,  
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 ( 383700.0, 3746700.0, 6.6, 6.6, 0.0); ( 383800.0,  
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 ( 383900.0, 3746700.0, 7.2, 7.2, 0.0); ( 384000.0,  
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 ( 384100.0, 3746700.0, 7.6, 8.9, 0.0); ( 384300.0,  
 3746700.0, 10.4, 10.4, 0.0);  
 ( 384400.0, 3746700.0, 11.8, 11.8, 0.0); ( 384600.0,  
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 ( 384700.0, 3746700.0, 15.6, 15.6, 0.0); ( 384800.0,  
 3746700.0, 15.7, 15.7, 0.0);  
 ( 384900.0, 3746700.0, 17.6, 21.2, 0.0); ( 385000.0,  
 3746700.0, 22.0, 22.0, 0.0);  
 ( 385100.0, 3746700.0, 23.8, 23.8, 0.0); ( 385200.0,  
 3746700.0, 25.8, 25.8, 0.0);  
 ( 385300.0, 3746700.0, 28.0, 28.0, 0.0); ( 385500.0,

Victoria Greens Construction HRA

3746700.0, 31.2, 31.2, 0.0);  
 ( 385600.0, 3746700.0, 32.2, 36.5, 0.0); ( 385700.0,  
 3746700.0, 32.9, 38.3, 0.0);  
 ( 386400.0, 3746700.0, 46.5, 46.5, 0.0); ( 386500.0,  
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 ( 386600.0, 3746700.0, 49.0, 49.0, 0.0); ( 386700.0,  
 3746700.0, 50.8, 50.8, 0.0);  
 ( 383000.0, 3746800.0, 7.2, 7.2, 0.0); ( 383100.0,  
 3746800.0, 7.5, 7.5, 0.0);  
 ( 383200.0, 3746800.0, 7.3, 7.3, 0.0); ( 383300.0,  
 3746800.0, 7.3, 7.3, 0.0);  
 ( 383400.0, 3746800.0, 7.8, 7.8, 0.0); ( 383500.0,  
 3746800.0, 7.7, 7.7, 0.0);  
 ( 383600.0, 3746800.0, 6.9, 6.9, 0.0); ( 383700.0,  
 3746800.0, 6.7, 6.7, 0.0);  
 ( 383800.0, 3746800.0, 7.0, 7.0, 0.0); ( 383900.0,  
 3746800.0, 7.5, 7.5, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 10

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 384000.0, 3746800.0, 7.4, 7.4, 0.0); ( 384100.0,  
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 ( 384200.0, 3746800.0, 12.0, 16.1, 0.0); ( 384300.0,  
 3746800.0, 13.9, 13.9, 0.0);  
 ( 384400.0, 3746800.0, 15.2, 16.8, 0.0); ( 384600.0,  
 3746800.0, 18.2, 25.2, 0.0);  
 ( 384700.0, 3746800.0, 19.6, 26.4, 0.0); ( 384800.0,  
 3746800.0, 19.5, 26.1, 0.0);  
 ( 384900.0, 3746800.0, 21.2, 26.7, 0.0); ( 385000.0,  
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 ( 385100.0, 3746800.0, 28.9, 28.9, 0.0); ( 385200.0,  
 3746800.0, 30.8, 30.8, 0.0);  
 ( 385300.0, 3746800.0, 33.0, 33.0, 0.0); ( 385400.0,  
 3746800.0, 34.4, 34.4, 0.0);  
 ( 385500.0, 3746800.0, 35.3, 35.3, 0.0); ( 385600.0,  
 3746800.0, 37.6, 37.6, 0.0);  
 ( 385700.0, 3746800.0, 38.1, 43.1, 0.0); ( 386400.0,  
 3746800.0, 48.6, 48.6, 0.0);  
 ( 386500.0, 3746800.0, 49.8, 49.8, 0.0); ( 386600.0,



Victoria Greens Construction HRA

3746800.0, 51.0, 51.0, 0.0);  
 ( 386700.0, 3746800.0, 51.8, 52.9, 0.0); ( 383000.0,  
 3746900.0, 7.5, 7.5, 0.0);  
 ( 383100.0, 3746900.0, 7.7, 7.7, 0.0); ( 383200.0,  
 3746900.0, 7.4, 7.4, 0.0);  
 ( 383300.0, 3746900.0, 7.9, 7.9, 0.0); ( 383400.0,  
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 ( 383500.0, 3746900.0, 7.8, 7.8, 0.0); ( 383600.0,  
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 ( 383900.0, 3746900.0, 8.7, 8.7, 0.0); ( 384000.0,  
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 ( 384100.0, 3746900.0, 13.3, 16.8, 0.0); ( 384200.0,  
 3746900.0, 17.3, 17.7, 0.0);  
 ( 384300.0, 3746900.0, 17.2, 20.1, 0.0); ( 384400.0,  
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 ( 384500.0, 3746900.0, 20.3, 20.3, 0.0); ( 384600.0,  
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 ( 384900.0, 3746900.0, 26.4, 30.4, 0.0); ( 385000.0,  
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 ( 385100.0, 3746900.0, 34.0, 34.0, 0.0); ( 385200.0,  
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 ( 386600.0, 3746900.0, 53.5, 53.5, 0.0); ( 386700.0,  
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 ( 383000.0, 3747000.0, 7.2, 7.2, 0.0); ( 383100.0,  
 3747000.0, 7.5, 7.5, 0.0);  
 ( 383200.0, 3747000.0, 7.6, 7.6, 0.0); ( 383300.0,  
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 ( 383400.0, 3747000.0, 8.1, 8.1, 0.0); ( 383500.0,  
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 ( 383600.0, 3747000.0, 7.9, 7.9, 0.0); ( 383700.0,  
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 ( 383800.0, 3747000.0, 11.3, 11.3, 0.0); ( 383900.0,  
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 ( 384000.0, 3747000.0, 15.3, 15.3, 0.0); ( 384100.0,  
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 ( 384200.0, 3747000.0, 20.4, 20.4, 0.0); ( 384300.0,  
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 ( 384400.0, 3747000.0, 23.4, 23.4, 0.0); ( 384500.0,

Victoria Greens Construction HRA

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 ( 384800.0, 3747000.0, 28.7, 28.7, 0.0); ( 384900.0,  
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 ( 385000.0, 3747000.0, 35.6, 35.6, 0.0); ( 385100.0,  
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 ( 385200.0, 3747000.0, 40.9, 40.9, 0.0); ( 385300.0,  
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 ( 385400.0, 3747000.0, 44.4, 44.4, 0.0); ( 385500.0,  
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 ( 385600.0, 3747000.0, 47.1, 47.1, 0.0); ( 386400.0,  
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 ( 386500.0, 3747000.0, 53.6, 53.6, 0.0); ( 386600.0,  
 3747000.0, 54.4, 54.4, 0.0);  
 ( 382900.0, 3747100.0, 6.5, 7.8, 0.0); ( 383000.0,  
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 ( 383100.0, 3747100.0, 7.7, 7.7, 0.0); ( 383200.0,  
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 ( 383300.0, 3747100.0, 8.7, 8.7, 0.0); ( 383400.0,  
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 ( 383500.0, 3747100.0, 8.6, 8.6, 0.0); ( 383600.0,  
 3747100.0, 9.7, 19.5, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 11

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

( 383700.0, 3747100.0, 12.7, 12.7, 0.0); ( 383800.0,  
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 ( 383900.0, 3747100.0, 15.4, 15.4, 0.0); ( 384000.0,  
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 ( 384100.0, 3747100.0, 18.8, 20.7, 0.0); ( 385400.0,  
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 ( 382600.0, 3747300.0, 7.9, 7.9, 0.0); ( 382700.0,  
 3747300.0, 7.2, 7.2, 0.0);  
 ( 382800.0, 3747300.0, 7.5, 7.5, 0.0); ( 382900.0,

Victoria Greens Construction HRA

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 ( 383200.0, 3747300.0, 9.0, 9.0, 0.0); ( 383300.0,  
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 ( 382600.0, 3747400.0, 8.0, 8.0, 0.0); ( 382700.0,  
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 ( 382500.0, 3747500.0, 7.9, 7.9, 0.0); ( 382600.0,  
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 ( 382700.0, 3747500.0, 7.5, 7.5, 0.0); ( 382800.0,  
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 ( 383900.0, 3747500.0, 27.6, 27.6, 0.0); ( 382400.0,  
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 ( 382500.0, 3747600.0, 7.4, 7.4, 0.0); ( 382600.0,  
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 ( 382700.0, 3747600.0, 7.5, 7.5, 0.0); ( 382400.0,  
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 ( 382500.0, 3747700.0, 6.6, 6.6, 0.0); ( 382600.0,  
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 ( 382700.0, 3747700.0, 7.0, 7.0, 0.0); ( 382800.0,  
 3747700.0, 7.4, 7.4, 0.0);  
 ( 384200.0, 3747700.0, 38.2, 38.2, 0.0); ( 384300.0,  
 3747700.0, 42.3, 42.3, 0.0);  
 ( 382400.0, 3747800.0, 7.3, 7.3, 0.0); ( 382500.0,  
 3747800.0, 7.2, 7.2, 0.0);  
 ( 382600.0, 3747800.0, 7.8, 7.8, 0.0); ( 382700.0,  
 3747800.0, 7.5, 7.5, 0.0);  
 ( 382800.0, 3747800.0, 8.0, 8.0, 0.0); ( 384200.0,  
 3747800.0, 39.2, 43.7, 0.0);  
 ( 384300.0, 3747800.0, 44.5, 44.5, 0.0); ( 386600.0,  
 3747800.0, 41.6, 48.2, 0.0);  
 ( 386700.0, 3747800.0, 38.7, 47.9, 0.0); ( 382400.0,  
 3747900.0, 7.4, 7.4, 0.0);  
 ( 382500.0, 3747900.0, 7.4, 7.4, 0.0); ( 382600.0,  
 3747900.0, 8.5, 8.5, 0.0);  
 ( 382700.0, 3747900.0, 8.0, 8.0, 0.0); ( 382800.0,  
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 ( 384200.0, 3747900.0, 39.2, 42.7, 0.0); ( 384300.0,  
 3747900.0, 45.0, 48.7, 0.0);  
 ( 386600.0, 3747900.0, 38.4, 42.5, 0.0); ( 386700.0,  
 3747900.0, 36.3, 36.8, 0.0);  
 ( 382400.0, 3748000.0, 7.4, 7.4, 0.0); ( 382500.0,  
 3748000.0, 8.2, 8.2, 0.0);  
 ( 382600.0, 3748000.0, 8.7, 8.7, 0.0); ( 382700.0,

Victoria Greens Construction HRA

3748000.0, 8.9, 8.9, 0.0);  
 ( 382800.0, 3748000.0, 9.6, 12.6, 0.0); ( 382400.0,  
 3748100.0, 7.9, 7.9, 0.0);  
 ( 382500.0, 3748100.0, 8.5, 8.5, 0.0); ( 382600.0,  
 3748100.0, 8.9, 8.9, 0.0);  
 ( 382700.0, 3748100.0, 9.1, 9.1, 0.0); ( 382500.0,  
 3748200.0, 8.5, 8.5, 0.0);  
 ( 382600.0, 3748200.0, 9.5, 9.5, 0.0); ( 382700.0,  
 3748200.0, 11.1, 11.1, 0.0);  
 ( 382800.0, 3748200.0, 12.0, 12.0, 0.0); ( 383000.0,  
 3748200.0, 18.9, 18.9, 0.0);  
 ( 383100.0, 3748200.0, 21.4, 21.4, 0.0); ( 383200.0,  
 3748200.0, 22.8, 22.8, 0.0);  
 ( 383300.0, 3748200.0, 24.6, 24.6, 0.0); ( 383400.0,  
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 ( 383500.0, 3748200.0, 26.5, 26.5, 0.0); ( 383600.0,  
 3748200.0, 26.8, 26.8, 0.0);  
 ( 383700.0, 3748200.0, 27.6, 27.6, 0.0); ( 384000.0,  
 3748200.0, 35.0, 35.0, 0.0);  
 ( 384100.0, 3748200.0, 38.0, 38.0, 0.0); ( 384200.0,  
 3748200.0, 41.4, 41.4, 0.0);  
 ( 384300.0, 3748200.0, 43.7, 43.7, 0.0); ( 384400.0,  
 3748200.0, 46.7, 46.7, 0.0);  
 ( 382500.0, 3748300.0, 8.1, 8.1, 0.0); ( 382600.0,  
 3748300.0, 9.1, 9.1, 0.0);  
 ( 382700.0, 3748300.0, 11.6, 11.6, 0.0); ( 382800.0,  
 3748300.0, 12.6, 12.6, 0.0);  
 ( 383000.0, 3748300.0, 17.4, 17.4, 0.0); ( 383100.0,  
 3748300.0, 20.7, 20.7, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 12

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 383200.0, 3748300.0, 22.3, 22.3, 0.0); ( 383300.0,  
 3748300.0, 24.3, 24.3, 0.0);  
 ( 383600.0, 3748300.0, 27.5, 27.5, 0.0); ( 383700.0,  
 3748300.0, 28.4, 28.4, 0.0);  
 ( 383800.0, 3748300.0, 29.6, 30.5, 0.0); ( 383900.0,  
 3748300.0, 32.9, 34.1, 0.0);  
 ( 384000.0, 3748300.0, 36.7, 36.7, 0.0); ( 384100.0,

Victoria Greens Construction HRA

3748300.0, 37.8, 37.8, 0.0);  
 ( 384200.0, 3748300.0, 40.5, 40.7, 0.0); ( 384300.0,  
 3748300.0, 42.0, 43.5, 0.0);  
 ( 384400.0, 3748300.0, 44.1, 44.1, 0.0); ( 382400.0,  
 3748400.0, 10.0, 10.0, 0.0);  
 ( 382700.0, 3748400.0, 11.1, 11.1, 0.0); ( 382800.0,  
 3748400.0, 12.9, 12.9, 0.0);  
 ( 383200.0, 3748400.0, 22.2, 22.2, 0.0); ( 383300.0,  
 3748400.0, 23.9, 23.9, 0.0);  
 ( 383400.0, 3748400.0, 25.6, 25.6, 0.0); ( 383500.0,  
 3748400.0, 27.0, 27.0, 0.0);  
 ( 383600.0, 3748400.0, 27.9, 27.9, 0.0); ( 383700.0,  
 3748400.0, 28.5, 28.5, 0.0);  
 ( 383800.0, 3748400.0, 30.7, 30.7, 0.0); ( 383900.0,  
 3748400.0, 32.3, 32.3, 0.0);  
 ( 384000.0, 3748400.0, 34.5, 34.5, 0.0); ( 384100.0,  
 3748400.0, 36.1, 36.1, 0.0);  
 ( 384200.0, 3748400.0, 38.2, 38.2, 0.0); ( 384300.0,  
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 ( 384400.0, 3748400.0, 42.2, 42.2, 0.0); ( 382400.0,  
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 ( 382500.0, 3748500.0, 10.8, 10.8, 0.0); ( 382700.0,  
 3748500.0, 9.3, 9.3, 0.0);  
 ( 382800.0, 3748500.0, 10.2, 13.8, 0.0); ( 383000.0,  
 3748500.0, 17.8, 17.8, 0.0);  
 ( 383100.0, 3748500.0, 20.2, 20.2, 0.0); ( 383200.0,  
 3748500.0, 21.7, 21.7, 0.0);  
 ( 383300.0, 3748500.0, 23.2, 23.2, 0.0); ( 383400.0,  
 3748500.0, 24.7, 24.7, 0.0);  
 ( 383500.0, 3748500.0, 25.1, 26.3, 0.0); ( 383800.0,  
 3748500.0, 29.4, 29.4, 0.0);  
 ( 383900.0, 3748500.0, 31.0, 31.0, 0.0); ( 384000.0,  
 3748500.0, 33.0, 33.0, 0.0);  
 ( 384100.0, 3748500.0, 34.1, 34.1, 0.0); ( 384200.0,  
 3748500.0, 35.5, 37.2, 0.0);  
 ( 384300.0, 3748500.0, 38.9, 38.9, 0.0); ( 384400.0,  
 3748500.0, 42.0, 42.0, 0.0);  
 ( 382400.0, 3748600.0, 10.8, 10.8, 0.0); ( 382500.0,  
 3748600.0, 11.2, 11.2, 0.0);  
 ( 382600.0, 3748600.0, 9.4, 11.7, 0.0); ( 383000.0,  
 3748600.0, 17.2, 17.2, 0.0);  
 ( 383100.0, 3748600.0, 19.0, 19.0, 0.0); ( 383200.0,  
 3748600.0, 20.4, 20.4, 0.0);  
 ( 383300.0, 3748600.0, 22.2, 22.9, 0.0); ( 383400.0,  
 3748600.0, 24.0, 24.0, 0.0);  
 ( 383500.0, 3748600.0, 24.6, 24.6, 0.0); ( 383800.0,  
 3748600.0, 27.7, 29.5, 0.0);  
 ( 383900.0, 3748600.0, 29.1, 29.1, 0.0); ( 384000.0,

Victoria Greens Construction HRA

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 ( 384100.0, 3748600.0, 31.1, 33.1, 0.0); ( 384200.0,  
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 ( 384300.0, 3748600.0, 38.2, 38.2, 0.0); ( 384400.0,  
 3748600.0, 40.2, 41.2, 0.0);  
 ( 383400.0, 3748700.0, 21.8, 23.0, 0.0); ( 383500.0,  
 3748700.0, 23.4, 23.4, 0.0);  
 ( 383800.0, 3748700.0, 27.4, 27.4, 0.0); ( 383900.0,  
 3748700.0, 27.8, 27.8, 0.0);  
 ( 384000.0, 3748700.0, 27.5, 27.5, 0.0); ( 384100.0,  
 3748700.0, 29.0, 31.9, 0.0);  
 ( 384200.0, 3748700.0, 34.6, 34.6, 0.0); ( 384300.0,  
 3748700.0, 38.0, 38.0, 0.0);  
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 3748900.0, 11.1, 11.1, 0.0);  
 ( 382600.0, 3748900.0, 11.9, 11.9, 0.0); ( 382700.0,  
 3748900.0, 13.5, 13.5, 0.0);  
 ( 382800.0, 3748900.0, 14.3, 21.3, 0.0); ( 382900.0,  
 3748900.0, 15.2, 21.5, 0.0);  
 ( 382400.0, 3749000.0, 12.9, 12.9, 0.0); ( 382500.0,  
 3749000.0, 12.0, 12.0, 0.0);  
 ( 382600.0, 3749000.0, 11.2, 11.2, 0.0); ( 382700.0,  
 3749000.0, 12.6, 12.6, 0.0);  
 ( 382800.0, 3749000.0, 14.5, 14.5, 0.0); ( 382900.0,  
 3749000.0, 15.4, 15.4, 0.0);  
 ( 382400.0, 3749100.0, 13.4, 13.4, 0.0); ( 382500.0,  
 3749100.0, 12.5, 12.5, 0.0);  
 ( 382600.0, 3749100.0, 12.4, 12.4, 0.0); ( 382700.0,  
 3749100.0, 12.0, 12.0, 0.0);  
 ( 382800.0, 3749100.0, 12.7, 12.7, 0.0); ( 382900.0,  
 3749100.0, 15.0, 15.0, 0.0);  
 ( 382400.0, 3749200.0, 13.6, 13.6, 0.0); ( 382500.0,  
 3749200.0, 13.5, 13.5, 0.0);  
 ( 382600.0, 3749200.0, 13.0, 13.0, 0.0); ( 382700.0,  
 3749200.0, 12.9, 12.9, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 13

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 382800.0, 3749200.0, 13.5, 13.5, 0.0); ( 382900.0,

Victoria Greens Construction HRA

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 ( 382400.0, 3749300.0, 13.7, 13.7, 0.0); ( 382500.0,  
 3749300.0, 13.9, 13.9, 0.0);  
 ( 382600.0, 3749300.0, 13.7, 13.7, 0.0); ( 382700.0,  
 3749300.0, 13.8, 13.8, 0.0);  
 ( 382800.0, 3749300.0, 13.7, 13.7, 0.0); ( 382900.0,  
 3749300.0, 14.3, 14.3, 0.0);  
 ( 382400.0, 3749400.0, 14.9, 14.9, 0.0); ( 382500.0,  
 3749400.0, 14.8, 14.8, 0.0);  
 ( 382600.0, 3749400.0, 14.5, 14.5, 0.0); ( 382700.0,  
 3749400.0, 14.9, 14.9, 0.0);  
 ( 382800.0, 3749400.0, 15.2, 15.2, 0.0); ( 382900.0,  
 3749400.0, 16.0, 16.0, 0.0);  
 ( 385400.0, 3749400.0, 30.0, 30.0, 0.0); ( 382400.0,  
 3749500.0, 13.7, 14.8, 0.0);  
 ( 382500.0, 3749500.0, 15.1, 15.1, 0.0); ( 382600.0,  
 3749500.0, 15.1, 15.1, 0.0);  
 ( 382700.0, 3749500.0, 15.4, 15.4, 0.0); ( 382800.0,  
 3749500.0, 15.9, 15.9, 0.0);  
 ( 382900.0, 3749500.0, 16.7, 16.7, 0.0); ( 383000.0,  
 3749500.0, 17.1, 17.1, 0.0);  
 ( 385400.0, 3749500.0, 29.4, 29.4, 0.0); ( 383400.0,  
 3749600.0, 19.5, 19.5, 0.0);  
 ( 383500.0, 3749600.0, 20.8, 20.8, 0.0); ( 383600.0,  
 3749600.0, 21.2, 21.2, 0.0);  
 ( 383700.0, 3749600.0, 21.5, 21.5, 0.0); ( 383800.0,  
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 ( 383900.0, 3749600.0, 23.3, 23.3, 0.0); ( 384000.0,  
 3749600.0, 27.1, 27.1, 0.0);  
 ( 383400.0, 3749700.0, 19.8, 19.8, 0.0); ( 383500.0,  
 3749700.0, 20.8, 20.8, 0.0);  
 ( 383600.0, 3749700.0, 21.1, 21.1, 0.0); ( 383700.0,  
 3749700.0, 21.5, 21.5, 0.0);  
 ( 383800.0, 3749700.0, 22.0, 22.0, 0.0); ( 383900.0,  
 3749700.0, 22.8, 24.2, 0.0);  
 ( 384000.0, 3749700.0, 27.3, 27.3, 0.0); ( 384900.0,  
 3749700.0, 29.9, 29.9, 0.0);  
 ( 385000.0, 3749700.0, 30.1, 30.1, 0.0); ( 385100.0,  
 3749700.0, 29.7, 29.7, 0.0);  
 ( 385200.0, 3749700.0, 28.9, 28.9, 0.0); ( 385300.0,  
 3749700.0, 29.6, 29.6, 0.0);  
 ( 385400.0, 3749700.0, 28.8, 28.8, 0.0); ( 385500.0,  
 3749700.0, 28.3, 28.3, 0.0);  
 ( 385600.0, 3749700.0, 27.8, 27.8, 0.0); ( 385700.0,  
 3749700.0, 27.1, 27.1, 0.0);  
 ( 385800.0, 3749700.0, 26.1, 26.1, 0.0); ( 385900.0,  
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 ( 386000.0, 3749700.0, 24.4, 24.4, 0.0); ( 386100.0,

Victoria Greens Construction HRA

3749700.0, 22.9, 22.9, 0.0);  
 ( 386200.0, 3749700.0, 22.8, 22.8, 0.0); ( 386300.0,  
 3749700.0, 22.6, 22.6, 0.0);  
 ( 386400.0, 3749700.0, 22.0, 22.0, 0.0); ( 386500.0,  
 3749700.0, 20.9, 20.9, 0.0);  
 ( 386600.0, 3749700.0, 20.5, 20.5, 0.0); ( 386700.0,  
 3749700.0, 20.1, 20.1, 0.0);  
 ( 383400.0, 3749800.0, 17.7, 17.7, 0.0); ( 383500.0,  
 3749800.0, 20.1, 20.1, 0.0);  
 ( 383600.0, 3749800.0, 20.1, 20.1, 0.0); ( 383700.0,  
 3749800.0, 21.6, 21.6, 0.0);  
 ( 383800.0, 3749800.0, 22.6, 22.6, 0.0); ( 383900.0,  
 3749800.0, 25.6, 25.6, 0.0);  
 ( 384000.0, 3749800.0, 27.7, 27.7, 0.0); ( 384100.0,  
 3749800.0, 29.1, 29.1, 0.0);  
 ( 384200.0, 3749800.0, 29.7, 29.7, 0.0); ( 384500.0,  
 3749800.0, 29.0, 29.0, 0.0);  
 ( 384600.0, 3749800.0, 28.9, 28.9, 0.0); ( 384700.0,  
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 ( 384800.0, 3749800.0, 29.0, 29.0, 0.0); ( 384900.0,  
 3749800.0, 29.3, 29.3, 0.0);  
 ( 385000.0, 3749800.0, 29.9, 29.9, 0.0); ( 385100.0,  
 3749800.0, 29.2, 29.2, 0.0);  
 ( 385200.0, 3749800.0, 28.8, 28.8, 0.0); ( 385300.0,  
 3749800.0, 29.3, 29.3, 0.0);  
 ( 385400.0, 3749800.0, 28.7, 28.7, 0.0); ( 385500.0,  
 3749800.0, 28.0, 28.0, 0.0);  
 ( 385600.0, 3749800.0, 27.7, 27.7, 0.0); ( 385700.0,  
 3749800.0, 26.5, 26.5, 0.0);  
 ( 385800.0, 3749800.0, 25.8, 25.8, 0.0); ( 385900.0,  
 3749800.0, 24.9, 24.9, 0.0);  
 ( 386000.0, 3749800.0, 23.4, 23.4, 0.0); ( 386100.0,  
 3749800.0, 22.7, 22.7, 0.0);  
 ( 386200.0, 3749800.0, 22.6, 22.6, 0.0); ( 386500.0,  
 3749800.0, 21.0, 21.0, 0.0);  
 ( 386600.0, 3749800.0, 20.6, 20.6, 0.0); ( 386700.0,  
 3749800.0, 19.2, 20.1, 0.0);  
 ( 383300.0, 3749900.0, 18.7, 18.7, 0.0); ( 383400.0,  
 3749900.0, 17.5, 17.5, 0.0);  
 ( 383500.0, 3749900.0, 17.7, 17.7, 0.0); ( 383600.0,  
 3749900.0, 20.0, 20.0, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57



Victoria Greens Construction HRA

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

( 383700.0, 3749900.0,	21.4,	21.4,	0.0);	( 383800.0,
3749900.0, 22.4,	22.4,	0.0);		
( 383900.0, 3749900.0,	25.0,	25.0,	0.0);	( 384000.0,
3749900.0, 27.8,	27.8,	0.0);		
( 384100.0, 3749900.0,	29.9,	29.9,	0.0);	( 384200.0,
3749900.0, 29.5,	29.5,	0.0);		
( 384300.0, 3749900.0,	29.5,	29.5,	0.0);	( 384400.0,
3749900.0, 29.3,	29.3,	0.0);		
( 384500.0, 3749900.0,	29.3,	29.3,	0.0);	( 384600.0,
3749900.0, 28.7,	28.7,	0.0);		
( 384700.0, 3749900.0,	29.5,	29.5,	0.0);	( 384800.0,
3749900.0, 29.4,	29.4,	0.0);		
( 384900.0, 3749900.0,	29.5,	29.5,	0.0);	( 385000.0,
3749900.0, 29.6,	29.6,	0.0);		
( 385100.0, 3749900.0,	28.8,	28.8,	0.0);	( 385200.0,
3749900.0, 28.6,	28.6,	0.0);		
( 385300.0, 3749900.0,	28.9,	28.9,	0.0);	( 385400.0,
3749900.0, 28.3,	28.3,	0.0);		
( 385500.0, 3749900.0,	27.6,	27.6,	0.0);	( 385600.0,
3749900.0, 27.5,	27.5,	0.0);		
( 385700.0, 3749900.0,	26.9,	26.9,	0.0);	( 385800.0,
3749900.0, 26.0,	26.0,	0.0);		
( 385900.0, 3749900.0,	24.8,	24.8,	0.0);	( 386000.0,
3749900.0, 23.8,	23.8,	0.0);		
( 386100.0, 3749900.0,	23.5,	23.5,	0.0);	( 386200.0,
3749900.0, 22.9,	22.9,	0.0);		
( 386400.0, 3749900.0,	22.0,	22.0,	0.0);	( 386500.0,
3749900.0, 21.1,	21.1,	0.0);		
( 386600.0, 3749900.0,	20.6,	20.6,	0.0);	( 386700.0,
3749900.0, 20.3,	20.3,	0.0);		
( 383300.0, 3750000.0,	19.4,	19.4,	0.0);	( 383400.0,
3750000.0, 17.8,	17.8,	0.0);		
( 383500.0, 3750000.0,	18.0,	18.0,	0.0);	( 383600.0,
3750000.0, 17.8,	17.8,	0.0);		
( 383700.0, 3750000.0,	20.6,	20.6,	0.0);	( 383800.0,
3750000.0, 22.4,	22.4,	0.0);		
( 383900.0, 3750000.0,	25.2,	25.2,	0.0);	( 384000.0,
3750000.0, 28.0,	28.0,	0.0);		
( 384100.0, 3750000.0,	30.4,	30.4,	0.0);	( 384200.0,
3750000.0, 29.6,	29.6,	0.0);		
( 384300.0, 3750000.0,	30.0,	30.0,	0.0);	( 384400.0,
3750000.0, 28.9,	28.9,	0.0);		
( 384500.0, 3750000.0,	29.6,	29.6,	0.0);	( 384600.0,

Victoria Greens Construction HRA

3750000.0, 28.8, 28.8, 0.0);  
 ( 384700.0, 3750000.0, 29.4, 29.4, 0.0); ( 384800.0,  
 3750000.0, 29.3, 29.3, 0.0);  
 ( 384900.0, 3750000.0, 29.3, 29.3, 0.0); ( 385000.0,  
 3750000.0, 29.3, 29.3, 0.0);  
 ( 385100.0, 3750000.0, 28.6, 28.6, 0.0); ( 385200.0,  
 3750000.0, 28.7, 28.7, 0.0);  
 ( 385300.0, 3750000.0, 28.7, 28.7, 0.0); ( 385400.0,  
 3750000.0, 28.3, 28.3, 0.0);  
 ( 385500.0, 3750000.0, 27.4, 27.4, 0.0); ( 385600.0,  
 3750000.0, 27.5, 27.5, 0.0);  
 ( 385700.0, 3750000.0, 26.4, 26.4, 0.0); ( 385800.0,  
 3750000.0, 25.8, 25.8, 0.0);  
 ( 385900.0, 3750000.0, 24.8, 24.8, 0.0); ( 386000.0,  
 3750000.0, 23.9, 23.9, 0.0);  
 ( 386100.0, 3750000.0, 23.4, 23.4, 0.0); ( 386200.0,  
 3750000.0, 22.6, 22.6, 0.0);  
 ( 386300.0, 3750000.0, 21.8, 21.8, 0.0); ( 386400.0,  
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 ( 386500.0, 3750000.0, 20.9, 20.9, 0.0); ( 386600.0,  
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 ( 386700.0, 3750000.0, 20.3, 20.3, 0.0); ( 383300.0,  
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 ( 383400.0, 3750100.0, 19.8, 19.8, 0.0); ( 383500.0,  
 3750100.0, 18.4, 18.4, 0.0);  
 ( 383600.0, 3750100.0, 18.4, 18.4, 0.0); ( 383700.0,  
 3750100.0, 18.3, 24.5, 0.0);  
 ( 383800.0, 3750100.0, 24.4, 27.5, 0.0); ( 383900.0,  
 3750100.0, 27.9, 27.9, 0.0);  
 ( 384000.0, 3750100.0, 29.2, 29.2, 0.0); ( 384100.0,  
 3750100.0, 30.4, 30.4, 0.0);  
 ( 384200.0, 3750100.0, 29.8, 29.8, 0.0); ( 384300.0,  
 3750100.0, 30.5, 30.5, 0.0);  
 ( 384400.0, 3750100.0, 29.7, 29.7, 0.0); ( 384500.0,  
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 ( 384600.0, 3750100.0, 29.9, 29.9, 0.0); ( 384700.0,  
 3750100.0, 29.8, 29.8, 0.0);  
 ( 384800.0, 3750100.0, 29.6, 29.6, 0.0); ( 384900.0,  
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 ( 385000.0, 3750100.0, 29.3, 29.3, 0.0); ( 385200.0,  
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 ( 385300.0, 3750100.0, 28.5, 28.5, 0.0); ( 385400.0,  
 3750100.0, 28.2, 28.2, 0.0);  
 ( 385500.0, 3750100.0, 27.5, 27.5, 0.0); ( 385600.0,  
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 ( 385700.0, 3750100.0, 25.8, 25.8, 0.0); ( 385800.0,  
 3750100.0, 25.3, 25.3, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA

Victoria Greens Construction HRA

\*\*\* 08/02/18

\*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* 13:57:57

PAGE 15

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 385900.0, 3750100.0,	24.7,	24.7,	0.0);	( 386000.0,
3750100.0, 24.1, 24.1,	0.0);			
( 386100.0, 3750100.0,	23.0,	23.0,	0.0);	( 386200.0,
3750100.0, 22.6, 22.6,	0.0);			
( 386300.0, 3750100.0,	21.7,	21.7,	0.0);	( 386400.0,
3750100.0, 21.1, 21.1,	0.0);			
( 386500.0, 3750100.0,	20.9,	20.9,	0.0);	( 386600.0,
3750100.0, 20.5, 20.5,	0.0);			
( 386700.0, 3750100.0,	20.4,	20.4,	0.0);	( 383300.0,
3750200.0, 21.1, 21.1,	0.0);			
( 383400.0, 3750200.0,	21.1,	21.1,	0.0);	( 383500.0,
3750200.0, 20.5, 20.5,	0.0);			
( 383600.0, 3750200.0,	18.3,	18.3,	0.0);	( 383700.0,
3750200.0, 18.7, 27.4,	0.0);			
( 383800.0, 3750200.0,	27.4,	28.8,	0.0);	( 384000.0,
3750200.0, 29.0, 29.0,	0.0);			
( 384100.0, 3750200.0,	29.8,	29.8,	0.0);	( 384200.0,
3750200.0, 30.3, 30.3,	0.0);			
( 384300.0, 3750200.0,	30.7,	30.7,	0.0);	( 384400.0,
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( 384500.0, 3750200.0,	30.3,	30.3,	0.0);	( 384600.0,
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( 384700.0, 3750200.0,	29.5,	29.5,	0.0);	( 384800.0,
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( 384900.0, 3750200.0,	29.7,	29.7,	0.0);	( 385000.0,
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3750200.0, 27.3, 27.3,	0.0);			
( 385600.0, 3750200.0,	26.6,	26.6,	0.0);	( 385700.0,
3750200.0, 26.1, 26.1,	0.0);			
( 385800.0, 3750200.0,	25.3,	25.3,	0.0);	( 385900.0,
3750200.0, 24.7, 24.7,	0.0);			
( 386000.0, 3750200.0,	23.9,	23.9,	0.0);	( 386100.0,
3750200.0, 23.2, 23.2,	0.0);			
( 386200.0, 3750200.0,	22.2,	22.2,	0.0);	( 386300.0,

Victoria Greens Construction HRA

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 ( 386400.0, 3750200.0, 21.0, 21.0, 0.0); ( 386500.0,  
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 ( 386600.0, 3750200.0, 20.5, 20.5, 0.0); ( 386700.0,  
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 ( 383300.0, 3750300.0, 21.6, 21.6, 0.0); ( 383700.0,  
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 ( 383800.0, 3750300.0, 28.8, 28.8, 0.0); ( 383900.0,  
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 ( 384300.0, 3750300.0, 30.0, 30.0, 0.0); ( 384400.0,  
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 ( 385200.0, 3750300.0, 28.8, 28.8, 0.0); ( 385300.0,  
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 ( 385400.0, 3750300.0, 27.1, 27.1, 0.0); ( 385500.0,  
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 ( 385600.0, 3750300.0, 26.6, 26.6, 0.0); ( 385700.0,  
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 ( 385800.0, 3750300.0, 25.2, 25.2, 0.0); ( 385900.0,  
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 ( 386000.0, 3750300.0, 23.6, 23.6, 0.0); ( 386100.0,  
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 ( 386300.0, 3750300.0, 21.2, 21.2, 0.0); ( 386500.0,  
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 ( 386600.0, 3750300.0, 20.9, 20.9, 0.0); ( 386700.0,  
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 ( 383300.0, 3750400.0, 22.1, 22.1, 0.0); ( 383400.0,  
 3750400.0, 21.9, 21.9, 0.0);  
 ( 383700.0, 3750400.0, 26.6, 27.0, 0.0); ( 383800.0,  
 3750400.0, 29.8, 29.8, 0.0);  
 ( 383900.0, 3750400.0, 30.8, 30.8, 0.0); ( 384000.0,  
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 ( 384100.0, 3750400.0, 30.1, 30.1, 0.0); ( 384600.0,  
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 ( 384700.0, 3750400.0, 29.8, 29.8, 0.0); ( 384800.0,  
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 ( 384900.0, 3750400.0, 29.7, 29.7, 0.0); ( 385000.0,  
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 ( 385100.0, 3750400.0, 28.4, 28.4, 0.0); ( 385200.0,  
 3750400.0, 28.6, 28.6, 0.0);  
 ( 385300.0, 3750400.0, 28.1, 28.1, 0.0); ( 385500.0,

Victoria Greens Construction HRA

3750400.0, 27.0, 27.0, 0.0);  
( 385700.0, 3750400.0, 25.4, 25.4, 0.0); ( 385800.0,  
3750400.0, 24.5, 24.5, 0.0);  
( 385900.0, 3750400.0, 24.0, 24.0, 0.0); ( 386000.0,  
3750400.0, 23.4, 23.4, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 16

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 386100.0, 3750400.0, 22.6, 22.6, 0.0); ( 386200.0,  
3750400.0, 21.9, 21.9, 0.0);  
( 386400.0, 3750400.0, 21.5, 21.5, 0.0); ( 386500.0,  
3750400.0, 21.0, 21.0, 0.0);  
( 386600.0, 3750400.0, 21.1, 21.1, 0.0); ( 386700.0,  
3750400.0, 20.7, 20.7, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 17

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* METEOROLOGICAL DAYS SELECTED FOR  
PROCESSING \*\*\*  
(1=YES; 0=NO)

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

Victoria Greens Construction HRA

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

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED

CATEGORIES \*\*\*

(METERS/SEC)

1.54, 3.09, 5.14, 8.23,

10.80,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18

\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 18

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

DATA \*\*\*

Surface file: C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\MET Data\LongBe Met Version: 16216

Profile file: C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\MET Data\LongBe

Surface format: FREE

Profile format: FREE

Surface station no.: 23129  
 Name: UNKNOWN

Upper air station no.: 3190  
 Name: UNKNOWN

Year: 2012

Year: 2012

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							
12	01	01	1	01	-5.3	0.094	-9.000	-9.000	-999.	70.	14.3	0.10	2.68	
1.00	1.13	322.			7.9	282.0	2.0							
12	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.10	2.68	
1.00	0.00	0.			7.9	281.4	2.0							
12	01	01	1	03	-2.5	0.068	-9.000	-9.000	-999.	43.	11.4	0.10	2.68	

Victoria Greens Construction HRA

1.00	0.74	79.	7.9	280.9	2.0								
12	01	01	1	04	-3.2	0.075	-9.000	-9.000	-999.	49.	11.7	0.10	2.68
1.00	0.86	137.	7.9	280.9	2.0								
12	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.10	2.68
1.00	0.00	0.	7.9	280.4	2.0								
12	01	01	1	06	-5.2	0.093	-9.000	-9.000	-999.	68.	14.0	0.10	2.68
1.00	1.11	92.	7.9	279.9	2.0								
12	01	01	1	07	-2.3	0.066	-9.000	-9.000	-999.	41.	11.5	0.10	2.68
1.00	0.69	67.	7.9	278.8	2.0								
12	01	01	1	08	-1.7	0.060	-9.000	-9.000	-999.	36.	11.4	0.10	2.68
0.54	0.65	91.	7.9	279.9	2.0								
12	01	01	1	09	36.2	-9.000	-9.000	-9.000	37.	-999.	-99999.0	0.10	2.68
0.31	0.00	0.	7.9	283.8	2.0								
12	01	01	1	10	108.4	0.139	0.707	0.009	119.	124.	-2.3	0.10	2.68
0.24	0.92	319.	7.9	287.5	2.0								
12	01	01	1	11	160.5	0.114	1.137	0.005	334.	93.	-1.0	0.10	2.68
0.21	0.62	23.	7.9	292.5	2.0								
12	01	01	1	12	186.7	0.125	1.473	0.005	623.	105.	-1.0	0.10	2.68
0.20	0.69	18.	7.9	295.4	2.0								
12	01	01	1	13	186.8	0.130	1.761	0.005	1065.	112.	-1.1	0.10	2.68
0.20	0.74	250.	7.9	297.5	2.0								
12	01	01	1	14	161.7	0.150	1.834	0.005	1387.	139.	-1.9	0.10	2.68
0.21	0.96	347.	7.9	300.4	2.0								
12	01	01	1	15	105.5	0.243	1.633	0.005	1499.	288.	-12.4	0.10	2.68
0.24	2.11	194.	7.9	295.9	2.0								
12	01	01	1	16	32.4	0.211	1.109	0.005	1530.	233.	-26.3	0.10	2.68
0.33	1.98	186.	7.9	295.4	2.0								
12	01	01	1	17	-20.5	0.250	-9.000	-9.000	-999.	300.	69.2	0.10	2.68
0.60	2.81	293.	7.9	291.4	2.0								
12	01	01	1	18	-25.4	0.257	-9.000	-9.000	-999.	313.	72.8	0.10	2.68
1.00	2.90	301.	7.9	288.1	2.0								
12	01	01	1	19	-21.0	0.211	-9.000	-9.000	-999.	233.	49.0	0.10	2.68
1.00	2.40	313.	7.9	286.4	2.0								
12	01	01	1	20	-25.7	0.258	-9.000	-9.000	-999.	315.	73.3	0.10	2.68
1.00	2.91	302.	7.9	286.4	2.0								
12	01	01	1	21	-22.5	0.225	-9.000	-9.000	-999.	256.	55.7	0.10	2.68
1.00	2.55	306.	7.9	285.4	2.0								
12	01	01	1	22	-9.3	0.126	-9.000	-9.000	-999.	111.	19.5	0.10	2.68
1.00	1.48	284.	7.9	285.9	2.0								
12	01	01	1	23	-21.4	0.214	-9.000	-9.000	-999.	237.	50.3	0.10	2.68
1.00	2.43	282.	7.9	285.4	2.0								
12	01	01	1	24	-30.1	0.300	-9.000	-9.000	-999.	394.	98.9	0.10	2.68
1.00	3.36	300.	7.9	284.2	2.0								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	7.9	1	322.	1.13	282.1	99.0	-99.00	-99.00

Victoria Greens Construction HRA

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

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* Victoria Greens Construction HRA  
   \*\*\*                           08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
   \*\*\*                           13:57:57

PAGE 19

\*\*\* MODELOPTs:     RegDFault   CONC   ELEV   URBAN   ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA           IN MICROGRAMS/M\*\*3

		**		
X-COORD (M)	Y-COORD (M)	CONC		X-COORD (M)
Y-COORD (M)	CONC			
383400.00	3746100.00	0.21203		383500.00
3746100.00	0.21845			
383600.00	3746100.00	0.22417		383700.00
3746100.00	0.23067			
383800.00	3746100.00	0.23634		383900.00
3746100.00	0.24243			
384000.00	3746100.00	0.24727		384400.00
3746100.00	0.26438			
384800.00	3746100.00	0.27376		384900.00
3746100.00	0.27493			
385000.00	3746100.00	0.27542		385100.00
3746100.00	0.27563			
385200.00	3746100.00	0.27559		385300.00
3746100.00	0.27565			
385400.00	3746100.00	0.27543		385500.00
3746100.00	0.27686			
385600.00	3746100.00	0.27865		385700.00



Victoria Greens Construction HRA

3746100.00	0.28209			
	385800.00	3746100.00	0.28702	383000.00
3746200.00	0.19717			
	383100.00	3746200.00	0.20419	383400.00
3746200.00	0.22384			
	383500.00	3746200.00	0.23110	383600.00
3746200.00	0.23869			
	383700.00	3746200.00	0.24543	383800.00
3746200.00	0.25200			
	383900.00	3746200.00	0.25890	384000.00
3746200.00	0.26470			
	384300.00	3746200.00	0.28164	384400.00
3746200.00	0.28419			
	384600.00	3746200.00	0.29174	384800.00
3746200.00	0.29495			
	384900.00	3746200.00	0.29627	385000.00
3746200.00	0.29656			
	385100.00	3746200.00	0.29639	385200.00
3746200.00	0.29711			
	385300.00	3746200.00	0.29790	385400.00
3746200.00	0.29765			
	385500.00	3746200.00	0.30016	385600.00
3746200.00	0.30385			
	385700.00	3746200.00	0.30926	385800.00
3746200.00	0.31513			
	383000.00	3746300.00	0.20714	383100.00
3746300.00	0.21448			
	383200.00	3746300.00	0.22287	383300.00
3746300.00	0.23074			
	383600.00	3746300.00	0.25404	383700.00
3746300.00	0.26154			
	383800.00	3746300.00	0.26969	383900.00
3746300.00	0.27755			
	384000.00	3746300.00	0.28435	384300.00
3746300.00	0.30335			
	384400.00	3746300.00	0.30660	384600.00
3746300.00	0.31558			
	384700.00	3746300.00	0.31753	384800.00
3746300.00	0.31924			
	384900.00	3746300.00	0.32035	385000.00
3746300.00	0.32110			
	385100.00	3746300.00	0.32100	385200.00
3746300.00	0.32205			
	385300.00	3746300.00	0.32339	385400.00
3746300.00	0.32525			
	385500.00	3746300.00	0.32811	385600.00
3746300.00	0.33382			
	385700.00	3746300.00	0.34058	385800.00

Victoria Greens Construction HRA

3746300.00	0.34807			
	383000.00	3746400.00	0.21733	383100.00
3746400.00	0.22591			
	383200.00	3746400.00	0.23525	383300.00
3746400.00	0.24439			
	383400.00	3746400.00	0.25287	383600.00
3746400.00	0.27074			
	383700.00	3746400.00	0.27979	383800.00
3746400.00	0.28924			
	383900.00	3746400.00	0.29745	384000.00
3746400.00	0.30587			
	384300.00	3746400.00	0.32667	384600.00
3746400.00	0.34216			
	384700.00	3746400.00	0.34513	384800.00
3746400.00	0.34718			

\* \*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* Victoria Greens Construction HRA  
                                       \*\*\*                                   08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                       \*\*\*                                   13:57:57

PAGE 20

\*\*\* MODELOPTs:      RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA              IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
384900.00	3746400.00	0.35016	385000.00
3746400.00	0.34966		
385100.00	3746400.00	0.35223	385200.00
3746400.00	0.35375		

Victoria Greens Construction HRA

	385300.00	3746400.00	0.35592	385400.00
3746400.00	0.35956			
	385500.00	3746400.00	0.36400	385600.00
3746400.00	0.37114			
	385700.00	3746400.00	0.37893	383000.00
3746500.00	0.22829			
	383100.00	3746500.00	0.23839	383200.00
3746500.00	0.24852			
	383300.00	3746500.00	0.25856	383400.00
3746500.00	0.26883			
	383500.00	3746500.00	0.28031	383600.00
3746500.00	0.29084			
	383700.00	3746500.00	0.30128	383800.00
3746500.00	0.31032			
	383900.00	3746500.00	0.32105	384000.00
3746500.00	0.33098			
	384200.00	3746500.00	0.34841	384300.00
3746500.00	0.35605			
	384400.00	3746500.00	0.36268	384600.00
3746500.00	0.37243			
	384700.00	3746500.00	0.37568	384800.00
3746500.00	0.37862			
	384900.00	3746500.00	0.38363	385000.00
3746500.00	0.38585			
	385100.00	3746500.00	0.38731	385200.00
3746500.00	0.39000			
	385300.00	3746500.00	0.39303	385400.00
3746500.00	0.40246			
	385500.00	3746500.00	0.40974	385600.00
3746500.00	0.41570			
	385700.00	3746500.00	0.42268	383000.00
3746600.00	0.24031			
	383100.00	3746600.00	0.25152	383200.00
3746600.00	0.26253			
	383300.00	3746600.00	0.27407	383400.00
3746600.00	0.28638			
	383500.00	3746600.00	0.29933	383600.00
3746600.00	0.31138			
	383700.00	3746600.00	0.32280	383800.00
3746600.00	0.33566			
	383900.00	3746600.00	0.34740	384000.00
3746600.00	0.35936			
	384200.00	3746600.00	0.38139	384300.00
3746600.00	0.39110			
	384400.00	3746600.00	0.39907	384600.00
3746600.00	0.41464			
	384700.00	3746600.00	0.42117	384800.00
3746600.00	0.42458			

Victoria Greens Construction HRA

384900.00	3746600.00	0.42733	385000.00
3746600.00	0.43111		
385100.00	3746600.00	0.43505	385200.00
3746600.00	0.43923		
385300.00	3746600.00	0.44436	385400.00
3746600.00	0.45146		
385500.00	3746600.00	0.45887	385600.00
3746600.00	0.46791		
385700.00	3746600.00	0.47724	383000.00
3746700.00	0.25329		
383100.00	3746700.00	0.26564	383200.00
3746700.00	0.27849		
383300.00	3746700.00	0.29161	383400.00
3746700.00	0.30519		
383500.00	3746700.00	0.31989	383600.00
3746700.00	0.33378		
383700.00	3746700.00	0.34766	383800.00
3746700.00	0.36255		
383900.00	3746700.00	0.37718	384000.00
3746700.00	0.39130		
384100.00	3746700.00	0.40452	384300.00
3746700.00	0.43156		
384400.00	3746700.00	0.44321	384600.00
3746700.00	0.46225		
384700.00	3746700.00	0.46766	384800.00
3746700.00	0.47050		
384900.00	3746700.00	0.47543	385000.00
3746700.00	0.48423		

^ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 21

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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

Victoria Greens Construction HRA

\*\*\*

		** CONC OF HRA	IN MICROGRAMS/M**3
		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
385100.00	3746700.00	0.48818	385200.00
3746700.00	0.49317		
385300.00	3746700.00	0.50023	385500.00
3746700.00	0.51906		
385600.00	3746700.00	0.53052	385700.00
3746700.00	0.54246		
386400.00	3746700.00	0.56711	386500.00
3746700.00	0.55335		
386600.00	3746700.00	0.53629	386700.00
3746700.00	0.51657		
383000.00	3746800.00	0.26679	383100.00
3746800.00	0.28066		
383200.00	3746800.00	0.29477	383300.00
3746800.00	0.30981		
383400.00	3746800.00	0.32603	383500.00
3746800.00	0.34232		
383600.00	3746800.00	0.35816	383700.00
3746800.00	0.37501		
383800.00	3746800.00	0.39255	383900.00
3746800.00	0.41033		
384000.00	3746800.00	0.42689	384100.00
3746800.00	0.44544		
384200.00	3746800.00	0.46521	384300.00
3746800.00	0.48217		
384400.00	3746800.00	0.49627	384600.00
3746800.00	0.51914		
384700.00	3746800.00	0.52711	384800.00
3746800.00	0.53013		
384900.00	3746800.00	0.53542	385000.00
3746800.00	0.54853		
385100.00	3746800.00	0.55388	385200.00
3746800.00	0.56051		
385300.00	3746800.00	0.57003	385400.00
3746800.00	0.58108		
385500.00	3746800.00	0.59363	385600.00
3746800.00	0.61010		
385700.00	3746800.00	0.62321	386400.00
3746800.00	0.61076		
386500.00	3746800.00	0.58944	386600.00

Victoria Greens Construction HRA

3746800.00	0.56522			
	386700.00	3746800.00	0.55645	383000.00
3746900.00	0.28114			
	383100.00	3746900.00	0.29655	383200.00
3746900.00	0.31250			
	383300.00	3746900.00	0.33019	383400.00
3746900.00	0.34842			
	383500.00	3746900.00	0.36708	383600.00
3746900.00	0.38606			
	383700.00	3746900.00	0.40652	383800.00
3746900.00	0.42865			
	383900.00	3746900.00	0.44975	384000.00
3746900.00	0.47346			
	384100.00	3746900.00	0.49841	384200.00
3746900.00	0.52541			
	384300.00	3746900.00	0.54208	384400.00
3746900.00	0.55914			
	384500.00	3746900.00	0.57580	384600.00
3746900.00	0.59371			
	384700.00	3746900.00	0.60548	384800.00
3746900.00	0.60814			
	384900.00	3746900.00	0.61238	385000.00
3746900.00	0.62698			
	385100.00	3746900.00	0.63427	385200.00
3746900.00	0.64380			
	385300.00	3746900.00	0.65714	385400.00
3746900.00	0.67178			
	385500.00	3746900.00	0.68809	385600.00
3746900.00	0.70500			
	386400.00	3746900.00	0.65583	386500.00
3746900.00	0.67799			
	386600.00	3746900.00	0.67897	386700.00
3746900.00	0.62773			
	383000.00	3747000.00	0.29565	383100.00
3747000.00	0.31304			
	383200.00	3747000.00	0.33149	383300.00
3747000.00	0.35136			
	383400.00	3747000.00	0.37238	383500.00
3747000.00	0.39384			
	383600.00	3747000.00	0.41722	383700.00
3747000.00	0.44321			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\*  
08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\*  
13:57:57

Victoria Greens Construction HRA

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
383800.00	3747000.00	0.47199	383900.00
3747000.00	0.49853		
384000.00	3747000.00	0.53124	384100.00
3747000.00	0.55826		
384200.00	3747000.00	0.59236	384300.00
3747000.00	0.61463		
384400.00	3747000.00	0.64114	384500.00
3747000.00	0.65662		
384600.00	3747000.00	0.67578	384700.00
3747000.00	0.68921		
384800.00	3747000.00	0.69631	384900.00
3747000.00	0.70433		
385000.00	3747000.00	0.72031	385100.00
3747000.00	0.73181		
385200.00	3747000.00	0.74570	385300.00
3747000.00	0.76308		
385400.00	3747000.00	0.78190	385500.00
3747000.00	0.80118		
385600.00	3747000.00	0.81816	386400.00
3747000.00	0.74462		
386500.00	3747000.00	0.74962	386600.00
3747000.00	0.74329		
382900.00	3747100.00	0.29253	383000.00
3747100.00	0.31186		
383100.00	3747100.00	0.33073	383200.00
3747100.00	0.35216		

Victoria Greens Construction HRA

383300.00	3747100.00	0.37514	383400.00
3747100.00	0.39919		
383500.00	3747100.00	0.42480	383600.00
3747100.00	0.45395		
383700.00	3747100.00	0.48853	383800.00
3747100.00	0.52261		
383900.00	3747100.00	0.55651	384000.00
3747100.00	0.59354		
384100.00	3747100.00	0.62916	385400.00
3747100.00	0.91461		
383200.00	3747200.00	0.37410	383300.00
3747200.00	0.40036		
382400.00	3747300.00	0.23697	382500.00
3747300.00	0.25134		
382600.00	3747300.00	0.26664	382700.00
3747300.00	0.28283		
382800.00	3747300.00	0.30149	382900.00
3747300.00	0.32101		
383000.00	3747300.00	0.34386	383100.00
3747300.00	0.36842		
383200.00	3747300.00	0.39624	383300.00
3747300.00	0.42834		
382400.00	3747400.00	0.24396	382500.00
3747400.00	0.25940		
382600.00	3747400.00	0.27598	382700.00
3747400.00	0.29350		
382800.00	3747400.00	0.31385	382400.00
3747500.00	0.25049		
382500.00	3747500.00	0.26695	382600.00
3747500.00	0.28490		
382700.00	3747500.00	0.30385	382800.00
3747500.00	0.32578		
383900.00	3747500.00	0.90315	382400.00
3747600.00	0.25669		
382500.00	3747600.00	0.27369	382600.00
3747600.00	0.29273		
382700.00	3747600.00	0.31351	382400.00
3747700.00	0.26161		
382500.00	3747700.00	0.27957	382600.00
3747700.00	0.29973		
382700.00	3747700.00	0.32201	382800.00
3747700.00	0.34735		
384200.00	3747700.00	1.79735	384300.00
3747700.00	2.08405		
382400.00	3747800.00	0.26714	382500.00
3747800.00	0.28578		
382600.00	3747800.00	0.30731	382700.00
3747800.00	0.33054		



Victoria Greens Construction HRA

382800.00	3747800.00	0.35752	384200.00
3747800.00	2.20101		
384300.00	3747800.00	2.66258	386600.00
3747800.00	0.49416		
386700.00	3747800.00	0.44592	382400.00
3747900.00	0.27138		

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 23

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
382500.00	3747900.00	0.29080	382600.00
3747900.00	0.31378		
382700.00	3747900.00	0.33780	382800.00
3747900.00	0.36673		
384200.00	3747900.00	2.69965	384300.00
3747900.00	3.45620		
386600.00	3747900.00	0.46720	386700.00
3747900.00	0.42355		
382400.00	3748000.00	0.27461	382500.00
3748000.00	0.29539		
382600.00	3748000.00	0.31853	382700.00
3748000.00	0.34427		
382800.00	3748000.00	0.37426	382400.00

Victoria Greens Construction HRA

3748100.00	0.27744			
	382500.00	3748100.00	0.29852	382600.00
3748100.00	0.32200			
	382700.00	3748100.00	0.34855	382500.00
3748200.00	0.30014			
	382600.00	3748200.00	0.32470	382700.00
3748200.00	0.35334			
	382800.00	3748200.00	0.38541	383000.00
3748200.00	0.47454			
	383100.00	3748200.00	0.52992	383200.00
3748200.00	0.59332			
	383300.00	3748200.00	0.67103	383400.00
3748200.00	0.76922			
	383500.00	3748200.00	0.87808	383600.00
3748200.00	1.01948			
	383700.00	3748200.00	1.20510	384000.00
3748200.00	2.35608			
	384100.00	3748200.00	3.18248	384200.00
3748200.00	4.58661			
	384300.00	3748200.00	7.16777	384400.00
3748200.00	13.11522			
	382500.00	3748300.00	0.30042	382600.00
3748300.00	0.32508			
	382700.00	3748300.00	0.35488	382800.00
3748300.00	0.38734			
	383000.00	3748300.00	0.47350	383100.00
3748300.00	0.53069			
	383200.00	3748300.00	0.59526	383300.00
3748300.00	0.67430			
	383600.00	3748300.00	1.03360	383700.00
3748300.00	1.22489			
	383800.00	3748300.00	1.48404	383900.00
3748300.00	1.86829			
	384000.00	3748300.00	2.44704	384100.00
3748300.00	3.28957			
	384200.00	3748300.00	4.79060	384300.00
3748300.00	7.64362			
	384400.00	3748300.00	14.73098	382400.00
3748400.00	0.28094			
	382700.00	3748400.00	0.35385	382800.00
3748400.00	0.38727			
	383200.00	3748400.00	0.59379	383300.00
3748400.00	0.67163			
	383400.00	3748400.00	0.76712	383500.00
3748400.00	0.88519			
	383600.00	3748400.00	1.03176	383700.00
3748400.00	1.21997			
	383800.00	3748400.00	1.48479	383900.00

Victoria Greens Construction HRA

3748400.00	1.84556			
	384000.00	3748400.00	2.37836	384100.00
3748400.00	3.18624			
	384200.00	3748400.00	4.54693	384300.00
3748400.00	7.07838			
	384400.00	3748400.00	12.86111	382400.00
3748500.00	0.28036			
	382500.00	3748500.00	0.30159	382700.00
3748500.00	0.35009			
	382800.00	3748500.00	0.38162	383000.00
3748500.00	0.47071			
	383100.00	3748500.00	0.52514	383200.00
3748500.00	0.58774			
	383300.00	3748500.00	0.66354	383400.00
3748500.00	0.75603			
	383500.00	3748500.00	0.86570	383800.00
3748500.00	1.43860			
	383900.00	3748500.00	1.77284	384000.00
3748500.00	2.25309			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*     \*\*\* Victoria Greens Construction HRA  
   \*\*\*                     08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*     \*\*\*  
   \*\*\*                     13:57:57

PAGE 24

\*\*\* MODELOPTs:     RegDEFAULT     CONC     ELEV     URBAN     ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA                 IN MICROGRAMS/M\*\*3

\*\*

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

Victoria Greens Construction HRA

3748500.00	384100.00	3748500.00	2.94620	384200.00
	4.03101			
3748500.00	384300.00	3748500.00	5.96704	384400.00
	9.51583			
3748600.00	382400.00	3748600.00	0.27900	382500.00
	0.30002			
3748600.00	382600.00	3748600.00	0.32139	383000.00
	0.46480			
3748600.00	383100.00	3748600.00	0.51667	383200.00
	0.57706			
3748600.00	383300.00	3748600.00	0.65077	383400.00
	0.74040			
3748600.00	383500.00	3748600.00	0.84606	383800.00
	1.36934			
3748600.00	383900.00	3748600.00	1.66448	384000.00
	2.05930			
3748600.00	384100.00	3748600.00	2.61279	384200.00
	3.45820			
3748600.00	384300.00	3748600.00	4.79525	384400.00
	6.65648			
3748700.00	383400.00	3748700.00	0.71607	383500.00
	0.81811			
3748700.00	383800.00	3748700.00	1.29746	383900.00
	1.54304			
3748700.00	384000.00	3748700.00	1.85288	384100.00
	2.28742			
3748700.00	384200.00	3748700.00	2.96098	384300.00
	3.82542			
3748900.00	382400.00	3748900.00	0.27204	382500.00
	0.29116			
3748900.00	382600.00	3748900.00	0.31384	382700.00
	0.34032			
3748900.00	382800.00	3748900.00	0.36936	382900.00
	0.40260			
3749000.00	382400.00	3749000.00	0.26994	382500.00
	0.28822			
3749000.00	382600.00	3749000.00	0.30860	382700.00
	0.33390			
3749000.00	382800.00	3749000.00	0.36306	382900.00
	0.39494			
3749100.00	382400.00	3749100.00	0.26671	382500.00
	0.28441			
3749100.00	382600.00	3749100.00	0.30487	382700.00
	0.32716			
3749100.00	382800.00	3749100.00	0.35355	382900.00
	0.38536			
3749200.00	382400.00	3749200.00	0.26292	382500.00
	0.28061			

Victoria Greens Construction HRA

	382600.00	3749200.00	0.29987	382700.00
3749200.00	0.32155			
	382800.00	3749200.00	0.34640	382900.00
3749200.00	0.37464			
	382400.00	3749300.00	0.25856	382500.00
3749300.00	0.27575			
	382600.00	3749300.00	0.29437	382700.00
3749300.00	0.31508			
	382800.00	3749300.00	0.33779	382900.00
3749300.00	0.36365			
	382400.00	3749400.00	0.25463	382500.00
3749400.00	0.27085			
	382600.00	3749400.00	0.28829	382700.00
3749400.00	0.30811			
	382800.00	3749400.00	0.32986	382900.00
3749400.00	0.35417			
	385400.00	3749400.00	0.68289	382400.00
3749500.00	0.24848			
	382500.00	3749500.00	0.26489	382600.00
3749500.00	0.28152			
	382700.00	3749500.00	0.29998	382800.00
3749500.00	0.32031			
	382900.00	3749500.00	0.34274	383000.00
3749500.00	0.36687			
	385400.00	3749500.00	0.62626	383400.00
3749600.00	0.46174			
	383500.00	3749600.00	0.49708	383600.00
3749600.00	0.53374			
	383700.00	3749600.00	0.57269	383800.00
3749600.00	0.61452			
	383900.00	3749600.00	0.65977	384000.00
3749600.00	0.71286			

\*\*\* AERMOD - VERSION 18081 \*\*\* \*\* Victoria Greens Construction HRA  
08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*  
13:57:57

PAGE 25

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S): L000001 , L000002  
, L000003 , L000004 , L000005 ,  
L000006 , L000007 , L000008 , L000009 , L000010  
, L000011 , L000012 , L000013 ,  
L000014 , L000015 , L000016 , L000017 , L000018  
, L000019 , L000020 , L000021 ,

Victoria Greens Construction HRA

L0000022 , L0000023 , L0000024 , L0000025 , L0000026  
 , L0000027 , L0000028 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
383400.00	3749700.00	0.43656	383500.00
3749700.00	0.46725		
383600.00	3749700.00	0.49906	383700.00
3749700.00	0.53311		
383800.00	3749700.00	0.56848	383900.00
3749700.00	0.60483		
384000.00	3749700.00	0.65009	384900.00
3749700.00	0.72226		
385000.00	3749700.00	0.69284	385100.00
3749700.00	0.65529		
385200.00	3749700.00	0.61329	385300.00
3749700.00	0.57357		
385400.00	3749700.00	0.53261	385500.00
3749700.00	0.49472		
385600.00	3749700.00	0.46013	385700.00
3749700.00	0.42837		
385800.00	3749700.00	0.39924	385900.00
3749700.00	0.37294		
386000.00	3749700.00	0.34922	386100.00
3749700.00	0.32693		
386200.00	3749700.00	0.30789	386300.00
3749700.00	0.29024		
386400.00	3749700.00	0.27366	386500.00
3749700.00	0.25811		
386600.00	3749700.00	0.24425	386700.00
3749700.00	0.23142		
383400.00	3749800.00	0.40914	383500.00
3749800.00	0.43847		
383600.00	3749800.00	0.46585	383700.00
3749800.00	0.49703		
383800.00	3749800.00	0.52818	383900.00
3749800.00	0.56337		
384000.00	3749800.00	0.59531	384100.00
3749800.00	0.62269		
384200.00	3749800.00	0.64401	384500.00

Victoria Greens Construction HRA

3749800.00	0.67380			
	384600.00	3749800.00	0.67549	384700.00
3749800.00	0.67231			
	384800.00	3749800.00	0.66338	384900.00
3749800.00	0.64764			
	385000.00	3749800.00	0.62566	385100.00
3749800.00	0.59512			
	385200.00	3749800.00	0.56151	385300.00
3749800.00	0.52807			
	385400.00	3749800.00	0.49332	385500.00
3749800.00	0.46024			
	385600.00	3749800.00	0.43013	385700.00
3749800.00	0.40143			
	385800.00	3749800.00	0.37585	385900.00
3749800.00	0.35222			
	386000.00	3749800.00	0.33004	386100.00
3749800.00	0.31062			
	386200.00	3749800.00	0.29318	386500.00
3749800.00	0.24781			
	386600.00	3749800.00	0.23495	386700.00
3749800.00	0.22247			
	383300.00	3749900.00	0.36691	383400.00
3749900.00	0.38661			
	383500.00	3749900.00	0.40951	383600.00
3749900.00	0.43687			
	383700.00	3749900.00	0.46378	383800.00
3749900.00	0.49002			
	383900.00	3749900.00	0.51885	384000.00
3749900.00	0.54630			
	384100.00	3749900.00	0.56956	384200.00
3749900.00	0.58410			
	384300.00	3749900.00	0.59555	384400.00
3749900.00	0.60273			
	384500.00	3749900.00	0.60735	384600.00
3749900.00	0.60730			
	384700.00	3749900.00	0.60639	384800.00
3749900.00	0.59885			
	384900.00	3749900.00	0.58615	385000.00
3749900.00	0.56778			
	385100.00	3749900.00	0.54289	385200.00
3749900.00	0.51571			
	385300.00	3749900.00	0.48745	385400.00
3749900.00	0.45781			
	385500.00	3749900.00	0.42911	385600.00
3749900.00	0.40281			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*  
 \*\*\*  
 \*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* Victoria Greens Construction HRA  
 08/02/18

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Victoria Greens Construction HRA  
 \*\*\* 13:57:57

PAGE 26

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
385700.00	3749900.00	0.37795	385800.00
3749900.00	0.35475		
385900.00	3749900.00	0.33316	386000.00
3749900.00	0.31351		
386100.00	3749900.00	0.29609	386200.00
3749900.00	0.27977		
386400.00	3749900.00	0.25099	386500.00
3749900.00	0.23790		
386600.00	3749900.00	0.22597	386700.00
3749900.00	0.21499		
383300.00	3750000.00	0.34915	383400.00
3750000.00	0.36643		
383500.00	3750000.00	0.38666	383600.00
3750000.00	0.40697		
383700.00	3750000.00	0.43232	383800.00
3750000.00	0.45606		
383900.00	3750000.00	0.48044	384000.00
3750000.00	0.50305		
384100.00	3750000.00	0.52236	384200.00
3750000.00	0.53283		
384300.00	3750000.00	0.54228	384400.00
3750000.00	0.54615		



Victoria Greens Construction HRA

384500.00	3750000.00	0.55080	384600.00
3750000.00	0.55009		
384700.00	3750000.00	0.54910	384800.00
3750000.00	0.54297		
384900.00	3750000.00	0.53275	385000.00
3750000.00	0.51789		
385100.00	3750000.00	0.49772	385200.00
3750000.00	0.47559		
385300.00	3750000.00	0.45146	385400.00
3750000.00	0.42635		
385500.00	3750000.00	0.40114	385600.00
3750000.00	0.37813		
385700.00	3750000.00	0.35552	385800.00
3750000.00	0.33497		
385900.00	3750000.00	0.31562	386000.00
3750000.00	0.29784		
386100.00	3750000.00	0.28183	386200.00
3750000.00	0.26675		
386300.00	3750000.00	0.25279	386400.00
3750000.00	0.24006		
386500.00	3750000.00	0.22830	386600.00
3750000.00	0.21619		
386700.00	3750000.00	0.20715	383300.00
3750100.00	0.33227		
383400.00	3750100.00	0.34947	383500.00
3750100.00	0.36567		
383600.00	3750100.00	0.38371	383700.00
3750100.00	0.40163		
383800.00	3750100.00	0.42807	383900.00
3750100.00	0.44972		
384000.00	3750100.00	0.46620	384100.00
3750100.00	0.48000		
384200.00	3750100.00	0.48827	384300.00
3750100.00	0.49620		
384400.00	3750100.00	0.49934	384500.00
3750100.00	0.50221		
384600.00	3750100.00	0.50275	384700.00
3750100.00	0.50078		
384800.00	3750100.00	0.49568	384900.00
3750100.00	0.48722		
385000.00	3750100.00	0.47490	385200.00
3750100.00	0.44022		
385300.00	3750100.00	0.41940	385400.00
3750100.00	0.39786		
385500.00	3750100.00	0.37600	385600.00
3750100.00	0.35531		
385700.00	3750100.00	0.33486	385800.00
3750100.00	0.31645		

Victoria Greens Construction HRA

3750100.00	385900.00	3750100.00	0.29929	386000.00
		0.28338		
3750100.00	386100.00	3750100.00	0.26826	386200.00
		0.25469		
3750100.00	386300.00	3750100.00	0.24180	386400.00
		0.23002		
3750100.00	386500.00	3750100.00	0.21925	386600.00
		0.20902		
3750200.00	386700.00	3750100.00	0.19966	383300.00
		0.31704		

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
 \*\*\* 08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 13:57:57

PAGE 27

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
3750200.00	383400.00	0.33272	383500.00
	0.34804		
3750200.00	383600.00	0.36127	383700.00
	0.37724		
3750200.00	383800.00	0.40347	384000.00
	0.43110		
3750200.00	384100.00	0.44173	384200.00
	0.44969		
3750200.00	384300.00	0.45545	384400.00

Victoria Greens Construction HRA

3750200.00	0.45784			
	384500.00	3750200.00	0.46033	384600.00
3750200.00	0.46011			
	384700.00	3750200.00	0.45812	384800.00
3750200.00	0.45417			
	384900.00	3750200.00	0.44761	385000.00
3750200.00	0.43757			
	385200.00	3750200.00	0.40841	385300.00
3750200.00	0.39041			
	385400.00	3750200.00	0.37193	385500.00
3750200.00	0.35289			
	385600.00	3750200.00	0.33429	385700.00
3750200.00	0.31664			
	385800.00	3750200.00	0.29981	385900.00
3750200.00	0.28421			
	386000.00	3750200.00	0.26954	386100.00
3750200.00	0.25595			
	386200.00	3750200.00	0.24316	386300.00
3750200.00	0.23138			
	386400.00	3750200.00	0.22053	386500.00
3750200.00	0.21032			
	386600.00	3750200.00	0.20115	386700.00
3750200.00	0.19246			
	383300.00	3750300.00	0.30212	383700.00
3750300.00	0.36114			
	383800.00	3750300.00	0.37872	383900.00
3750300.00	0.39167			
	384100.00	3750300.00	0.40925	384200.00
3750300.00	0.41522			
	384300.00	3750300.00	0.41881	384400.00
3750300.00	0.42193			
	384600.00	3750300.00	0.42296	384700.00
3750300.00	0.42147			
	384800.00	3750300.00	0.41842	384900.00
3750300.00	0.41284			
	385000.00	3750300.00	0.40436	385100.00
3750300.00	0.39284			
	385200.00	3750300.00	0.37989	385300.00
3750300.00	0.36427			
	385400.00	3750300.00	0.34791	385500.00
3750300.00	0.33196			
	385600.00	3750300.00	0.31540	385700.00
3750300.00	0.29928			
	385800.00	3750300.00	0.28437	385900.00
3750300.00	0.27010			
	386000.00	3750300.00	0.25666	386100.00
3750300.00	0.24420			
	386300.00	3750300.00	0.22158	386500.00

Victoria Greens Construction HRA

3750300.00	0.20239			
	386600.00	3750300.00	0.19380	386700.00
3750300.00	0.18565			
	383300.00	3750400.00	0.28812	383400.00
3750400.00	0.30050			
	383700.00	3750400.00	0.34173	383800.00
3750400.00	0.35567			
	383900.00	3750400.00	0.36619	384000.00
3750400.00	0.37355			
	384100.00	3750400.00	0.37960	384600.00
3750400.00	0.39065			
	384700.00	3750400.00	0.38953	384800.00
3750400.00	0.38692			
	384900.00	3750400.00	0.38209	385000.00
3750400.00	0.37483			
	385100.00	3750400.00	0.36512	385200.00
3750400.00	0.35426			
	385300.00	3750400.00	0.34124	385500.00
3750400.00	0.31259			
	385700.00	3750400.00	0.28352	385800.00
3750400.00	0.26967			
	385900.00	3750400.00	0.25688	386000.00
3750400.00	0.24470			

^ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
                                       \*\*\*                              08/02/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
                                       \*\*\*                              13:57:57

PAGE 28

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA            IN MICROGRAMS/M\*\*3

\*\*

Victoria Greens Construction HRA

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
3750400.00	386100.00	3750400.00	0.23320	386200.00
3750400.00	386400.00	3750400.00	0.20348	386500.00
3750400.00	386600.00	3750400.00	0.18670	386700.00

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*  
 \*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* Victoria Greens Construction HRA  
 08/02/18  
 \*\*\*  
 13:57:57

PAGE 29

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	14.73098	AT ( 384400.00, 3748300.00, 44.08,	DC	
	0.00) DC				
	2ND HIGHEST VALUE IS	13.11522	AT ( 384400.00, 3748200.00, 46.67,	DC	
	0.00) DC				
	3RD HIGHEST VALUE IS	12.86111	AT ( 384400.00, 3748400.00, 42.17,	DC	
	0.00) DC				
	4TH HIGHEST VALUE IS	9.51583	AT ( 384400.00, 3748500.00, 42.01,	DC	
	0.00) DC				
	5TH HIGHEST VALUE IS	7.64362	AT ( 384300.00, 3748300.00, 42.00,	DC	
	0.00) DC				
	6TH HIGHEST VALUE IS	7.16777	AT ( 384300.00, 3748200.00, 43.70,	DC	
	0.00) DC				
	7TH HIGHEST VALUE IS	7.07838	AT ( 384300.00, 3748400.00, 40.01,	DC	
	0.00) DC				
	8TH HIGHEST VALUE IS	6.65648	AT ( 384400.00, 3748600.00, 40.20,	DC	
	0.00) DC				

Victoria Greens Construction HRA

9TH HIGHEST VALUE IS 5.96704 AT ( 384300.00, 3748500.00, 38.92,  
38.92, 0.00) DC  
10TH HIGHEST VALUE IS 4.79525 AT ( 384300.00, 3748600.00, 38.16,  
38.16, 0.00) DC

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

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* Victoria Greens Construction HRA  
\*\*\* 08/02/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 13:57:57

PAGE 30

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

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

A Total of 0 Fatal Error Message(s)  
A Total of 2 Warning Message(s)  
A Total of 1017 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 747 Calm Hours Identified  
  
A Total of 270 Missing Hours Identified ( 0.62 Percent)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 363 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used  
0.50  
ME W187 363 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*  
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 1.5

Exposure Duration Bin Distribution  
3rd Trimester Bin: 0.25  
0<2 Years Bin: 1.5  
2<9 Years Bin: 0  
2<16 Years Bin: 0  
16<30 Years Bin: 0  
16 to 70 Years Bin: 0

\*\*\*\*\*  
PATHWAYS ENABLED

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

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

\*\*\*\*\*  
INHALATION

Victoria\_Const\_Unmit\_1.5yrCancerOutput

Daily breathing rate: LongTerm24HR

**\*\*Worker Adjustment Factors\*\***

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2 Output\VictoriaGreens\_Const\_Unmit\VICTORIAGREENS\_CONST\_UNMIT\hra\Victoria\_Const\_Unmit\_1.5yrCancerCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Const\_Unmit\VICTORIAGREENS\_CONST\_UNMIT\hra\Victoria\_Const\_Unmit\_1.5yrCancerCancerRiskSumByRec.csv

HRA ran successfully























:NS\_CONST\_UNMIT\hra\Victoria\_Const\_Unmit\_1.5yrCancerHRAInput.hra

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: NCChronic  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

\*\*Exposure duration are only adjusted for cancer assessments\*\*

\*\*\*\*\*

PATHWAYS ENABLED

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

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

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

\*\*Fraction at time at home\*\*

NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

\*\*\*\*\*

Victoria\_Const\_Unmit\_ChronicOutput

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2 Output\VictoriaGreens\_Const\_Unmit\VICTORIAGREENS\_CONST\_UNMIT\hra\Victoria\_Const\_Unmit\_ChronicNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\swang\Documents\1.

Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2 Output\VictoriaGreens\_Const\_Unmit\VICTORIAGREENS\_CONST\_UNMIT\hra\Victoria\_Const\_Unmit\_ChronicNCChronicRiskSumByRec.csv

HRA ran successfully

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*  
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 1.5

Exposure Duration Bin Distribution  
3rd Trimester Bin: 0.25  
0<2 Years Bin: 1.5  
2<9 Years Bin: 0  
2<16 Years Bin: 0  
16<30 Years Bin: 0  
16 to 70 Years Bin: 0

\*\*\*\*\*  
PATHWAYS ENABLED

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

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

\*\*\*\*\*  
INHALATION

Victoria\_Const\_Mitt\_1.5yrCancerOutput

Daily breathing rate: LongTerm24HR

**\*\*Worker Adjustment Factors\*\***

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2 Output\VictoriaGreens\_Const\_HRA\_Mit\VICTORIAGREENS\_CONST\_MIT\hra\Victoria\_Const\_Mitt\_1.5yrCancerCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Const\_HRA\_Mit\VICTORIAGREENS\_CONST\_MIT\hra\Victoria\_Const\_Mitt\_1.5yrCancerCancerRiskSumByRec.csv

HRA ran successfully





















\\EENS\_CONST\_MIT\hra\Victoria\_Const\_Mitt\_1.5yrCancerHRAInput.hra



GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: NCChronic  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

\*\*Exposure duration are only adjusted for cancer assessments\*\*

\*\*\*\*\*

PATHWAYS ENABLED

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

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

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

\*\*Fraction at time at home\*\*

NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

\*\*\*\*\*

Victoria\_Const\_Mitt\_ChronicOutput

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2 Output\VictoriaGreens\_Const\_HRA\_Mit\VICTORIAGREENS\_CONST\_MIT\hra\Victoria\_Const\_Mitt\_ChronicNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Const\_HRA\_Mit\VICTORIAGREENS\_CONST\_MIT\hra\Victoria\_Const\_Mitt\_ChronicNCChronicRiskSumByRec.csv

HRA ran successfully



















oria\_Const\_Mitt\_ChronicHRAInput.hra

**Victoria Greens Cumulative Health Risk Assessment - Roadway Emission Inventory**

Vehicle Class	Fuel Type	Existing Diesel AADT <sup>1</sup>	Distance (meter) <sup>2</sup>	Distance (miles)	Daily VMT	Exhaust PM10					Mitigated Indoor Emissions Exposure	
						EF (g/mile)	Emission (g/day)	Emission (lb/hr)	Emission (lb/yr)	Emission (ton/yr)	Emission (lb/hr)	Emission (lb/yr)
<b>SLINE1: 91 WB Segment</b>												
Non-Trucks	DSL	1,172	4,703	2.92	3,425	1.77E-02	60.50	5.56E-03	<b>48.69</b>	0.024343		
LHDT1/LHDT2	DSL	3,792	4,703	2.92	11,085	1.48E-02	164.20	1.51E-02	<b>132.13</b>	0.066065		
MHDT	DSL	743	4,703	2.92	2,172	7.27E-02	157.86	1.45E-02	<b>127.02</b>	0.063512		
HHDT	DSL	2,528	4,703	2.92	7,389	5.06E-02	373.93	3.43E-02	<b>300.89</b>	0.150444		
All Diesel Vehicles							756.49	6.95E-02	<b>608.73</b>	0.304364	2.11E-02	185.05
<b>SLINE2: 91 EB Segment</b>												
Non-Trucks	DSL	1,172	4,706	2.92	3,427	1.77E-02	60.54	5.56E-03	<b>48.72</b>	0.024358		
LHDT1/LHDT2	DSL	3,792	4,706	2.92	11,092	1.48E-02	164.31	1.51E-02	<b>132.21</b>	0.066107		
MHDT	DSL	743	4,706	2.92	2,173	7.27E-02	157.96	1.45E-02	<b>127.11</b>	0.063553		
HHDT	DSL	2,528	4,706	2.92	7,394	5.06E-02	374.16	3.44E-02	<b>301.08</b>	0.15054		
All Diesel Vehicles							756.97	6.95E-02	<b>609.12</b>	0.304558	2.11E-02	185.17

**% Reduction Assumed**

- 87% % Time Indoors
- 80% % MERV13 PM10 Redu
- 69.60% Total Reduction

**Notes:** % = percent; AADT = average annual daily trip; g = grams; hr = hours; lb = pounds; yr = years

1. Estimated based on the EMFAC2017 emission rates, Caltrans population breakdown by axle, and Caltrans average daily truck traffic provided by (Caltrans 2017).
2. Based on the modeled link length used in the AERMOD model.

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Victoria Greens Cumulative Health Risk Assessment  
Stationary Sources

Facility	Address	Source Type	AERMOD Name	Total Trucks trucks/hr	Total Trucks trucks/yr	Idling Time hr/truck	Source type	Height ft	Diameter m	Temperature K	Exit Velocity m/s	Unmitigated Truck DPM		Mitigated Truck DPM		% Reduction Assumed
												lb/year	lb/hr	lb/year	lb/hr	
Turbo Air	1250 E Victoria St, Carson, CA 90746	Truck Idling	TAldling1	2	520	0.08	Point	12.6	0.1	366	51.71	9.34E-05	3.59E-07	0.00002839	0.00000011	87% % Time Indoors 80% % MERV13 PM10 Redu 69.60% Total Reduction
Two Chefs on a roll (trucks)	18201 Central Ave, Carson, CA 90746	Truck Idling	Chefidling1	21	5460	0.08	Point	12.6	0.1	366	51.71	9.80E-04	3.77E-06	0.00029805	0.00000115	
Two Chefs on a roll (TRU)	18201 Central Ave, Carson, CA 90746	TRU Idling	ChefTRU1	14.7	3822	0.5	Point	13.0	0.04445	501	49	1.30E-03	5.01E-06	0.00039600	0.00000152	
Weckerle Sales	18050 Central Ave, Carson, CA 90746	Truck Idling	WECKERLE	0.1	26	0.08	Point	12.6	0.1	366	51.71	4.67E-06	1.80E-08	0.00000142	0.00000001	
Cirrus	18027 Bishop Ave, Carson, CA 90746	Truck Idling	CIRRUSS	4	1040	0.08	Point	12.6	0.1	366	51.71	1.87E-04	7.18E-07	0.00005677	0.00000022	
Northrop Grumman	1501 Victoria St	Truck Idling	Northrop	6	1560	0.08	Point	12.6	0.1	366	51.71	2.80E-04	1.08E-06	0.00008516	0.00000033	
HD Smith	1370 Victoria St	Truck Idling	HDldling	42	10920	0.08	Point	12.6	0.1	366	51.71	1.96E-03	7.54E-06	0.00059609	0.00000229	
Unknown	1420 Victoria St	Truck Idling	ldling	18	4680	0.08	Point	12.6	0.1	366	51.71	8.40E-04	3.23E-06	0.00025547	0.00000098	
Ace Global Distribution	18271 Bishop	Truck Idling	Aceidling	12	3120	0.08	Point	12.6	0.1	366	51.71	5.60E-04	2.15E-06	0.00017031	0.00000066	
Radiant	1421 Charles Willard St, Carson, CA 90746	Truck Idling	Radiant	24	6240	0.08	Point	12.6	0.1	366	51.71	1.12E-03	4.31E-06	0.00034062	0.00000131	
Unknown (Trucks)	1371 Charles Willard St, Carson CA	Truck Idling	ldling2	12	3120	0.08	Point	12.6	0.1	366	51.71	5.60E-04	2.15E-06	0.00017031	0.00000066	
Unknown (TRU)	1371 Charles Willard St, Carson CA	TRU Idling	TRU2	2.4	624	0.5	Point	13.00	0.04445	501	49	2.13E-04	8.18E-07	0.00006465	0.00000025	

Engine Name	Address	Permit Number	AERMOD Name	DPM Emission Rate	Engine Rating	Operating	Source type	Exhaust Height ft	Exhaust Diameter ft	Exhaust Temperature °F	Exhaust Air Flow cfm	Unmitigated Genset DPM		Mitigated Genset DPM	
												g/hp-hr	hp	hr/yr	lb/year
Cummins KTA1150G	17900 S Central Avenue, Compton, CA	G6144	GEN1	0.015	560	200	Point	11.00	0.25	980	3190	3.70	1.85E-02	1.12592593	0.00562963
Cummins KTA1150G	17900 S Central Avenue, Compton, CA	G6145	GEN2	0.015	560	200	Point	11.00	0.25	980	3190	3.70	1.85E-02	1.12592593	0.00562963
Cummins NTA855-G3	17900 S Central Avenue, Compton, CA	G30576	GEN3	0.015	535	200	Point	9.00	0.25	980	3190	3.54	1.77E-02	1.07566138	0.00537831

Notes: °F = degrees Fahrenheit; cfm = cubic feet per meters; ft = feet; g = gram; hp = horsepower; hr = hours; K = Kelvins; lb = pounds; m = meters; s = second; TRU = transport refrigeration unit; yr = year

- Stack height assumed from GE exhaust stack along the side of the building
- Operating parameters from Cummins Specifications Sheets
- Genset operating hours per year based on permit conditions.
- G30576 Emission standard based on 2011-2014 Tier 4 engine standard <https://nepis.epa.gov/Exec/ZipPDF.cgi?Dockey=P100A05.pdf>

Conversions:

1 lb = 453.6 g  
1 mile = 1609.344 meters



RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE	TRUCK	TRUCK	TRUCK			AADT	TOTAL	%	TRUCK			AADT	EAL	YEAR
						AADT TOTAL	AADT TOTAL	% TOT VEH	-----By Axle-----			-----	-----By Axle-----			-----	2-WAY (1000)	VER/ EST		
									2	3	4	5+	2	3	4	5+				
91	07	LA	R7.426	A	CARSON, AVALON BLVD	201000	14127	7.03	7585	1486	418	4638	53.69	11	3	33	2064	16V		

**Existing Volumes:**

RTE	Non-truck AADT	Non-truck - Diesel	LHDT1/LHDT2 (2 axle)	MHDT (3 axle)	HHDT (4 axle)	HHDT (5+ axle)
91 Ahead	186,873	2,343	7,585	1,486	418	4,638



EMFAC2014 (v1.0.7) Emission Rates

Region Type: Air Basin

Region: South Coast

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL ar

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	PM10_RUN	PM10_IDLEX	PM10_IDLEX
										g/veh/day	g/veh/hr
South Coas	2021	HHDT	Aggregate	Aggregate	DSL	87478.44	12125606	0	0.017684	0.042565934	0.001774
South Coas	2021	LHDT1	Aggregate	Aggregate	DSL	92129.22	3261305	1158870	0.019364	0.026279664	0.001095
South Coas	2021	MHDT	Aggregate	Aggregate	DSL	131577	7496367	0	0.006214	0.001527173	6.36E-05
									<b>Average</b>	<b>0.02345759</b>	<b>0.000977</b>

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**EMFAC2017 (v1.0.2) Emission Rates**

Region Type: Sub-Area  
 Region: Los Angeles (SC)  
 Calendar Year: 2021  
 Season: Annual  
 Vehicle Classification: EMFAC2007 Categories  
 Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX

**2021 Aggregate Emission Factor Summary:**

Non-Truck Aggregate EF 0.0177 g/mile  
 LHDT1/LHDT2 Aggregate EF 0.0148 g/mile  
 MHDT Aggregate EF 0.0727 g/mile  
 HHDT Aggregate EF 0.0506 g/mile

**Non-Truck Aggregate EF 0.017666**

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	PM10_RUNEX
Los Angeles	2021	LDA	Aggregate	Aggregate	DSL	32586.46	1298142	154026	0.011691016
Los Angeles	2021	LDT1	Aggregate	Aggregate	DSL	290.8626	7197.69	1036.357	0.150684269
Los Angeles	2021	LDT2	Aggregate	Aggregate	DSL	8031.054	350363.7	39758.63	0.006754718
Los Angeles	2021	MDV	Aggregate	Aggregate	DSL	17653	715508.5	87132.23	0.00600381
Los Angeles	2021	MH	Aggregate	Aggregate	DSL	5558.491	59012.67	555.8491	0.082566509
Los Angeles	2021	OBUS	Aggregate	Aggregate	DSL	3046.476	229570.7	29861.24	0.071740816
Los Angeles	2021	SBUS	Aggregate	Aggregate	DSL	3420.816	108359.3	39475.74	0.042905513
Los Angeles	2021	UBUS	Aggregate	Aggregate	DSL	10.1389	1181.23	40.5556	0.006137414

**LHDT1/LHDT2 Aggregate EF 0.014813**

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	PM10_RUNEX
Los Angeles	2021	LHDT1	Aggregate	Aggregate	DSL	59340.16	2581231	746424.5	0.014436269
Los Angeles	2021	LHDT2	Aggregate	Aggregate	DSL	23954.96	1002703	301323.3	0.015783659

**MHDT Aggregate EF 0.07268**

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	PM10_RUNEX
Los Angeles	2021	MHDT	Aggregate	Aggregate	DSL	64529.73	4032847	633765.2	0.072679746

**HHDT Aggregate EF 0.050604**

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	PM10_RUNEX
Los Angeles	2021	HHDT	Aggregate	Aggregate	DSL	55990.86	6673865	556551.3	0.050603913

EMFAC2017 (v1.0.2) Emission Rates				EMFAC2017 (v1.0.2) Emission Rates			
Region Type: Sub-Area				Region Type: Sub-Area			
Region: Los Angeles (SC)				Region: Los Angeles (SC)			
Calendar Year: 2021				Calendar Year: 2021			
Season: Annual				Season: Annual			
Vehicle Classification: EMFAC2007 Categories				Vehicle Classification: EMFAC2007 Categories			
Total	Pop	VMT	Trips	Non-Truck	Pop	VMT	Trips
	267118910.3	8.85E+09	1.34E+09		2.67E+08	8.85E+09	1.34E+09
DSL	12844509.11	6.8E+08	1.24E+08	DSL	3518018	1.15E+08	16804020
	4.81%	7.6%	9.20%		1.32%	1.30%	1.23%

Units: miles/day for VMT, trips/day for Trips, g/mile for RUXE, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar	Vehicle	Cat	Model	Year	Speed	Fuel	Population	VMT	Trips	ROG_RUN	ROG_IDLE	ROG_STRE	ROG_HOT	ROG_RUN	ROG_REST	ROG_DIUR	CO2_RUN	CO2_IDLE	CO2_STRE	CO2_HOT	CO2_RUN	CO2_REST	CO2_DIUR	NOx_RUN	NOx_IDLE	NOx_STRE	NOx_HOT	NOx_RUN	NOx_REST	NOx_DIUR	PM10_RUN	PM10_IDLE	PM10_STRE	PM10_HOT	PM10_RUN	PM10_REST	PM10_DIUR								
Los Angeles	2021	HHDT	Aggregate	Aggregate	GAS		58.07198474	5693.756	1161.904	0.611117	0	0.00139	0.159396	0.873108	0.058566	0.083547	0.89174	0	0.00152	0.159396	0.873108	0.058566	0.083547	0.89174	0	0.0495753	58.96822	0	5.248559	4.643738	0	0.831754	2144.009	0	48.19822	0.00181167	0	0.00092742	0.02000006	0.061740018						
Los Angeles	2021	HHDT	Aggregate	Aggregate	GAS		55990.85516	6673865	556551.3	0.1211762	0	0.00139	0.159396	0.873108	0.058566	0.083547	0.89174	0	0.00152	0.159396	0.873108	0.058566	0.083547	0.89174	0	0.0495753	58.96822	0	5.248559	4.643738	0	0.831754	2144.009	0	48.19822	0.00181167	0	0.00092742	0.02000006	0.061740018						
Los Angeles	2021	HHDT	Aggregate	Aggregate	NG		2450.201478	99716.61	9555.786	0.395927	0.074837	0	0	0	0	0	0	0	0	0.1317446	19.93288	0	3.643059	24.43471	0	0	0	0	0	0	0	0	0	0	0	0	0.007762306	0.052358241	0	0.03560001	0.061740018					
Los Angeles	2021	LDA	Aggregate	Aggregate	GAS		3908662.591	1.51E+08	18440358	0.014143	0	0.252862	0.110275	0.22593	0.257793	0.274891	0.022624	0	0.27685	0.110275	0.22593	0.257793	0.274891	0.022624	0	0.27685	0.110275	0.22593	0.257793	0.274891	0.022624	0	0.27685	0.110275	0.22593	0.257793	0.274891	0.022624	0	0.27685	0.110275	0.22593	0.257793	0.274891	0.022624	
Los Angeles	2021	LDA	Aggregate	Aggregate	GAS		31586.45511	1298142	154026	0.024298	0	0	0	0	0	0	0	0	0	0.093684	0	0.200132	284.4088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011691016	0	0.008800002	0.036750011		
Los Angeles	2021	LDA	Aggregate	Aggregate	ELEC		66214.59189	2654203	331237.8	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011			
Los Angeles	2021	LDT1	Aggregate	Aggregate	GAS		443614.9839	16706920	2046809	0.040069	0	0.397744	0.218903	0.758779	0.540621	0.650059	0.058412	0	0.435476	0.218903	0.758779	0.540621	0.650059	0.058412	0	0.435476	0.218903	0.758779	0.540621	0.650059	0.058412	0	0.435476	0.218903	0.758779	0.540621	0.650059	0.058412	0	0.435476	0.218903	0.758779	0.540621	0.650059	0.058412	
Los Angeles	2021	LDT1	Aggregate	Aggregate	NG		290.8625759	7197.69	1036.357	0.200968	0	0	0	0	0	0	0	0	0	0	1.171314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011		
Los Angeles	2021	LDT1	Aggregate	Aggregate	ELEC		2511.870717	99622.81	12479.58	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011		
Los Angeles	2021	LDT2	Aggregate	Aggregate	GAS		1344988.733	51495062	6318825	0.023553	0	0.349513	0.133249	0.429575	0.366754	0.36557	0.034402	0	0.382781	0.133249	0.429575	0.366754	0.36557	0.034402	0	0.382781	0.133249	0.429575	0.366754	0.36557	0.034402	0	0.382781	0.133249	0.429575	0.366754	0.36557	0.034402	0	0.382781	0.133249	0.429575	0.366754	0.36557	0.034402	
Los Angeles	2021	LDT2	Aggregate	Aggregate	DSL		8031.053707	350363.7	39758.63	0.023562	0	0	0	0	0	0	0	0	0	0	0.025824	0	0	0	0	0	0	0	0	0.018829	0	0.051209	0	0.3010947	0	0	0	0	0	0	0	0.008800002	0.036750011			
Los Angeles	2021	LDT2	Aggregate	Aggregate	ELEC		10912.37044	363985	55320.27	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011			
Los Angeles	2021	LHDT1	Aggregate	Aggregate	GAS		105693.4335	3876714	1574675	0.041681	0.448264	0.128339	0.127491	0.876982	0.036603	0.060689	0.060821	0.654105	0.140515	0.127491	0.876982	0.036603	0.060689	0.060821	0.654105	0.140515	0.127491	0.876982	0.036603	0.060689	0.060821	0.654105	0.140515	0.127491	0.876982	0.036603	0.060689	0.060821	0.654105	0.140515	0.127491	0.876982	0.036603	0.060689	0.060821	0.654105
Los Angeles	2021	LHDT1	Aggregate	Aggregate	DSL		59340.15891	2581231	746424.5	0.07005	0.10976	0	0	0	0	0	0	0	0	0.079747	0.124954	0	0	0	0	0	0	0	0.360915	0.909745	0	1.437696	2.015558	0	4.718348	132.3567	0	0.014436269	0.027912326	0	0.01200003	0.076440022				
Los Angeles	2021	LHDT2	Aggregate	Aggregate	GAS		17634.38841	624954.5	262726.1	0.029166	0.449897	0.132113	0.127088	0.846603	0.033704	0.055438	0.042558	0.656489	0.144665	0.127088	0.846603	0.033704	0.055438	0.042558	0.656489	0.144665	0.127088	0.846603	0.033704	0.055438	0.042558	0.656489	0.144665	0.127088	0.846603	0.033704	0.055438	0.042558	0.656489	0.144665	0.127088	0.846603	0.033704	0.055438	0.042558	0.656489
Los Angeles	2021	LHDT2	Aggregate	Aggregate	DSL		23954.96305	1002703	301323.3	0.06883	0.10976	0	0	0	0	0	0	0	0	0.078358	0.124954	0	0	0	0	0	0	0	0.353868	0.909745	0	1.369679	2.033464	0	5.228163	212.6642	0	0.015783659	0.028489856	0	0.01200003	0.089180026				
Los Angeles	2021	MCY	Aggregate	Aggregate	GAS		170130.7051	1205146	340261.4	2.631668	0	1.823531	0.671625	2.065601	1.343608	2.178012	3.260946	0	1.984614	0.671625	2.065601	1.343608	2.178012	3.260946	0	1.984614	0.671625	2.065601	1.343608	2.178012	3.260946	0	1.984614	0.671625	2.065601	1.343608	2.178012	3.260946	0	1.984614	0.671625	2.065601	1.343608	2.178012	3.260946	
Los Angeles	2021	MDV	Aggregate	Aggregate	DSL		911569.8922	32248064	4221474	0.0383337	0	0.456426	0.153437	0.461537	0.441789	0.422798	0.35359	0	0.499674	0.153437	0.461537	0.441789	0.422798	0.35359	0	3.379831	0.138641	0	0.391908	437.4421	0	88.67673	0.002170457	0	0.002261915	0.008000002	0.036750011	0	0.008800002	0.036750011						
Los Angeles	2021	MDV	Aggregate	Aggregate	DSL		17652.99935	715508.5	87132.23	0.017287	0	0	0	0	0	0	0	0	0	0.285937	0	0	0	0	0	0	0	0	0.054218	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011			
Los Angeles	2021	MDV	Aggregate	Aggregate	ELEC		4769.443571	164756.7	24445.83	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0.004888	0.0075	0.022407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008800002	0.036750011		
Los Angeles	2021	MH	Aggregate	Aggregate	GAS		18789.47051	190228.3	1879.699	0.064846	0	0.130857	0.083706	0.209581	0.049962	0.120616	0.094623	0	0.143272	0.083706	0.209581	0.049962	0.120616	0.094623	0	0.143272	0.083706	0.209581	0.049962	0.120616	0.094623	0	0.143272	0.083706	0.209581	0.049962	0.120616	0.094623	0	0.143272	0.083706	0.209581	0.049962	0.120616	0.094623	
Los Angeles	2021	MH	Aggregate	Aggregate	DSL		5558.490531	59012.67	555.8491	0.070354	0	0	0	0	0	0	0	0	0	0.080094	0	0	0	0	0	0	0	0	0	0.287194	0	0.3624762	0	0.978167	0	0	0	0	0	0	0	0.082556509	0	0.016500005	0.130340037	
Los Angeles	2021	MHDT	Aggregate	Aggregate	GAS		14428.47468	790404.3	288684.9	0.080862	1.000452	0.223714	0.092219	0.495117	0.029359	0.046617	0.117994	1.459857	0.244939	0.092219	0.495117	0.029359	0.046617	0.117994	1.459857	0.244939	0.092219	0.495117	0.029359	0.046617	0.117994	1.459857	0.244939	0.092219	0.495117	0.029359	0.046617	0.117994	1.459857	0.244939	0.092219	0.495117	0.029359	0.046617	0.117994	1.459857
Los Angeles	2021	MHDT	Aggregate	Aggregate	DSL		64529.72517	4032847	633765.2	0.126214	0.117233	0																																		

OFFROAD2017 (v1.0.1) Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2021

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2017 Equipment Types

Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	CalYr	VehClass	MdYr	HP_Bin	Fuel	PM10_tpd	Fuel_gpy	Total_Activ	Total_Population
South Coas	2021	TRU - Insta	1993	25	Diesel	0	0	0	0
South Coas	2021	TRU - Insta	1994	25	Diesel	0	0	0	0
South Coas	2021	TRU - Insta	1995	25	Diesel	1.81598E-06	0.210578	167.0075	0.122709
South Coas	2021	TRU - Insta	1996	25	Diesel	3.2227E-06	0.373697	296.3764	0.217764
South Coas	2021	TRU - Insta	1997	25	Diesel	6.67059E-06	0.773507	613.4625	0.450744
South Coas	2021	TRU - Insta	1998	25	Diesel	1.49128E-05	1.72926	1371.462	1.007687
South Coas	2021	TRU - Insta	1999	25	Diesel	3.40407E-05	3.947293	3130.567	2.300196
South Coas	2021	TRU - Insta	2000	25	Diesel	3.599E-05	5.061266	4014.05	2.949338
South Coas	2021	TRU - Insta	2001	25	Diesel	4.08405E-05	5.743386	4555.034	3.346829
South Coas	2021	TRU - Insta	2002	25	Diesel	4.45273E-05	6.261858	4966.23	3.648957
South Coas	2021	TRU - Insta	2003	25	Diesel	0.000104102	14.63989	11610.78	8.531064
South Coas	2021	TRU - Insta	2004	25	Diesel	0.000208185	29.27705	23219.39	17.06054
South Coas	2021	TRU - Insta	2005	25	Diesel	0.000319936	55.64872	44134.56	32.42804
South Coas	2021	TRU - Insta	2006	25	Diesel	0.000419063	72.89053	57808.9	42.47531
South Coas	2021	TRU - Insta	2007	25	Diesel	0.000449165	78.12634	61961.38	45.52636
South Coas	2021	TRU - Insta	2008	25	Diesel	0.000609229	211.9349	168083.9	123.5003
South Coas	2021	TRU - Insta	2009	25	Diesel	0.000224005	77.92544	61802.05	45.4093
South Coas	2021	TRU - Insta	2010	25	Diesel	0.000262029	91.15314	72292.84	53.11744
South Coas	2021	TRU - Insta	2011	25	Diesel	0.000396695	129.5771	102766.6	75.50812
South Coas	2021	TRU - Insta	2012	25	Diesel	0.001026277	335.225	265864.3	195.3448
South Coas	2021	TRU - Insta	2013	25	Diesel	0.000460609	150.4543	119324.1	87.67383
South Coas	2021	TRU - Insta	2014	25	Diesel	0.000990009	323.3783	256468.8	188.4414
South Coas	2021	TRU - Insta	2015	25	Diesel	0.001746319	570.4211	452396.4	332.4
South Coas	2021	TRU - Insta	2016	25	Diesel	0.001094624	357.55	283570.1	208.3542
South Coas	2021	TRU - Insta	2017	25	Diesel	0.001176583	384.3215	304802.3	223.9547
South Coas	2021	TRU - Insta	2018	25	Diesel	0.001286697	420.2891	333328	244.914
South Coas	2021	TRU - Insta	2019	25	Diesel	0.001902679	621.4948	492902.6	362.1621
South Coas	2021	TRU - Insta	2020	25	Diesel	0.001370437	447.6422	355021.5	260.8534

PM10  
 tons/hr/TRU  
 3.40825E-10  
 lb/hr/TRU  
 6.82E-07

CostcoMurrieta\_Op\_HRA

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\*\* AERMOD Input Produced by:

\*\* AERMOD View Ver. 9.6.0

\*\* Lakes Environmental Software Inc.

\*\* Date: 7/10/2018

\*\* File: C:\Lakes\AERMOD View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.ADI

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\*\* AERMOD Control Pathway

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CO STARTING

TITLEONE C:\Lakes\AERMOD View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc

MODELOPT DFAULT CONC

AVERTIME 1 PERIOD

URBANOPT 2189461 Riverside

POLLUTID HRA

RUNORNOT RUN

ERRORFIL CostcoMurrieta\_Op\_HRA.err

CO FINISHED

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\*\* AERMOD Source Pathway

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SO STARTING

\*\* Source Location \*\*

\*\* Source ID - Type - X Coord. - Y Coord. \*\*

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\*\* Line Source Represented by Separated Volume Sources

\*\* LINE VOLUME Source ID = TRAVEL1

\*\* DESCRSRC Clinton Road West Truck Traveling

\*\* PREFIX

\*\* Length of Side = 3.40

\*\* Configuration = Separated

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 0.85

\*\* SZINIT = 0.40

\*\* Nodes = 6

\*\* 484308.135, 3717579.853, 462.82, 5.00, 3.11

\*\* 484088.891, 3717579.853, 465.67, 5.00, 3.11

CostcoMurrieta\_Op\_HRA

\*\* 484068.683, 3717582.067, 466.40, 5.00, 3.11  
 \*\* 484052.627, 3717583.728, 466.48, 5.00, 3.11  
 \*\* 484017.470, 3717590.649, 466.32, 5.00, 3.11  
 \*\* 483935.530, 3717616.670, 465.66, 5.00, 3.11

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LOCATION	VOLUME				
L0000001	VOLUME	484306.435	3717579.853	462.86	
L0000002	VOLUME	484299.755	3717579.853	462.82	
L0000003	VOLUME	484293.074	3717579.853	462.86	
L0000004	VOLUME	484286.393	3717579.853	462.89	
L0000005	VOLUME	484279.712	3717579.853	462.90	
L0000006	VOLUME	484273.032	3717579.853	462.90	
L0000007	VOLUME	484266.351	3717579.853	462.97	
L0000008	VOLUME	484259.670	3717579.853	463.08	
L0000009	VOLUME	484252.990	3717579.853	463.18	
L0000010	VOLUME	484246.309	3717579.853	463.29	
L0000011	VOLUME	484239.628	3717579.853	463.43	
L0000012	VOLUME	484232.948	3717579.853	463.49	
L0000013	VOLUME	484226.267	3717579.853	463.38	
L0000014	VOLUME	484219.586	3717579.853	463.30	
L0000015	VOLUME	484212.906	3717579.853	463.33	
L0000016	VOLUME	484206.225	3717579.853	463.43	
L0000017	VOLUME	484199.544	3717579.853	463.46	
L0000018	VOLUME	484192.863	3717579.853	463.50	
L0000019	VOLUME	484186.183	3717579.853	463.53	
L0000020	VOLUME	484179.502	3717579.853	463.53	
L0000021	VOLUME	484172.821	3717579.853	463.52	
L0000022	VOLUME	484166.141	3717579.853	463.51	
L0000023	VOLUME	484159.460	3717579.853	463.59	
L0000024	VOLUME	484152.779	3717579.853	463.74	
L0000025	VOLUME	484146.099	3717579.853	463.87	
L0000026	VOLUME	484139.418	3717579.853	463.87	
L0000027	VOLUME	484132.737	3717579.853	463.94	
L0000028	VOLUME	484126.057	3717579.853	464.10	
L0000029	VOLUME	484119.376	3717579.853	464.36	
L0000030	VOLUME	484112.695	3717579.853	464.66	
L0000031	VOLUME	484106.014	3717579.853	465.04	
L0000032	VOLUME	484099.334	3717579.853	465.43	
L0000033	VOLUME	484092.653	3717579.853	465.78	
L0000034	VOLUME	484085.990	3717580.171	466.00	
L0000035	VOLUME	484079.349	3717580.899	466.16	
L0000036	VOLUME	484072.708	3717581.626	466.33	
L0000037	VOLUME	484066.065	3717582.338	466.45	
L0000038	VOLUME	484059.420	3717583.026	466.48	
L0000039	VOLUME	484052.775	3717583.713	466.35	
L0000040	VOLUME	484046.218	3717584.990	466.26	
L0000041	VOLUME	484039.663	3717586.280	466.24	
L0000042	VOLUME	484033.108	3717587.571	466.29	
L0000043	VOLUME	484026.553	3717588.861	466.33	

CostcoMurrieta\_Op\_HRA

LOCATION	L0000044	VOLUME	484019.998	3717590.151	466.38
LOCATION	L0000045	VOLUME	484013.559	3717591.891	466.55
LOCATION	L0000046	VOLUME	484007.191	3717593.913	466.80
LOCATION	L0000047	VOLUME	484000.824	3717595.935	467.07
LOCATION	L0000048	VOLUME	483994.457	3717597.957	467.32
LOCATION	L0000049	VOLUME	483988.089	3717599.979	467.56
LOCATION	L0000050	VOLUME	483981.722	3717602.002	467.81
LOCATION	L0000051	VOLUME	483975.355	3717604.024	468.09
LOCATION	L0000052	VOLUME	483968.987	3717606.046	468.33
LOCATION	L0000053	VOLUME	483962.620	3717608.068	468.42
LOCATION	L0000054	VOLUME	483956.253	3717610.090	468.24
LOCATION	L0000055	VOLUME	483949.885	3717612.112	467.56
LOCATION	L0000056	VOLUME	483943.518	3717614.134	466.73
LOCATION	L0000057	VOLUME	483937.151	3717616.156	465.87
** End of LINE VOLUME Source ID = TRAVEL1					
LOCATION	IDLING1	POINT	484148.500	3717920.370	472.590
** DESCRSRC Costco delivery truck idling loading dock					
LOCATION	IDLING2	POINT	484297.020	3717916.130	489.350
** DESCRSRC Costco gas station truck delivery idling					
** -----					
** Line Source Represented by Separated Volume Sources					
** LINE VOLUME Source ID = TRAFFIC2					
** DESCRSRC Delivery truck trip traveling onsite					
** PREFIX					
** Length of Side = 3.40					
** Configuration = Separated					
** Emission Rate = 1.0					
** Vertical Dimension = 0.85					
** SZINIT = 0.40					
** Nodes = 8					
** 484303.914, 3717589.923, 462.99, 5.00, 3.16					
** 484306.036, 3717841.338, 471.30, 5.00, 3.16					
** 484330.434, 3717936.811, 493.55, 5.00, 3.16					
** 484147.973, 3717938.933, 471.82, 5.00, 3.16					
** 484084.854, 3717958.558, 469.07, 5.00, 3.16					
** 484039.769, 3717699.187, 472.63, 5.00, 3.16					
** 484086.446, 3717685.397, 474.90, 5.00, 3.16					
** 484081.141, 3717600.001, 468.82, 5.00, 3.16					
** -----					
LOCATION	L0000058	VOLUME	484303.928	3717591.623	463.03
LOCATION	L0000059	VOLUME	484303.986	3717598.421	463.17
LOCATION	L0000060	VOLUME	484304.043	3717605.220	463.34
LOCATION	L0000061	VOLUME	484304.100	3717612.019	463.43
LOCATION	L0000062	VOLUME	484304.158	3717618.817	463.44
LOCATION	L0000063	VOLUME	484304.215	3717625.616	463.56
LOCATION	L0000064	VOLUME	484304.273	3717632.414	463.67
LOCATION	L0000065	VOLUME	484304.330	3717639.213	463.75
LOCATION	L0000066	VOLUME	484304.387	3717646.012	463.89



CostcoMurrieta\_Op\_HRA

LOCATION L0000067	VOLUME	484304.445	3717652.810	464.10
LOCATION L0000068	VOLUME	484304.502	3717659.609	464.39
LOCATION L0000069	VOLUME	484304.559	3717666.407	464.85
LOCATION L0000070	VOLUME	484304.617	3717673.206	465.35
LOCATION L0000071	VOLUME	484304.674	3717680.005	465.87
LOCATION L0000072	VOLUME	484304.731	3717686.803	466.34
LOCATION L0000073	VOLUME	484304.789	3717693.602	466.80
LOCATION L0000074	VOLUME	484304.846	3717700.400	467.25
LOCATION L0000075	VOLUME	484304.904	3717707.199	467.72
LOCATION L0000076	VOLUME	484304.961	3717713.998	468.15
LOCATION L0000077	VOLUME	484305.018	3717720.796	468.56
LOCATION L0000078	VOLUME	484305.076	3717727.595	468.96
LOCATION L0000079	VOLUME	484305.133	3717734.393	469.37
LOCATION L0000080	VOLUME	484305.190	3717741.192	469.78
LOCATION L0000081	VOLUME	484305.248	3717747.991	470.14
LOCATION L0000082	VOLUME	484305.305	3717754.789	470.46
LOCATION L0000083	VOLUME	484305.363	3717761.588	470.76
LOCATION L0000084	VOLUME	484305.420	3717768.386	471.07
LOCATION L0000085	VOLUME	484305.477	3717775.185	471.36
LOCATION L0000086	VOLUME	484305.535	3717781.984	471.62
LOCATION L0000087	VOLUME	484305.592	3717788.782	471.66
LOCATION L0000088	VOLUME	484305.649	3717795.581	471.57
LOCATION L0000089	VOLUME	484305.707	3717802.379	471.32
LOCATION L0000090	VOLUME	484305.764	3717809.178	470.87
LOCATION L0000091	VOLUME	484305.822	3717815.976	470.38
LOCATION L0000092	VOLUME	484305.879	3717822.775	469.93
LOCATION L0000093	VOLUME	484305.936	3717829.574	469.80
LOCATION L0000094	VOLUME	484305.994	3717836.372	470.13
LOCATION L0000095	VOLUME	484306.490	3717843.114	471.39
LOCATION L0000096	VOLUME	484308.173	3717849.701	473.16
LOCATION L0000097	VOLUME	484309.856	3717856.288	474.94
LOCATION L0000098	VOLUME	484311.540	3717862.875	476.48
LOCATION L0000099	VOLUME	484313.223	3717869.462	478.00
LOCATION L0000100	VOLUME	484314.906	3717876.050	479.51
LOCATION L0000101	VOLUME	484316.590	3717882.637	480.90
LOCATION L0000102	VOLUME	484318.273	3717889.224	482.19
LOCATION L0000103	VOLUME	484319.957	3717895.811	483.33
LOCATION L0000104	VOLUME	484321.640	3717902.398	484.81
LOCATION L0000105	VOLUME	484323.323	3717908.985	486.53
LOCATION L0000106	VOLUME	484325.007	3717915.572	488.63
LOCATION L0000107	VOLUME	484326.690	3717922.160	490.32
LOCATION L0000108	VOLUME	484328.373	3717928.747	491.84
LOCATION L0000109	VOLUME	484330.057	3717935.334	493.41
LOCATION L0000110	VOLUME	484325.161	3717936.873	494.43
LOCATION L0000111	VOLUME	484318.363	3717936.952	494.83
LOCATION L0000112	VOLUME	484311.564	3717937.031	495.13
LOCATION L0000113	VOLUME	484304.766	3717937.110	495.08
LOCATION L0000114	VOLUME	484297.968	3717937.189	494.54

CostcoMurrieta\_Op\_HRA

LOCATION L0000115	VOLUME	484291.169	3717937.268	493.47
LOCATION L0000116	VOLUME	484284.371	3717937.347	491.87
LOCATION L0000117	VOLUME	484277.572	3717937.426	490.49
LOCATION L0000118	VOLUME	484270.774	3717937.505	489.28
LOCATION L0000119	VOLUME	484263.976	3717937.584	487.89
LOCATION L0000120	VOLUME	484257.177	3717937.663	486.03
LOCATION L0000121	VOLUME	484250.379	3717937.742	483.72
LOCATION L0000122	VOLUME	484243.581	3717937.821	481.92
LOCATION L0000123	VOLUME	484236.782	3717937.900	480.37
LOCATION L0000124	VOLUME	484229.984	3717937.979	478.99
LOCATION L0000125	VOLUME	484223.185	3717938.059	477.72
LOCATION L0000126	VOLUME	484216.387	3717938.138	476.68
LOCATION L0000127	VOLUME	484209.589	3717938.217	475.95
LOCATION L0000128	VOLUME	484202.790	3717938.296	475.44
LOCATION L0000129	VOLUME	484195.992	3717938.375	475.04
LOCATION L0000130	VOLUME	484189.193	3717938.454	474.64
LOCATION L0000131	VOLUME	484182.395	3717938.533	474.23
LOCATION L0000132	VOLUME	484175.597	3717938.612	473.77
LOCATION L0000133	VOLUME	484168.798	3717938.691	473.26
LOCATION L0000134	VOLUME	484162.000	3717938.770	472.71
LOCATION L0000135	VOLUME	484155.202	3717938.849	472.20
LOCATION L0000136	VOLUME	484148.403	3717938.928	471.87
LOCATION L0000137	VOLUME	484141.892	3717940.824	471.54
LOCATION L0000138	VOLUME	484135.399	3717942.843	471.14
LOCATION L0000139	VOLUME	484128.907	3717944.861	470.69
LOCATION L0000140	VOLUME	484122.415	3717946.880	470.25
LOCATION L0000141	VOLUME	484115.923	3717948.898	469.92
LOCATION L0000142	VOLUME	484109.430	3717950.917	469.68
LOCATION L0000143	VOLUME	484102.938	3717952.936	469.51
LOCATION L0000144	VOLUME	484096.446	3717954.954	469.38
LOCATION L0000145	VOLUME	484089.953	3717956.973	469.20
LOCATION L0000146	VOLUME	484084.604	3717957.121	469.03
LOCATION L0000147	VOLUME	484083.440	3717950.423	469.11
LOCATION L0000148	VOLUME	484082.276	3717943.724	469.17
LOCATION L0000149	VOLUME	484081.111	3717937.026	469.17
LOCATION L0000150	VOLUME	484079.947	3717930.327	469.31
LOCATION L0000151	VOLUME	484078.783	3717923.629	469.49
LOCATION L0000152	VOLUME	484077.618	3717916.931	469.72
LOCATION L0000153	VOLUME	484076.454	3717910.232	469.88
LOCATION L0000154	VOLUME	484075.290	3717903.534	470.04
LOCATION L0000155	VOLUME	484074.125	3717896.835	470.20
LOCATION L0000156	VOLUME	484072.961	3717890.137	470.43
LOCATION L0000157	VOLUME	484071.797	3717883.439	470.54
LOCATION L0000158	VOLUME	484070.632	3717876.740	470.51
LOCATION L0000159	VOLUME	484069.468	3717870.042	470.59
LOCATION L0000160	VOLUME	484068.304	3717863.343	470.70
LOCATION L0000161	VOLUME	484067.139	3717856.645	470.75
LOCATION L0000162	VOLUME	484065.975	3717849.947	470.84

CostcoMurrieta\_Op\_HRA

LOCATION	VOLUME				
LOCATION L0000163	VOLUME	484064.811	3717843.248	470.94	
LOCATION L0000164	VOLUME	484063.646	3717836.550	471.03	
LOCATION L0000165	VOLUME	484062.482	3717829.851	471.03	
LOCATION L0000166	VOLUME	484061.318	3717823.153	471.00	
LOCATION L0000167	VOLUME	484060.153	3717816.455	471.01	
LOCATION L0000168	VOLUME	484058.989	3717809.756	470.96	
LOCATION L0000169	VOLUME	484057.825	3717803.058	470.88	
LOCATION L0000170	VOLUME	484056.660	3717796.359	470.92	
LOCATION L0000171	VOLUME	484055.496	3717789.661	470.96	
LOCATION L0000172	VOLUME	484054.332	3717782.963	471.00	
LOCATION L0000173	VOLUME	484053.167	3717776.264	471.07	
LOCATION L0000174	VOLUME	484052.003	3717769.566	471.25	
LOCATION L0000175	VOLUME	484050.839	3717762.867	471.52	
LOCATION L0000176	VOLUME	484049.674	3717756.169	471.70	
LOCATION L0000177	VOLUME	484048.510	3717749.471	471.93	
LOCATION L0000178	VOLUME	484047.345	3717742.772	472.19	
LOCATION L0000179	VOLUME	484046.181	3717736.074	472.33	
LOCATION L0000180	VOLUME	484045.017	3717729.375	472.46	
LOCATION L0000181	VOLUME	484043.852	3717722.677	472.61	
LOCATION L0000182	VOLUME	484042.688	3717715.979	472.65	
LOCATION L0000183	VOLUME	484041.524	3717709.280	472.69	
LOCATION L0000184	VOLUME	484040.359	3717702.582	472.71	
LOCATION L0000185	VOLUME	484042.985	3717698.237	472.85	
LOCATION L0000186	VOLUME	484049.506	3717696.311	473.17	
LOCATION L0000187	VOLUME	484056.026	3717694.384	473.49	
LOCATION L0000188	VOLUME	484062.546	3717692.458	473.78	
LOCATION L0000189	VOLUME	484069.066	3717690.532	474.05	
LOCATION L0000190	VOLUME	484075.587	3717688.605	474.39	
LOCATION L0000191	VOLUME	484082.107	3717686.679	474.77	
LOCATION L0000192	VOLUME	484086.305	3717683.127	475.00	
LOCATION L0000193	VOLUME	484085.883	3717676.341	474.69	
LOCATION L0000194	VOLUME	484085.462	3717669.555	474.26	
LOCATION L0000195	VOLUME	484085.040	3717662.769	473.71	
LOCATION L0000196	VOLUME	484084.619	3717655.983	473.16	
LOCATION L0000197	VOLUME	484084.197	3717649.198	472.63	
LOCATION L0000198	VOLUME	484083.776	3717642.412	472.18	
LOCATION L0000199	VOLUME	484083.354	3717635.626	471.74	
LOCATION L0000200	VOLUME	484082.933	3717628.840	471.32	
LOCATION L0000201	VOLUME	484082.511	3717622.055	470.85	
LOCATION L0000202	VOLUME	484082.090	3717615.269	470.26	
LOCATION L0000203	VOLUME	484081.668	3717608.483	469.58	
LOCATION L0000204	VOLUME	484081.247	3717601.697	468.74	

\*\* End of LINE VOLUME Source ID = TRAFFIC2  
 \*\* -----  
 \*\* Line Source Represented by Separated Volume Sources  
 \*\* LINE VOLUME Source ID = TRAVEL3  
 \*\* DESCRSRC Major retail truck delivery travel onsite  
 \*\* PREFIX

CostcoMurrieta\_Op\_HRA

\*\* Length of Side = 3.40  
 \*\* Configuration = Separated  
 \*\* Emission Rate = 1.0  
 \*\* Vertical Dimension = 0.85  
 \*\* SZINIT = 0.40  
 \*\* Nodes = 3  
 \*\* 484339.982, 3717936.281, 492.01, 5.00, 3.13  
 \*\* 484459.855, 3717934.690, 468.72, 5.00, 3.13  
 \*\* 484463.037, 3717808.982, 463.29, 5.00, 3.13

\*\* -----

LOCATION	VOLUME	Source ID	Value 1	Value 2	Value 3
L0000712	484341.682	3717936.258	491.58		
L0000713	484348.410	3717936.169	490.24		
L0000714	484355.138	3717936.080	488.64		
L0000715	484361.866	3717935.991	486.55		
L0000716	484368.594	3717935.901	483.91		
L0000717	484375.322	3717935.812	482.07		
L0000718	484382.050	3717935.723	480.64		
L0000719	484388.778	3717935.633	479.42		
L0000720	484395.506	3717935.544	478.19		
L0000721	484402.234	3717935.455	477.04		
L0000722	484408.962	3717935.365	475.99		
L0000723	484415.690	3717935.276	474.98		
L0000724	484422.418	3717935.187	473.96		
L0000725	484429.146	3717935.097	472.93		
L0000726	484435.874	3717935.008	471.91		
L0000727	484442.602	3717934.919	470.88		
L0000728	484449.330	3717934.830	469.90		
L0000729	484456.059	3717934.740	469.00		
L0000730	484459.929	3717931.759	468.45		
L0000731	484460.099	3717925.032	468.22		
L0000732	484460.269	3717918.306	467.99		
L0000733	484460.440	3717911.579	467.77		
L0000734	484460.610	3717904.853	467.52		
L0000735	484460.780	3717898.126	467.14		
L0000736	484460.951	3717891.400	466.84		
L0000737	484461.121	3717884.673	466.56		
L0000738	484461.291	3717877.947	466.13		
L0000739	484461.462	3717871.220	465.70		
L0000740	484461.632	3717864.494	465.29		
L0000741	484461.802	3717857.767	465.10		
L0000742	484461.972	3717851.041	465.04		
L0000743	484462.143	3717844.314	465.07		
L0000744	484462.313	3717837.588	464.79		
L0000745	484462.483	3717830.861	464.48		
L0000746	484462.654	3717824.135	464.12		
L0000747	484462.824	3717817.408	463.80		
L0000748	484462.994	3717810.682	463.54		

\*\* End of LINE VOLUME Source ID = TRAVEL3

CostcoMurrieta\_Op\_HRA

LOCATION	IDLING3	POINT	484449.250	3717812.700	463.750
**	DESCRSRC	Major retail delivery truck idling			
LOCATION	IDLING4	POINT	484415.830	3717786.170	463.540
**	DESCRSRC	Shop truck delivery idling			
LOCATION	IDLING5	POINT	484350.590	3717765.490	466.610
**	DESCRSRC	Fast food truck delivery idling			
LOCATION	IDLING6	POINT	484347.410	3717814.290	468.840
**	DESCRSRC	Shop delivery trip idling			
LOCATION	ISLAND	VOLUME	484274.671	3717886.698	483.020
**	DESCRSRC	Costco Fuel Station Island Refueling and Spillage			
LOCATION	VENT	POINT	484274.480	3717887.270	483.090
**	DESCRSRC	Ventpipe loading and breathing			
**	Source Parameters **				
**	LINE	VOLUME	Source	ID	= TRAVEL1
	SRCPARAM	L0000001	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000002	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000003	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000004	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000005	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000006	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000007	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000008	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000009	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000010	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000011	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000012	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000013	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000014	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000015	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000016	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000017	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000018	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000019	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000020	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000021	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000022	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000023	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000024	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000025	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000026	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000027	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000028	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000029	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000030	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000031	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000032	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000033	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000034	0.0175438596	5.00	3.11 0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000035	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000036	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000037	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000038	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000039	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000040	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000041	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000042	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000043	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000044	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000045	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000046	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000047	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000048	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000049	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000050	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000051	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000052	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000053	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000054	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000055	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000056	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000057	0.0175438596	5.00	3.11	0.40

\*\*

SRCPARAM	IDLING1	1.0	3.962	501.000	49.00000	0.100
SRCPARAM	IDLING2	1.0	3.962	501.000	49.00000	0.100

\*\*

LINE VOLUME Source ID = TRAFFIC2

SRCPARAM	L0000058	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000059	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000060	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000061	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000062	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000063	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000064	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000065	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000066	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000067	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000068	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000069	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000070	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000071	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000072	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000073	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000074	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000075	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000076	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000077	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000078	0.0068027211	5.00	3.16	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000079	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000080	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000081	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000082	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000083	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000084	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000085	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000086	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000087	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000088	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000089	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000090	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000091	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000092	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000093	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000094	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000095	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000096	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000097	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000098	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000099	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000100	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000101	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000102	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000103	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000104	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000105	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000106	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000107	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000108	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000109	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000110	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000111	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000112	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000113	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000114	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000116	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000118	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000119	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000120	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000121	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000122	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000123	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000124	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000125	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000126	0.0068027211	5.00	3.16	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000127	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000128	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000130	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000134	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000141	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000142	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000147	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000150	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000152	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000153	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000154	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000156	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000157	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000158	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000159	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000160	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000161	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000162	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000163	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000164	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000165	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000166	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000167	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000168	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000169	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000170	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000171	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000172	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000173	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000174	0.0068027211	5.00	3.16	0.40



CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000175	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000176	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000177	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000178	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000179	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000180	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000181	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000182	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000183	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000184	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000185	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000186	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000187	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000188	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000189	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000190	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000191	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000192	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000193	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000194	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000195	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000196	0.0068027211	5.00	3.16	0.40
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SRCPARAM	L0000198	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000199	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000200	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000201	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000202	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000203	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000204	0.0068027211	5.00	3.16	0.40

\*\*

\*\* LINE VOLUME Source ID = TRAVEL3

SRCPARAM	L0000712	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000713	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000714	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000715	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000716	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000717	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000718	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000719	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000720	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000721	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000722	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000723	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000724	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000725	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000726	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000727	0.027027027	5.00	3.13	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000728	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000729	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000730	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000731	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000732	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000733	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000734	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000735	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000736	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000737	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000738	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000739	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000740	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000741	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000742	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000743	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000744	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000745	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000746	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000747	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000748	0.027027027	5.00	3.13	0.40

\*\*

SRCPARAM	IDLING3	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING4	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING5	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING6	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	ISLAND	1.0	1.000	10.428	1.860		
SRCPARAM	VENT	1.0	3.658	289.000	0.00274	0.052	
URBANSRC	ALL						
SRCGROUP	IDLING1	IDLING1					
SRCGROUP	IDLING2	IDLING2					
SRCGROUP	IDLING3	IDLING3					
SRCGROUP	IDLING4	IDLING4					
SRCGROUP	IDLING5	IDLING5					
SRCGROUP	IDLING6	IDLING6					
SRCGROUP	ISLAND	ISLAND					
SRCGROUP	TRAFFIC2	L0000058	L0000059	L0000060	L0000061	L0000062	L0000063
SRCGROUP	TRAFFIC2	L0000064	L0000065	L0000066	L0000067	L0000068	L0000069
SRCGROUP	TRAFFIC2	L0000070	L0000071	L0000072	L0000073	L0000074	L0000075
SRCGROUP	TRAFFIC2	L0000076	L0000077	L0000078	L0000079	L0000080	L0000081
SRCGROUP	TRAFFIC2	L0000082	L0000083	L0000084	L0000085	L0000086	L0000087
SRCGROUP	TRAFFIC2	L0000088	L0000089	L0000090	L0000091	L0000092	L0000093
SRCGROUP	TRAFFIC2	L0000094	L0000095	L0000096	L0000097	L0000098	L0000099
SRCGROUP	TRAFFIC2	L0000100	L0000101	L0000102	L0000103	L0000104	L0000105
SRCGROUP	TRAFFIC2	L0000106	L0000107	L0000108	L0000109	L0000110	L0000111
SRCGROUP	TRAFFIC2	L0000112	L0000113	L0000114	L0000115	L0000116	L0000117
SRCGROUP	TRAFFIC2	L0000118	L0000119	L0000120	L0000121	L0000122	L0000123
SRCGROUP	TRAFFIC2	L0000124	L0000125	L0000126	L0000127	L0000128	L0000129

CostcoMurrieta\_Op\_HRA

SRCGROUP TRAFFIC2 L0000130 L0000131 L0000132 L0000133 L0000134 L0000135  
SRCGROUP TRAFFIC2 L0000136 L0000137 L0000138 L0000139 L0000140 L0000141  
SRCGROUP TRAFFIC2 L0000142 L0000143 L0000144 L0000145 L0000146 L0000147  
SRCGROUP TRAFFIC2 L0000148 L0000149 L0000150 L0000151 L0000152 L0000153  
SRCGROUP TRAFFIC2 L0000154 L0000155 L0000156 L0000157 L0000158 L0000159  
SRCGROUP TRAFFIC2 L0000160 L0000161 L0000162 L0000163 L0000164 L0000165  
SRCGROUP TRAFFIC2 L0000166 L0000167 L0000168 L0000169 L0000170 L0000171  
SRCGROUP TRAFFIC2 L0000172 L0000173 L0000174 L0000175 L0000176 L0000177  
SRCGROUP TRAFFIC2 L0000178 L0000179 L0000180 L0000181 L0000182 L0000183  
SRCGROUP TRAFFIC2 L0000184 L0000185 L0000186 L0000187 L0000188 L0000189  
SRCGROUP TRAFFIC2 L0000190 L0000191 L0000192 L0000193 L0000194 L0000195  
SRCGROUP TRAFFIC2 L0000196 L0000197 L0000198 L0000199 L0000200 L0000201  
SRCGROUP TRAFFIC2 L0000202 L0000203 L0000204  
SRCGROUP TRAVEL1 L0000001 L0000002 L0000003 L0000004 L0000005 L0000006  
SRCGROUP TRAVEL1 L0000007 L0000008 L0000009 L0000010 L0000011 L0000012  
SRCGROUP TRAVEL1 L0000013 L0000014 L0000015 L0000016 L0000017 L0000018  
SRCGROUP TRAVEL1 L0000019 L0000020 L0000021 L0000022 L0000023 L0000024  
SRCGROUP TRAVEL1 L0000025 L0000026 L0000027 L0000028 L0000029 L0000030  
SRCGROUP TRAVEL1 L0000031 L0000032 L0000033 L0000034 L0000035 L0000036  
SRCGROUP TRAVEL1 L0000037 L0000038 L0000039 L0000040 L0000041 L0000042  
SRCGROUP TRAVEL1 L0000043 L0000044 L0000045 L0000046 L0000047 L0000048  
SRCGROUP TRAVEL1 L0000049 L0000050 L0000051 L0000052 L0000053 L0000054  
SRCGROUP TRAVEL1 L0000055 L0000056 L0000057  
SRCGROUP TRAVEL3 L0000712 L0000713 L0000714 L0000715 L0000716 L0000717  
SRCGROUP TRAVEL3 L0000718 L0000719 L0000720 L0000721 L0000722 L0000723  
SRCGROUP TRAVEL3 L0000724 L0000725 L0000726 L0000727 L0000728 L0000729  
SRCGROUP TRAVEL3 L0000730 L0000731 L0000732 L0000733 L0000734 L0000735  
SRCGROUP TRAVEL3 L0000736 L0000737 L0000738 L0000739 L0000740 L0000741  
SRCGROUP TRAVEL3 L0000742 L0000743 L0000744 L0000745 L0000746 L0000747  
SRCGROUP TRAVEL3 L0000748  
SRCGROUP VENT VENT  
SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

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RE STARTING

INCLUDED CostcoMurrieta\_Op\_HRA.rou

RE FINISHED

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\*\* AERMOD Meteorology Pathway

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CostcoMurrieta\_Op\_HRA

ME STARTING

SURFFILE "C:\Users\swang\Documents\1. Projects\11092 Costco Murrieta\HRA\MET\LakeElsinoreADJU\ELSI\_V9\_ADJU\ELSI\_v9.SFC"

PROFFILE "C:\Users\swang\Documents\1. Projects\11092 Costco Murrieta\HRA\MET\LakeElsinoreADJU\ELSI\_V9\_ADJU\ELSI\_v9.PFL"

SURFDATA 3171 2012

UAIRDATA 3190 2012

SITEDATA 99999 2012

PROFBASE 406.0 METERS

ME FINISHED

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\*\* AERMOD Output Pathway

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OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST CostcoMurrieta\_Op\_HRA.AD\01H1GALL.PLT 31

PLOTFILE 1 IDLING1 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G001.PLT 32

PLOTFILE 1 IDLING2 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G002.PLT 33

PLOTFILE 1 IDLING3 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G003.PLT 34

PLOTFILE 1 IDLING4 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G004.PLT 35

PLOTFILE 1 IDLING5 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G005.PLT 36

PLOTFILE 1 IDLING6 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G006.PLT 37

PLOTFILE 1 ISLAND 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G007.PLT 38

PLOTFILE 1 TRAFFIC2 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G008.PLT 39

PLOTFILE 1 TRAVEL1 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G009.PLT 40

PLOTFILE 1 TRAVEL3 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G010.PLT 41

PLOTFILE 1 VENT 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G011.PLT 42

PLOTFILE PERIOD ALL CostcoMurrieta\_Op\_HRA.AD\PE00GALL.PLT 43

PLOTFILE PERIOD IDLING1 CostcoMurrieta\_Op\_HRA.AD\PE00G001.PLT 44

PLOTFILE PERIOD IDLING2 CostcoMurrieta\_Op\_HRA.AD\PE00G002.PLT 45

PLOTFILE PERIOD IDLING3 CostcoMurrieta\_Op\_HRA.AD\PE00G003.PLT 46

PLOTFILE PERIOD IDLING4 CostcoMurrieta\_Op\_HRA.AD\PE00G004.PLT 47

PLOTFILE PERIOD IDLING5 CostcoMurrieta\_Op\_HRA.AD\PE00G005.PLT 48

PLOTFILE PERIOD IDLING6 CostcoMurrieta\_Op\_HRA.AD\PE00G006.PLT 49

PLOTFILE PERIOD ISLAND CostcoMurrieta\_Op\_HRA.AD\PE00G007.PLT 50

PLOTFILE PERIOD TRAFFIC2 CostcoMurrieta\_Op\_HRA.AD\PE00G008.PLT 51

PLOTFILE PERIOD TRAVEL1 CostcoMurrieta\_Op\_HRA.AD\PE00G009.PLT 52

PLOTFILE PERIOD TRAVEL3 CostcoMurrieta\_Op\_HRA.AD\PE00G010.PLT 53

PLOTFILE PERIOD VENT CostcoMurrieta\_Op\_HRA.AD\PE00G011.PLT 54

SUMMFILE CostcoMurrieta\_Op\_HRA.sum

OU FINISHED

CostcoMurrieta\_Op\_HRA

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
ME W186 680 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 680 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

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

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18
\*\*\* AERMET - VERSION 16216 \*\*\*
\*\*\* 17:09:15

PAGE 1
\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 249 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2189461.0 ; Urban Roughness Length = 1.000 m

CostcoMurrieta\_Op\_HRA

\*\*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:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET  
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: HRA

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 249 Source(s); 12 Source Group(s); and 152  
Receptor(s)

with: 7 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 242 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: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD 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

CostcoMurrieta\_Op\_HRA

Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 406.00 ; Decay  
 Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ;  
 Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.7 MB of RAM.

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: CostcoMurrieta\_Op\_HRA.err

\*\*File for Summary of Results: CostcoMurrieta\_Op\_HRA.sum

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 2

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* POINT SOURCE DATA \*\*\*

STACK	STACK	BLDG	URBAN	CAP/	EMIS	BASE	STACK	STACK	
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT	
VEL. DIAMETER	EXISTS	SOURCE	HOR	SCALAR	(METERS)	(METERS)	(DEG.K)		
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)		
(M/SEC)	(METERS)			VARY BY					
IDLING1	0	0.10000E+01	484148.5	3717920.4	472.6	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING2	0	0.10000E+01	484297.0	3717916.1	489.4	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING3	0	0.10000E+01	484449.2	3717812.7	463.8	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING4	0	0.10000E+01	484415.8	3717786.2	463.5	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING5	0	0.10000E+01	484350.6	3717765.5	466.6	3.96	501.00		

CostcoMurrieta\_Op\_HRA

49.00 0.10 NO YES NO  
 IDLING6 0 0.10000E+01 484347.4 3717814.3 468.8 3.96 501.00  
 49.00 0.10 NO YES NO  
 VENT 0 0.10000E+01 484274.5 3717887.3 483.1 3.66 289.00  
 0.00 0.05 NO YES NO

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 3

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SZ	SOURCE	EMISSION	RATE		X	Y	ELEV.	HEIGHT	SY
(METERS)	ID	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		CATS.	BY						
L0000001		0	0.17544E-01	484306.4	3717579.9	462.9	5.00	3.11	
0.40	YES								
L0000002		0	0.17544E-01	484299.8	3717579.9	462.8	5.00	3.11	
0.40	YES								
L0000003		0	0.17544E-01	484293.1	3717579.9	462.9	5.00	3.11	
0.40	YES								
L0000004		0	0.17544E-01	484286.4	3717579.9	462.9	5.00	3.11	
0.40	YES								
L0000005		0	0.17544E-01	484279.7	3717579.9	462.9	5.00	3.11	
0.40	YES								
L0000006		0	0.17544E-01	484273.0	3717579.9	462.9	5.00	3.11	
0.40	YES								
L0000007		0	0.17544E-01	484266.4	3717579.9	463.0	5.00	3.11	
0.40	YES								
L0000008		0	0.17544E-01	484259.7	3717579.9	463.1	5.00	3.11	
0.40	YES								
L0000009		0	0.17544E-01	484253.0	3717579.9	463.2	5.00	3.11	
0.40	YES								
L0000010		0	0.17544E-01	484246.3	3717579.9	463.3	5.00	3.11	
0.40	YES								
L0000011		0	0.17544E-01	484239.6	3717579.9	463.4	5.00	3.11	
0.40	YES								
L0000012		0	0.17544E-01	484232.9	3717579.9	463.5	5.00	3.11	



CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000013		0	0.17544E-01	484226.3	3717579.9	463.4	5.00	3.11
0.40	YES							
L0000014		0	0.17544E-01	484219.6	3717579.9	463.3	5.00	3.11
0.40	YES							
L0000015		0	0.17544E-01	484212.9	3717579.9	463.3	5.00	3.11
0.40	YES							
L0000016		0	0.17544E-01	484206.2	3717579.9	463.4	5.00	3.11
0.40	YES							
L0000017		0	0.17544E-01	484199.5	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000018		0	0.17544E-01	484192.9	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000019		0	0.17544E-01	484186.2	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000020		0	0.17544E-01	484179.5	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000021		0	0.17544E-01	484172.8	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000022		0	0.17544E-01	484166.1	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000023		0	0.17544E-01	484159.5	3717579.9	463.6	5.00	3.11
0.40	YES							
L0000024		0	0.17544E-01	484152.8	3717579.9	463.7	5.00	3.11
0.40	YES							
L0000025		0	0.17544E-01	484146.1	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000026		0	0.17544E-01	484139.4	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000027		0	0.17544E-01	484132.7	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000028		0	0.17544E-01	484126.1	3717579.9	464.1	5.00	3.11
0.40	YES							
L0000029		0	0.17544E-01	484119.4	3717579.9	464.4	5.00	3.11
0.40	YES							
L0000030		0	0.17544E-01	484112.7	3717579.9	464.7	5.00	3.11
0.40	YES							
L0000031		0	0.17544E-01	484106.0	3717579.9	465.0	5.00	3.11
0.40	YES							
L0000032		0	0.17544E-01	484099.3	3717579.9	465.4	5.00	3.11
0.40	YES							
L0000033		0	0.17544E-01	484092.7	3717579.9	465.8	5.00	3.11
0.40	YES							
L0000034		0	0.17544E-01	484086.0	3717580.2	466.0	5.00	3.11
0.40	YES							
L0000035		0	0.17544E-01	484079.3	3717580.9	466.2	5.00	3.11
0.40	YES							
L0000036		0	0.17544E-01	484072.7	3717581.6	466.3	5.00	3.11

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000037		0	0.17544E-01	484066.1	3717582.3	466.4	5.00	3.11
0.40	YES							
L0000038		0	0.17544E-01	484059.4	3717583.0	466.5	5.00	3.11
0.40	YES							
L0000039		0	0.17544E-01	484052.8	3717583.7	466.4	5.00	3.11
0.40	YES							
L0000040		0	0.17544E-01	484046.2	3717585.0	466.3	5.00	3.11

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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*      17:09:15

PAGE 4

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE	SOURCE	EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	ID	SCALAR	VARY	X	Y	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
L0000041		0	0.17544E-01	484039.7	3717586.3	466.2	5.00	3.11
0.40	YES							
L0000042		0	0.17544E-01	484033.1	3717587.6	466.3	5.00	3.11
0.40	YES							
L0000043		0	0.17544E-01	484026.6	3717588.9	466.3	5.00	3.11
0.40	YES							
L0000044		0	0.17544E-01	484020.0	3717590.2	466.4	5.00	3.11
0.40	YES							
L0000045		0	0.17544E-01	484013.6	3717591.9	466.6	5.00	3.11
0.40	YES							
L0000046		0	0.17544E-01	484007.2	3717593.9	466.8	5.00	3.11
0.40	YES							
L0000047		0	0.17544E-01	484000.8	3717595.9	467.1	5.00	3.11
0.40	YES							
L0000048		0	0.17544E-01	483994.5	3717598.0	467.3	5.00	3.11
0.40	YES							
L0000049		0	0.17544E-01	483988.1	3717600.0	467.6	5.00	3.11
0.40	YES							
L0000050		0	0.17544E-01	483981.7	3717602.0	467.8	5.00	3.11

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000051		0	0.17544E-01	483975.4	3717604.0	468.1	5.00	3.11
0.40	YES							
L0000052		0	0.17544E-01	483969.0	3717606.0	468.3	5.00	3.11
0.40	YES							
L0000053		0	0.17544E-01	483962.6	3717608.1	468.4	5.00	3.11
0.40	YES							
L0000054		0	0.17544E-01	483956.3	3717610.1	468.2	5.00	3.11
0.40	YES							
L0000055		0	0.17544E-01	483949.9	3717612.1	467.6	5.00	3.11
0.40	YES							
L0000056		0	0.17544E-01	483943.5	3717614.1	466.7	5.00	3.11
0.40	YES							
L0000057		0	0.17544E-01	483937.2	3717616.2	465.9	5.00	3.11
0.40	YES							
L0000058		0	0.68027E-02	484303.9	3717591.6	463.0	5.00	3.16
0.40	YES							
L0000059		0	0.68027E-02	484304.0	3717598.4	463.2	5.00	3.16
0.40	YES							
L0000060		0	0.68027E-02	484304.0	3717605.2	463.3	5.00	3.16
0.40	YES							
L0000061		0	0.68027E-02	484304.1	3717612.0	463.4	5.00	3.16
0.40	YES							
L0000062		0	0.68027E-02	484304.2	3717618.8	463.4	5.00	3.16
0.40	YES							
L0000063		0	0.68027E-02	484304.2	3717625.6	463.6	5.00	3.16
0.40	YES							
L0000064		0	0.68027E-02	484304.3	3717632.4	463.7	5.00	3.16
0.40	YES							
L0000065		0	0.68027E-02	484304.3	3717639.2	463.8	5.00	3.16
0.40	YES							
L0000066		0	0.68027E-02	484304.4	3717646.0	463.9	5.00	3.16
0.40	YES							
L0000067		0	0.68027E-02	484304.4	3717652.8	464.1	5.00	3.16
0.40	YES							
L0000068		0	0.68027E-02	484304.5	3717659.6	464.4	5.00	3.16
0.40	YES							
L0000069		0	0.68027E-02	484304.6	3717666.4	464.9	5.00	3.16
0.40	YES							
L0000070		0	0.68027E-02	484304.6	3717673.2	465.4	5.00	3.16
0.40	YES							
L0000071		0	0.68027E-02	484304.7	3717680.0	465.9	5.00	3.16
0.40	YES							
L0000072		0	0.68027E-02	484304.7	3717686.8	466.3	5.00	3.16
0.40	YES							
L0000073		0	0.68027E-02	484304.8	3717693.6	466.8	5.00	3.16
0.40	YES							
L0000074		0	0.68027E-02	484304.8	3717700.4	467.2	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES	L0000075	0	0.68027E-02	484304.9	3717707.2	467.7	5.00	3.16
0.40	YES	L0000076	0	0.68027E-02	484305.0	3717714.0	468.2	5.00	3.16
0.40	YES	L0000077	0	0.68027E-02	484305.0	3717720.8	468.6	5.00	3.16
0.40	YES	L0000078	0	0.68027E-02	484305.1	3717727.6	469.0	5.00	3.16
0.40	YES	L0000079	0	0.68027E-02	484305.1	3717734.4	469.4	5.00	3.16
0.40	YES	L0000080	0	0.68027E-02	484305.2	3717741.2	469.8	5.00	3.16

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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*                    17:09:15

PAGE 5

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SOURCE	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	ELEV.	HEIGHT	SY	
SZ	ID	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	
(METERS)		CATS.	BY						
L0000081		0	0.68027E-02	484305.2	3717748.0	470.1	5.00	3.16	
0.40	YES	L0000082	0	0.68027E-02	484305.3	3717754.8	470.5	5.00	3.16
0.40	YES	L0000083	0	0.68027E-02	484305.4	3717761.6	470.8	5.00	3.16
0.40	YES	L0000084	0	0.68027E-02	484305.4	3717768.4	471.1	5.00	3.16
0.40	YES	L0000085	0	0.68027E-02	484305.5	3717775.2	471.4	5.00	3.16
0.40	YES	L0000086	0	0.68027E-02	484305.5	3717782.0	471.6	5.00	3.16
0.40	YES	L0000087	0	0.68027E-02	484305.6	3717788.8	471.7	5.00	3.16
0.40	YES	L0000088	0	0.68027E-02	484305.6	3717795.6	471.6	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000089		0	0.68027E-02	484305.7	3717802.4	471.3	5.00	3.16
0.40	YES							
L0000090		0	0.68027E-02	484305.8	3717809.2	470.9	5.00	3.16
0.40	YES							
L0000091		0	0.68027E-02	484305.8	3717816.0	470.4	5.00	3.16
0.40	YES							
L0000092		0	0.68027E-02	484305.9	3717822.8	469.9	5.00	3.16
0.40	YES							
L0000093		0	0.68027E-02	484305.9	3717829.6	469.8	5.00	3.16
0.40	YES							
L0000094		0	0.68027E-02	484306.0	3717836.4	470.1	5.00	3.16
0.40	YES							
L0000095		0	0.68027E-02	484306.5	3717843.1	471.4	5.00	3.16
0.40	YES							
L0000096		0	0.68027E-02	484308.2	3717849.7	473.2	5.00	3.16
0.40	YES							
L0000097		0	0.68027E-02	484309.9	3717856.3	474.9	5.00	3.16
0.40	YES							
L0000098		0	0.68027E-02	484311.5	3717862.9	476.5	5.00	3.16
0.40	YES							
L0000099		0	0.68027E-02	484313.2	3717869.5	478.0	5.00	3.16
0.40	YES							
L0000100		0	0.68027E-02	484314.9	3717876.0	479.5	5.00	3.16
0.40	YES							
L0000101		0	0.68027E-02	484316.6	3717882.6	480.9	5.00	3.16
0.40	YES							
L0000102		0	0.68027E-02	484318.3	3717889.2	482.2	5.00	3.16
0.40	YES							
L0000103		0	0.68027E-02	484320.0	3717895.8	483.3	5.00	3.16
0.40	YES							
L0000104		0	0.68027E-02	484321.6	3717902.4	484.8	5.00	3.16
0.40	YES							
L0000105		0	0.68027E-02	484323.3	3717909.0	486.5	5.00	3.16
0.40	YES							
L0000106		0	0.68027E-02	484325.0	3717915.6	488.6	5.00	3.16
0.40	YES							
L0000107		0	0.68027E-02	484326.7	3717922.2	490.3	5.00	3.16
0.40	YES							
L0000108		0	0.68027E-02	484328.4	3717928.7	491.8	5.00	3.16
0.40	YES							
L0000109		0	0.68027E-02	484330.1	3717935.3	493.4	5.00	3.16
0.40	YES							
L0000110		0	0.68027E-02	484325.2	3717936.9	494.4	5.00	3.16
0.40	YES							
L0000111		0	0.68027E-02	484318.4	3717937.0	494.8	5.00	3.16
0.40	YES							
L0000112		0	0.68027E-02	484311.6	3717937.0	495.1	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000113		0	0.68027E-02	484304.8	3717937.1	495.1	5.00	3.16
0.40	YES							
L0000114		0	0.68027E-02	484298.0	3717937.2	494.5	5.00	3.16
0.40	YES							
L0000115		0	0.68027E-02	484291.2	3717937.3	493.5	5.00	3.16
0.40	YES							
L0000116		0	0.68027E-02	484284.4	3717937.3	491.9	5.00	3.16
0.40	YES							
L0000117		0	0.68027E-02	484277.6	3717937.4	490.5	5.00	3.16
0.40	YES							
L0000118		0	0.68027E-02	484270.8	3717937.5	489.3	5.00	3.16
0.40	YES							
L0000119		0	0.68027E-02	484264.0	3717937.6	487.9	5.00	3.16
0.40	YES							
L0000120		0	0.68027E-02	484257.2	3717937.7	486.0	5.00	3.16

0.40 YES  
 ↑ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 6

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE			ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	(GRAMS/SEC)	X	Y	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	VARY	(METERS)	(METERS)			
		BY						
L0000121		0	0.68027E-02	484250.4	3717937.7	483.7	5.00	3.16
0.40	YES							
L0000122		0	0.68027E-02	484243.6	3717937.8	481.9	5.00	3.16
0.40	YES							
L0000123		0	0.68027E-02	484236.8	3717937.9	480.4	5.00	3.16
0.40	YES							
L0000124		0	0.68027E-02	484230.0	3717938.0	479.0	5.00	3.16
0.40	YES							
L0000125		0	0.68027E-02	484223.2	3717938.1	477.7	5.00	3.16
0.40	YES							
L0000126		0	0.68027E-02	484216.4	3717938.1	476.7	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000127		0	0.68027E-02	484209.6	3717938.2	475.9	5.00	3.16
0.40	YES							
L0000128		0	0.68027E-02	484202.8	3717938.3	475.4	5.00	3.16
0.40	YES							
L0000129		0	0.68027E-02	484196.0	3717938.4	475.0	5.00	3.16
0.40	YES							
L0000130		0	0.68027E-02	484189.2	3717938.5	474.6	5.00	3.16
0.40	YES							
L0000131		0	0.68027E-02	484182.4	3717938.5	474.2	5.00	3.16
0.40	YES							
L0000132		0	0.68027E-02	484175.6	3717938.6	473.8	5.00	3.16
0.40	YES							
L0000133		0	0.68027E-02	484168.8	3717938.7	473.3	5.00	3.16
0.40	YES							
L0000134		0	0.68027E-02	484162.0	3717938.8	472.7	5.00	3.16
0.40	YES							
L0000135		0	0.68027E-02	484155.2	3717938.8	472.2	5.00	3.16
0.40	YES							
L0000136		0	0.68027E-02	484148.4	3717938.9	471.9	5.00	3.16
0.40	YES							
L0000137		0	0.68027E-02	484141.9	3717940.8	471.5	5.00	3.16
0.40	YES							
L0000138		0	0.68027E-02	484135.4	3717942.8	471.1	5.00	3.16
0.40	YES							
L0000139		0	0.68027E-02	484128.9	3717944.9	470.7	5.00	3.16
0.40	YES							
L0000140		0	0.68027E-02	484122.4	3717946.9	470.2	5.00	3.16
0.40	YES							
L0000141		0	0.68027E-02	484115.9	3717948.9	469.9	5.00	3.16
0.40	YES							
L0000142		0	0.68027E-02	484109.4	3717950.9	469.7	5.00	3.16
0.40	YES							
L0000143		0	0.68027E-02	484102.9	3717952.9	469.5	5.00	3.16
0.40	YES							
L0000144		0	0.68027E-02	484096.4	3717955.0	469.4	5.00	3.16
0.40	YES							
L0000145		0	0.68027E-02	484090.0	3717957.0	469.2	5.00	3.16
0.40	YES							
L0000146		0	0.68027E-02	484084.6	3717957.1	469.0	5.00	3.16
0.40	YES							
L0000147		0	0.68027E-02	484083.4	3717950.4	469.1	5.00	3.16
0.40	YES							
L0000148		0	0.68027E-02	484082.3	3717943.7	469.2	5.00	3.16
0.40	YES							
L0000149		0	0.68027E-02	484081.1	3717937.0	469.2	5.00	3.16
0.40	YES							
L0000150		0	0.68027E-02	484079.9	3717930.3	469.3	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000151		0	0.68027E-02	484078.8	3717923.6	469.5	5.00	3.16
0.40	YES							
L0000152		0	0.68027E-02	484077.6	3717916.9	469.7	5.00	3.16
0.40	YES							
L0000153		0	0.68027E-02	484076.5	3717910.2	469.9	5.00	3.16
0.40	YES							
L0000154		0	0.68027E-02	484075.3	3717903.5	470.0	5.00	3.16
0.40	YES							
L0000155		0	0.68027E-02	484074.1	3717896.8	470.2	5.00	3.16
0.40	YES							
L0000156		0	0.68027E-02	484073.0	3717890.1	470.4	5.00	3.16
0.40	YES							
L0000157		0	0.68027E-02	484071.8	3717883.4	470.5	5.00	3.16
0.40	YES							
L0000158		0	0.68027E-02	484070.6	3717876.7	470.5	5.00	3.16
0.40	YES							
L0000159		0	0.68027E-02	484069.5	3717870.0	470.6	5.00	3.16
0.40	YES							
L0000160		0	0.68027E-02	484068.3	3717863.3	470.7	5.00	3.16
0.40	YES							

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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 7

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

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

L0000161		0	0.68027E-02	484067.1	3717856.6	470.8	5.00	3.16
0.40	YES							
L0000162		0	0.68027E-02	484066.0	3717849.9	470.8	5.00	3.16
0.40	YES							
L0000163		0	0.68027E-02	484064.8	3717843.2	470.9	5.00	3.16
0.40	YES							
L0000164		0	0.68027E-02	484063.6	3717836.5	471.0	5.00	3.16



CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000165		0	0.68027E-02	484062.5	3717829.9	471.0	5.00	3.16
0.40	YES							
L0000166		0	0.68027E-02	484061.3	3717823.2	471.0	5.00	3.16
0.40	YES							
L0000167		0	0.68027E-02	484060.2	3717816.5	471.0	5.00	3.16
0.40	YES							
L0000168		0	0.68027E-02	484059.0	3717809.8	471.0	5.00	3.16
0.40	YES							
L0000169		0	0.68027E-02	484057.8	3717803.1	470.9	5.00	3.16
0.40	YES							
L0000170		0	0.68027E-02	484056.7	3717796.4	470.9	5.00	3.16
0.40	YES							
L0000171		0	0.68027E-02	484055.5	3717789.7	471.0	5.00	3.16
0.40	YES							
L0000172		0	0.68027E-02	484054.3	3717783.0	471.0	5.00	3.16
0.40	YES							
L0000173		0	0.68027E-02	484053.2	3717776.3	471.1	5.00	3.16
0.40	YES							
L0000174		0	0.68027E-02	484052.0	3717769.6	471.2	5.00	3.16
0.40	YES							
L0000175		0	0.68027E-02	484050.8	3717762.9	471.5	5.00	3.16
0.40	YES							
L0000176		0	0.68027E-02	484049.7	3717756.2	471.7	5.00	3.16
0.40	YES							
L0000177		0	0.68027E-02	484048.5	3717749.5	471.9	5.00	3.16
0.40	YES							
L0000178		0	0.68027E-02	484047.3	3717742.8	472.2	5.00	3.16
0.40	YES							
L0000179		0	0.68027E-02	484046.2	3717736.1	472.3	5.00	3.16
0.40	YES							
L0000180		0	0.68027E-02	484045.0	3717729.4	472.5	5.00	3.16
0.40	YES							
L0000181		0	0.68027E-02	484043.9	3717722.7	472.6	5.00	3.16
0.40	YES							
L0000182		0	0.68027E-02	484042.7	3717716.0	472.7	5.00	3.16
0.40	YES							
L0000183		0	0.68027E-02	484041.5	3717709.3	472.7	5.00	3.16
0.40	YES							
L0000184		0	0.68027E-02	484040.4	3717702.6	472.7	5.00	3.16
0.40	YES							
L0000185		0	0.68027E-02	484043.0	3717698.2	472.9	5.00	3.16
0.40	YES							
L0000186		0	0.68027E-02	484049.5	3717696.3	473.2	5.00	3.16
0.40	YES							
L0000187		0	0.68027E-02	484056.0	3717694.4	473.5	5.00	3.16
0.40	YES							
L0000188		0	0.68027E-02	484062.5	3717692.5	473.8	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000189		0	0.68027E-02	484069.1	3717690.5	474.1	5.00	3.16
0.40	YES							
L0000190		0	0.68027E-02	484075.6	3717688.6	474.4	5.00	3.16
0.40	YES							
L0000191		0	0.68027E-02	484082.1	3717686.7	474.8	5.00	3.16
0.40	YES							
L0000192		0	0.68027E-02	484086.3	3717683.1	475.0	5.00	3.16
0.40	YES							
L0000193		0	0.68027E-02	484085.9	3717676.3	474.7	5.00	3.16
0.40	YES							
L0000194		0	0.68027E-02	484085.5	3717669.6	474.3	5.00	3.16
0.40	YES							
L0000195		0	0.68027E-02	484085.0	3717662.8	473.7	5.00	3.16
0.40	YES							
L0000196		0	0.68027E-02	484084.6	3717656.0	473.2	5.00	3.16
0.40	YES							
L0000197		0	0.68027E-02	484084.2	3717649.2	472.6	5.00	3.16
0.40	YES							
L0000198		0	0.68027E-02	484083.8	3717642.4	472.2	5.00	3.16
0.40	YES							
L0000199		0	0.68027E-02	484083.4	3717635.6	471.7	5.00	3.16
0.40	YES							
L0000200		0	0.68027E-02	484082.9	3717628.8	471.3	5.00	3.16

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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 8

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE		X	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	(GRAMS/SEC)	VARY	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY		(METERS)	(METERS)	(METERS)	(METERS)
L0000201		0	0.68027E-02		484082.5	3717622.1	470.9	5.00
0.40	YES							
L0000202		0	0.68027E-02		484082.1	3717615.3	470.3	5.00

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000203		0	0.68027E-02	484081.7	3717608.5	469.6	5.00	3.16
0.40	YES							
L0000204		0	0.68027E-02	484081.2	3717601.7	468.7	5.00	3.16
0.40	YES							
L0000712		0	0.27027E-01	484341.7	3717936.3	491.6	5.00	3.13
0.40	YES							
L0000713		0	0.27027E-01	484348.4	3717936.2	490.2	5.00	3.13
0.40	YES							
L0000714		0	0.27027E-01	484355.1	3717936.1	488.6	5.00	3.13
0.40	YES							
L0000715		0	0.27027E-01	484361.9	3717936.0	486.6	5.00	3.13
0.40	YES							
L0000716		0	0.27027E-01	484368.6	3717935.9	483.9	5.00	3.13
0.40	YES							
L0000717		0	0.27027E-01	484375.3	3717935.8	482.1	5.00	3.13
0.40	YES							
L0000718		0	0.27027E-01	484382.0	3717935.7	480.6	5.00	3.13
0.40	YES							
L0000719		0	0.27027E-01	484388.8	3717935.6	479.4	5.00	3.13
0.40	YES							
L0000720		0	0.27027E-01	484395.5	3717935.5	478.2	5.00	3.13
0.40	YES							
L0000721		0	0.27027E-01	484402.2	3717935.5	477.0	5.00	3.13
0.40	YES							
L0000722		0	0.27027E-01	484409.0	3717935.4	476.0	5.00	3.13
0.40	YES							
L0000723		0	0.27027E-01	484415.7	3717935.3	475.0	5.00	3.13
0.40	YES							
L0000724		0	0.27027E-01	484422.4	3717935.2	474.0	5.00	3.13
0.40	YES							
L0000725		0	0.27027E-01	484429.1	3717935.1	472.9	5.00	3.13
0.40	YES							
L0000726		0	0.27027E-01	484435.9	3717935.0	471.9	5.00	3.13
0.40	YES							
L0000727		0	0.27027E-01	484442.6	3717934.9	470.9	5.00	3.13
0.40	YES							
L0000728		0	0.27027E-01	484449.3	3717934.8	469.9	5.00	3.13
0.40	YES							
L0000729		0	0.27027E-01	484456.1	3717934.7	469.0	5.00	3.13
0.40	YES							
L0000730		0	0.27027E-01	484459.9	3717931.8	468.4	5.00	3.13
0.40	YES							
L0000731		0	0.27027E-01	484460.1	3717925.0	468.2	5.00	3.13
0.40	YES							
L0000732		0	0.27027E-01	484460.3	3717918.3	468.0	5.00	3.13
0.40	YES							
L0000733		0	0.27027E-01	484460.4	3717911.6	467.8	5.00	3.13

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000734		0	0.27027E-01	484460.6	3717904.9	467.5	5.00	3.13
0.40	YES							
L0000735		0	0.27027E-01	484460.8	3717898.1	467.1	5.00	3.13
0.40	YES							
L0000736		0	0.27027E-01	484461.0	3717891.4	466.8	5.00	3.13
0.40	YES							
L0000737		0	0.27027E-01	484461.1	3717884.7	466.6	5.00	3.13
0.40	YES							
L0000738		0	0.27027E-01	484461.3	3717877.9	466.1	5.00	3.13
0.40	YES							
L0000739		0	0.27027E-01	484461.5	3717871.2	465.7	5.00	3.13
0.40	YES							
L0000740		0	0.27027E-01	484461.6	3717864.5	465.3	5.00	3.13
0.40	YES							
L0000741		0	0.27027E-01	484461.8	3717857.8	465.1	5.00	3.13
0.40	YES							
L0000742		0	0.27027E-01	484462.0	3717851.0	465.0	5.00	3.13
0.40	YES							
L0000743		0	0.27027E-01	484462.1	3717844.3	465.1	5.00	3.13
0.40	YES							
L0000744		0	0.27027E-01	484462.3	3717837.6	464.8	5.00	3.13
0.40	YES							
L0000745		0	0.27027E-01	484462.5	3717830.9	464.5	5.00	3.13
0.40	YES							
L0000746		0	0.27027E-01	484462.7	3717824.1	464.1	5.00	3.13
0.40	YES							
L0000747		0	0.27027E-01	484462.8	3717817.4	463.8	5.00	3.13
0.40	YES							

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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*      17:09:15

PAGE 9

\*\*\* MODELOPTs:      RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

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

CostcoMurrieta\_Op\_HRA

L0000748            0   0.27027E-01  484463.0 3717810.7   463.5        5.00        3.13  
 0.40        YES  
 ISLAND            0   0.10000E+01  484274.7 3717886.7   483.0        1.00        10.43  
 1.86        YES

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 \*\*\* AERMET - VERSION 16216 \*\*\*        \*\*\*  
                                  \*\*\*            17:09:15

PAGE 10

\*\*\* MODELOPTs:        RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID -----	SOURCE IDs -----
IDLING1    IDLING1        ,	
IDLING2    IDLING2        ,	
IDLING3    IDLING3        ,	
IDLING4    IDLING4        ,	
IDLING5    IDLING5        ,	
IDLING6    IDLING6        ,	
ISLAND     ISLAND         ,	
TRAFFIC2   L0000058        , L0000059        , L0000060        , L0000061        , L0000062        , L0000063        , L0000064        , L0000065        ,	
L0000066        , L0000067        , L0000068        , L0000069        , L0000070        , L0000071        , L0000072        , L0000073        ,	
L0000074        , L0000075        , L0000076        , L0000077        , L0000078        , L0000079        , L0000080        , L0000081        ,	
L0000082        , L0000083        , L0000084        , L0000085        , L0000086        , L0000087        , L0000088        , L0000089        ,	
L0000090        , L0000091        , L0000092        , L0000093        , L0000094        , L0000095        , L0000096        , L0000097        ,	

CostcoMurrieta\_Op\_HRA

L0000103      L0000098      , L0000099      , L0000100      , L0000101      , L0000102      ,  
                   , L0000104      , L0000105      ,  
  
 L0000111      L0000106      , L0000107      , L0000108      , L0000109      , L0000110      ,  
                   , L0000112      , L0000113      ,  
  
 L0000119      L0000114      , L0000115      , L0000116      , L0000117      , L0000118      ,  
                   , L0000120      , L0000121      ,  
  
 L0000127      L0000122      , L0000123      , L0000124      , L0000125      , L0000126      ,  
                   , L0000128      , L0000129      ,  
  
 L0000135      L0000130      , L0000131      , L0000132      , L0000133      , L0000134      ,  
                   , L0000136      , L0000137      ,  
  
 L0000143      L0000138      , L0000139      , L0000140      , L0000141      , L0000142      ,  
                   , L0000144      , L0000145      ,  
  
 L0000151      L0000146      , L0000147      , L0000148      , L0000149      , L0000150      ,  
                   , L0000152      , L0000153      ,  
  
 L0000159      L0000154      , L0000155      , L0000156      , L0000157      , L0000158      ,  
                   , L0000160      , L0000161      ,

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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*      17:09:15

PAGE 11

\*\*\* MODELOPTs:      RegDEFAULT      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-----	-----
L0000167	L0000162      , L0000163      , L0000164      , L0000165      , L0000166      , , L0000168      , L0000169      ,
L0000175	L0000170      , L0000171      , L0000172      , L0000173      , L0000174      , , L0000176      , L0000177      ,
L0000183	L0000178      , L0000179      , L0000180      , L0000181      , L0000182      , , L0000184      , L0000185      ,

CostcoMurrieta\_Op\_HRA

L0000191 L0000186 , L0000187 , L0000188 , L0000189 , L0000190 ,  
 , L0000192 , L0000193 ,

L0000199 L0000194 , L0000195 , L0000196 , L0000197 , L0000198 ,  
 , L0000200 , L0000201 ,

L0000202 , L0000203 , L0000204 ,

TRAVEL1 L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,  
 L0000006 , L0000007 , L0000008 ,

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

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

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

L0000038 L0000033 , L0000034 , L0000035 , L0000036 , L0000037 ,  
 , L0000039 , L0000040 ,

L0000046 L0000041 , L0000042 , L0000043 , L0000044 , L0000045 ,  
 , L0000047 , L0000048 ,

L0000054 L0000049 , L0000050 , L0000051 , L0000052 , L0000053 ,  
 , L0000055 , L0000056 ,

L0000057 ,

TRAVEL3 L0000712 , L0000713 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 ,

L0000725 L0000720 , L0000721 , L0000722 , L0000723 , L0000724 ,  
 , L0000726 , L0000727 ,

L0000733 L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,  
 , L0000734 , L0000735 ,

L0000741 L0000736 , L0000737 , L0000738 , L0000739 , L0000740 ,  
 , L0000742 , L0000743 ,

L0000744 , L0000745 , L0000746 , L0000747 , L0000748 ,

VENT VENT ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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07/10/18

CostcoMurrieta\_Op\_HRA

\*\*\* AERMET - VERSION 16216 \*\*\*  
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17:09:15

PAGE 12

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* 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	,	L0000036	,	L0000037	,
L0000038	, L0000039	,	L0000040	,						
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,
L0000046	, L0000047	,	L0000048	,						
	L0000049	,	L0000050	,	L0000051	,	L0000052	,	L0000053	,
L0000054	, L0000055	,	L0000056	,						
	L0000057	,	IDLING1	,	IDLING2	,	L0000058	,	L0000059	,
L0000060	, L0000061	,	L0000062	,						
	L0000063	,	L0000064	,	L0000065	,	L0000066	,	L0000067	,
L0000068	, L0000069	,	L0000070	,						
	L0000071	,	L0000072	,	L0000073	,	L0000074	,	L0000075	,
L0000076	, L0000077	,	L0000078	,						
	L0000079	,	L0000080	,	L0000081	,	L0000082	,	L0000083	,
L0000084	, L0000085	,	L0000086	,						
	L0000087	,	L0000088	,	L0000089	,	L0000090	,	L0000091	,
L0000092	, L0000093	,	L0000094	,						



CostcoMurrieta\_Op\_HRA

L0000100      L0000095      , L0000096      , L0000097      , L0000098      , L0000099      ,  
                  , L0000101      , L0000102      ,  
  
L0000108      L0000103      , L0000104      , L0000105      , L0000106      , L0000107      ,  
                  , L0000109      , L0000110      ,  
  
L0000116      L0000111      , L0000112      , L0000113      , L0000114      , L0000115      ,  
                  , L0000117      , L0000118      ,  
  
L0000124      L0000119      , L0000120      , L0000121      , L0000122      , L0000123      ,  
                  , L0000125      , L0000126      ,  
  
L0000132      L0000127      , L0000128      , L0000129      , L0000130      , L0000131      ,  
                  , L0000133      , L0000134      ,  
  
L0000140      L0000135      , L0000136      , L0000137      , L0000138      , L0000139      ,  
                  , L0000141      , L0000142      ,  
  
L0000148      L0000143      , L0000144      , L0000145      , L0000146      , L0000147      ,  
                  , L0000149      , L0000150      ,  
  
L0000156      L0000151      , L0000152      , L0000153      , L0000154      , L0000155      ,  
                  , L0000157      , L0000158      ,

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\*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
   \*\*\*      17:09:15

PAGE 13

\*\*\* MODELOPTs:      RegDEFAULT      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-----	-----
L0000164	L0000159      , L0000160      , L0000161      , L0000162      , L0000163      , , L0000165      , L0000166      ,
L0000172	L0000167      , L0000168      , L0000169      , L0000170      , L0000171      , , L0000173      , L0000174      ,
L0000180	L0000175      , L0000176      , L0000177      , L0000178      , L0000179      , , L0000181      , L0000182      ,

CostcoMurrieta\_Op\_HRA

L0000188 , L0000183 , L0000184 , L0000185 , L0000186 , L0000187 ,  
 , L0000189 , L0000190 , ,  
 L0000196 , L0000191 , L0000192 , L0000193 , L0000194 , L0000195 ,  
 , L0000197 , L0000198 , ,  
 L0000204 , L0000199 , L0000200 , L0000201 , L0000202 , L0000203 ,  
 , L0000712 , L0000713 , ,  
 L0000719 , L0000714 , L0000715 , L0000716 , L0000717 , L0000718 ,  
 , L0000720 , L0000721 , ,  
 L0000727 , L0000722 , L0000723 , L0000724 , L0000725 , L0000726 ,  
 , L0000728 , L0000729 , ,  
 L0000735 , L0000730 , L0000731 , L0000732 , L0000733 , L0000734 ,  
 , L0000736 , L0000737 , ,  
 L0000743 , L0000738 , L0000739 , L0000740 , L0000741 , L0000742 ,  
 , L0000744 , L0000745 , ,  
 IDLING5 , L0000746 , L0000747 , L0000748 , IDLING3 , IDLING4 ,  
 , IDLING6 , ISLAND ,

VENT ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 14

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

\*\*\*

URBAN ID	URBAN POP	SOURCE IDs				
-----	-----	-----	-----	-----	-----	-----
L0000005	2189461.	L0000001	, L0000002	, L0000003	, L0000004	,
L0000008	, L0000006	, L0000007	,			
L0000014	, L0000009	, L0000010	, L0000011	, L0000012	, L0000013	,
	, L0000015	, L0000016	,			

CostcoMurrieta\_Op\_HRA

L0000022	L0000017 , L0000023	, L0000018 , L0000024	, L0000019 ,	, L0000020 ,	L0000021 ,
L0000030	L0000025 , L0000031	, L0000026 , L0000032	, L0000027 ,	, L0000028 ,	L0000029 ,
L0000038	L0000033 , L0000039	, L0000034 , L0000040	, L0000035 ,	, L0000036 ,	L0000037 ,
L0000046	L0000041 , L0000047	, L0000042 , L0000048	, L0000043 ,	, L0000044 ,	L0000045 ,
L0000054	L0000049 , L0000055	, L0000050 , L0000056	, L0000051 ,	, L0000052 ,	L0000053 ,
L0000060	L0000057 , L0000061	, IDLING1 , L0000062	, IDLING2 ,	, L0000058 ,	L0000059 ,
L0000068	L0000063 , L0000069	, L0000064 , L0000070	, L0000065 ,	, L0000066 ,	L0000067 ,
L0000076	L0000071 , L0000077	, L0000072 , L0000078	, L0000073 ,	, L0000074 ,	L0000075 ,
L0000084	L0000079 , L0000085	, L0000080 , L0000086	, L0000081 ,	, L0000082 ,	L0000083 ,
L0000092	L0000087 , L0000093	, L0000088 , L0000094	, L0000089 ,	, L0000090 ,	L0000091 ,
L0000100	L0000095 , L0000101	, L0000096 , L0000102	, L0000097 ,	, L0000098 ,	L0000099 ,
L0000108	L0000103 , L0000109	, L0000104 , L0000110	, L0000105 ,	, L0000106 ,	L0000107 ,
L0000116	L0000111 , L0000117	, L0000112 , L0000118	, L0000113 ,	, L0000114 ,	L0000115 ,
L0000124	L0000119 , L0000125	, L0000120 , L0000126	, L0000121 ,	, L0000122 ,	L0000123 ,
L0000132	L0000127 , L0000133	, L0000128 , L0000134	, L0000129 ,	, L0000130 ,	L0000131 ,
L0000140	L0000135 , L0000141	, L0000136 , L0000142	, L0000137 ,	, L0000138 ,	L0000139 ,

CostcoMurrieta\_Op\_HRA

L0000148 , L0000143 , L0000144 , L0000145 , L0000146 , L0000147 ,  
L0000149 , L0000150 ,

L0000151 , L0000152 , L0000153 , L0000154 , L0000155 ,  
L0000156 , L0000157 , L0000158 ,

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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 15

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

\*\*\*

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000164	L0000159 , L0000165	L0000160 , L0000161 , L0000162 , L0000163 , L0000166 ,
L0000172	L0000167 , L0000173	L0000168 , L0000169 , L0000170 , L0000171 , L0000174 ,
L0000180	L0000175 , L0000181	L0000176 , L0000177 , L0000178 , L0000179 , L0000182 ,
L0000188	L0000183 , L0000189	L0000184 , L0000185 , L0000186 , L0000187 , L0000190 ,
L0000196	L0000191 , L0000197	L0000192 , L0000193 , L0000194 , L0000195 , L0000198 ,
L0000204	L0000199 , L0000712	L0000200 , L0000201 , L0000202 , L0000203 , L0000713 ,
L0000719	L0000714 , L0000720	L0000715 , L0000716 , L0000717 , L0000718 , L0000721 ,
L0000727	L0000722 , L0000728	L0000723 , L0000724 , L0000725 , L0000726 , L0000729 ,
L0000735	L0000730 , L0000736	L0000731 , L0000732 , L0000733 , L0000734 , L0000737 ,

CostcoMurrieta\_Op\_HRA

L0000738 , L0000739 , L0000740 , L0000741 , L0000742 ,  
L0000743 , L0000744 , L0000745 ,  
L0000746 , L0000747 , L0000748 , IDLING3 , IDLING4 ,  
IDLING5 , IDLING6 , ISLAND ,

VENT ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 17:09:15

PAGE 16

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

( 483500.0, 3716600.0, 423.7, 527.8, 0.0); ( 483600.0,  
3716600.0, 422.5, 527.8, 0.0);  
( 483700.0, 3716600.0, 425.5, 527.8, 0.0); ( 483800.0,  
3716600.0, 425.9, 527.8, 0.0);  
( 483900.0, 3716600.0, 426.9, 527.8, 0.0); ( 484000.0,  
3716600.0, 425.9, 527.8, 0.0);  
( 485000.0, 3716600.0, 426.9, 545.4, 0.0); ( 485100.0,  
3716600.0, 464.0, 545.4, 0.0);  
( 483500.0, 3716700.0, 424.1, 527.8, 0.0); ( 483600.0,  
3716700.0, 432.8, 527.8, 0.0);  
( 483700.0, 3716700.0, 433.3, 527.8, 0.0); ( 483800.0,  
3716700.0, 436.5, 527.8, 0.0);  
( 483900.0, 3716700.0, 433.7, 527.8, 0.0); ( 484000.0,  
3716700.0, 432.5, 527.8, 0.0);  
( 485200.0, 3716700.0, 440.8, 545.4, 0.0); ( 485400.0,  
3716700.0, 446.2, 545.4, 0.0);  
( 485700.0, 3716700.0, 445.0, 545.4, 0.0); ( 483100.0,  
3716800.0, 447.7, 522.3, 0.0);  
( 483200.0, 3716800.0, 435.5, 527.8, 0.0); ( 483500.0,  
3716800.0, 436.9, 527.8, 0.0);  
( 483600.0, 3716800.0, 441.5, 527.8, 0.0); ( 483700.0,  
3716800.0, 454.4, 527.8, 0.0);  
( 483800.0, 3716800.0, 450.5, 527.8, 0.0); ( 483900.0,  
3716800.0, 443.1, 527.8, 0.0);  
( 484000.0, 3716800.0, 441.6, 527.8, 0.0); ( 483100.0,  
3716900.0, 454.1, 522.3, 0.0);  
( 483200.0, 3716900.0, 447.0, 527.8, 0.0); ( 485600.0,  
3716900.0, 442.9, 545.4, 0.0);  
( 483200.0, 3717000.0, 451.5, 522.3, 0.0); ( 483300.0,

CostcoMurrieta\_Op\_HRA

3717000.0, 453.5, 527.8, 0.0);  
 ( 485400.0, 3717100.0, 439.5, 545.4, 0.0); ( 485500.0,  
 3717100.0, 438.8, 545.4, 0.0);  
 ( 485600.0, 3717100.0, 432.3, 545.4, 0.0); ( 485700.0,  
 3717100.0, 433.3, 545.4, 0.0);  
 ( 483100.0, 3717200.0, 459.1, 582.4, 0.0); ( 483200.0,  
 3717300.0, 456.7, 607.1, 0.0);  
 ( 483300.0, 3717300.0, 460.4, 582.4, 0.0); ( 483400.0,  
 3717300.0, 458.1, 606.6, 0.0);  
 ( 483500.0, 3717300.0, 451.7, 607.1, 0.0); ( 483800.0,  
 3717300.0, 452.3, 606.6, 0.0);  
 ( 483900.0, 3717300.0, 456.9, 527.8, 0.0); ( 484000.0,  
 3717300.0, 463.7, 527.8, 0.0);  
 ( 484600.0, 3717300.0, 460.3, 527.1, 0.0); ( 484700.0,  
 3717300.0, 452.9, 521.2, 0.0);  
 ( 483100.0, 3717400.0, 451.4, 607.1, 0.0); ( 483200.0,  
 3717400.0, 454.1, 607.1, 0.0);  
 ( 483300.0, 3717400.0, 455.3, 607.1, 0.0); ( 483400.0,  
 3717400.0, 454.3, 607.1, 0.0);  
 ( 483500.0, 3717400.0, 453.0, 607.1, 0.0); ( 483800.0,  
 3717400.0, 453.4, 607.1, 0.0);  
 ( 483900.0, 3717400.0, 463.9, 527.8, 0.0); ( 484000.0,  
 3717400.0, 460.2, 527.8, 0.0);  
 ( 484600.0, 3717400.0, 466.1, 466.1, 0.0); ( 484700.0,  
 3717400.0, 462.2, 470.7, 0.0);  
 ( 484800.0, 3717400.0, 456.2, 492.7, 0.0); ( 483100.0,  
 3717500.0, 453.5, 647.8, 0.0);  
 ( 483300.0, 3717500.0, 456.2, 607.1, 0.0); ( 483400.0,  
 3717500.0, 458.6, 607.1, 0.0);  
 ( 483500.0, 3717500.0, 457.7, 607.1, 0.0); ( 483600.0,  
 3717500.0, 454.5, 607.1, 0.0);  
 ( 484000.0, 3717500.0, 460.0, 607.1, 0.0); ( 484600.0,  
 3717500.0, 464.7, 470.6, 0.0);  
 ( 484700.0, 3717500.0, 468.7, 470.5, 0.0); ( 483600.0,  
 3717600.0, 460.4, 607.1, 0.0);  
 ( 484600.0, 3717600.0, 460.9, 460.9, 0.0); ( 484700.0,  
 3717600.0, 462.2, 462.2, 0.0);  
 ( 484800.0, 3717600.0, 457.7, 465.8, 0.0); ( 484600.0,  
 3717700.0, 457.8, 496.2, 0.0);  
 ( 484700.0, 3717700.0, 458.2, 458.2, 0.0); ( 484800.0,  
 3717700.0, 463.2, 465.6, 0.0);  
 ( 483400.0, 3717800.0, 463.8, 647.8, 0.0); ( 483500.0,  
 3717800.0, 463.5, 647.8, 0.0);  
 ( 483600.0, 3717800.0, 463.4, 607.1, 0.0); ( 484600.0,  
 3717800.0, 461.2, 496.2, 0.0);  
 ( 484700.0, 3717800.0, 457.7, 457.7, 0.0); ( 485300.0,  
 3717800.0, 438.5, 446.1, 0.0);  
 ( 483300.0, 3717900.0, 466.4, 647.8, 0.0); ( 483400.0,

CostcoMurrieta\_Op\_HRA

3717900.0, 466.9, 647.8, 0.0);  
 ( 483500.0, 3717900.0, 469.7, 647.8, 0.0); ( 484600.0,  
 3717900.0, 462.2, 496.2, 0.0);  
 ( 484700.0, 3717900.0, 460.0, 460.0, 0.0); ( 484800.0,  
 3717900.0, 458.4, 458.4, 0.0);  
 ( 485100.0, 3717900.0, 447.3, 447.3, 0.0); ( 483300.0,  
 3718000.0, 470.3, 647.8, 0.0);  
 ( 483400.0, 3718000.0, 470.2, 647.8, 0.0); ( 483500.0,  
 3718000.0, 469.9, 647.8, 0.0);  
 ( 483600.0, 3718000.0, 467.9, 647.8, 0.0); ( 484600.0,  
 3718000.0, 462.3, 601.0, 0.0);  
 ( 484700.0, 3718000.0, 460.0, 460.0, 0.0); ( 484800.0,  
 3718000.0, 458.8, 458.8, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 17

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

( 483100.0, 3718100.0, 478.7, 647.8, 0.0); ( 483400.0,  
 3718100.0, 475.0, 647.8, 0.0);  
 ( 483600.0, 3718100.0, 470.0, 647.8, 0.0); ( 484600.0,  
 3718100.0, 462.0, 607.1, 0.0);  
 ( 483900.0, 3718200.0, 474.3, 607.1, 0.0); ( 484500.0,  
 3718200.0, 463.2, 607.1, 0.0);  
 ( 484600.0, 3718200.0, 461.9, 607.1, 0.0); ( 484700.0,  
 3718200.0, 459.4, 607.1, 0.0);  
 ( 484900.0, 3718200.0, 455.3, 457.3, 0.0); ( 485400.0,  
 3718200.0, 440.1, 440.1, 0.0);  
 ( 485600.0, 3718200.0, 433.3, 503.5, 0.0); ( 483100.0,  
 3718300.0, 528.6, 647.8, 0.0);  
 ( 483900.0, 3718300.0, 475.9, 607.1, 0.0); ( 484000.0,  
 3718300.0, 472.6, 607.1, 0.0);  
 ( 484200.0, 3718300.0, 470.7, 607.1, 0.0); ( 485300.0,  
 3718300.0, 442.1, 442.1, 0.0);  
 ( 485600.0, 3718300.0, 452.8, 453.3, 0.0); ( 483400.0,  
 3718400.0, 495.1, 647.8, 0.0);  
 ( 485200.0, 3718400.0, 445.8, 465.1, 0.0); ( 485200.0,  
 3718500.0, 445.1, 465.1, 0.0);  
 ( 484600.0, 3718600.0, 466.0, 607.1, 0.0); ( 484800.0,  
 3718600.0, 462.1, 607.1, 0.0);  
 ( 485200.0, 3718600.0, 446.8, 464.9, 0.0); ( 483700.0,

CostcoMurrieta\_Op\_HRA

3718700.0, 499.0, 647.8, 0.0);  
 ( 483100.0, 3718800.0, 529.4, 647.8, 0.0); ( 484000.0,  
 3718800.0, 490.3, 619.1, 0.0);  
 ( 484200.0, 3718800.0, 476.3, 619.1, 0.0); ( 485400.0,  
 3718800.0, 448.3, 452.9, 0.0);  
 ( 483100.0, 3718900.0, 529.6, 647.8, 0.0); ( 483200.0,  
 3718900.0, 542.6, 647.8, 0.0);  
 ( 483100.0, 3719000.0, 537.9, 647.8, 0.0); ( 483200.0,  
 3719000.0, 537.5, 647.8, 0.0);  
 ( 483300.0, 3719000.0, 548.7, 647.8, 0.0); ( 483400.0,  
 3719000.0, 558.7, 607.1, 0.0);  
 ( 483500.0, 3719000.0, 556.8, 607.1, 0.0); ( 483100.0,  
 3719100.0, 549.8, 647.8, 0.0);  
 ( 483200.0, 3719100.0, 547.9, 647.8, 0.0); ( 483300.0,  
 3719100.0, 544.1, 647.8, 0.0);  
 ( 483400.0, 3719100.0, 547.9, 647.8, 0.0); ( 483500.0,  
 3719100.0, 549.1, 607.1, 0.0);  
 ( 483700.0, 3719100.0, 597.5, 599.1, 0.0); ( 484900.0,  
 3719100.0, 459.2, 601.0, 0.0);  
 ( 485000.0, 3719100.0, 458.2, 599.2, 0.0); ( 485100.0,  
 3719100.0, 453.0, 599.2, 0.0);  
 ( 485200.0, 3719100.0, 453.2, 458.6, 0.0); ( 485300.0,  
 3719100.0, 452.4, 459.4, 0.0);  
 ( 485400.0, 3719100.0, 444.1, 459.4, 0.0); ( 485500.0,  
 3719100.0, 443.6, 472.2, 0.0);  
 ( 485600.0, 3719100.0, 444.2, 472.2, 0.0); ( 485700.0,  
 3719100.0, 450.0, 472.2, 0.0);  
 ( 484200.0, 3719200.0, 476.2, 619.1, 0.0); ( 484500.0,  
 3719200.0, 467.3, 619.1, 0.0);  
 ( 484800.0, 3719200.0, 464.0, 601.0, 0.0); ( 484900.0,  
 3719200.0, 460.8, 601.0, 0.0);  
 ( 485000.0, 3719200.0, 458.8, 599.2, 0.0); ( 485100.0,  
 3719200.0, 453.5, 599.2, 0.0);  
 ( 485200.0, 3719200.0, 458.6, 458.6, 0.0); ( 485300.0,  
 3719200.0, 453.3, 459.3, 0.0);  
 ( 485400.0, 3719200.0, 446.9, 459.4, 0.0); ( 485500.0,  
 3719200.0, 446.3, 446.3, 0.0);  
 ( 485600.0, 3719200.0, 450.6, 450.6, 0.0); ( 485700.0,  
 3719200.0, 453.7, 453.7, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 18

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* METEOROLOGICAL DAYS SELECTED FOR





CostcoMurrieta\_Op\_HRA

Surface station no.: 3171  
Name: UNKNOWN

Upper air station no.: 3190  
Name: UNKNOWN

Year: 2012

Year: 2012

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							
12	01	01	1	01	-1.3	0.065	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	78.		9.1	284.2	5.5								
12	01	01	1	02	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	69.		9.1	283.8	5.5								
12	01	01	1	03	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	286.		9.1	282.5	5.5								
12	01	01	1	04	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	348.		9.1	282.5	5.5								
12	01	01	1	05	-1.3	0.066	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	17.		9.1	282.0	5.5								
12	01	01	1	06	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	161.		9.1	282.0	5.5								
12	01	01	1	07	-1.3	0.066	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	273.		9.1	282.0	5.5								
12	01	01	1	08	-3.6	0.091	-9.000	-9.000	-999.	66.	18.3	0.23	2.69	
0.54	0.90	113.		9.1	283.8	5.5								
12	01	01	1	09	39.6	0.087	0.358	0.016	40.	61.	-1.4	0.23	2.69	
0.33	0.40	336.		9.1	285.9	5.5								
12	01	01	1	10	110.7	0.206	0.740	0.007	127.	225.	-6.9	0.23	2.69	
0.25	1.30	158.		9.1	291.4	5.5								
12	01	01	1	11	161.7	0.105	1.203	0.005	374.	87.	-1.0	0.23	2.69	
0.23	0.40	33.		9.1	297.0	5.5								
12	01	01	1	12	185.5	0.271	1.535	0.005	676.	339.	-9.3	0.23	2.69	
0.22	1.80	313.		9.1	298.8	5.5								
12	01	01	1	13	183.9	0.219	1.828	0.005	1154.	247.	-4.9	0.23	2.69	
0.22	1.30	250.		9.1	300.4	5.5								
12	01	01	1	14	156.6	0.266	1.869	0.005	1446.	330.	-10.4	0.23	2.69	
0.23	1.80	217.		9.1	301.4	5.5								
12	01	01	1	15	104.7	0.256	1.677	0.005	1562.	311.	-13.8	0.23	2.69	
0.27	1.80	248.		9.1	302.0	5.5								
12	01	01	1	16	32.7	0.319	1.147	0.005	1596.	433.	-85.9	0.23	2.69	
0.36	2.70	235.		9.1	302.0	5.5								
12	01	01	1	17	-15.5	0.190	-9.000	-9.000	-999.	208.	39.6	0.23	2.69	
0.63	1.80	46.		9.1	299.2	5.5								
12	01	01	1	18	-4.1	0.092	-9.000	-9.000	-999.	73.	16.2	0.23	2.69	
1.00	0.90	107.		9.1	294.9	5.5								
12	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.23	2.69	

CostcoMurrieta\_Op\_HRA

1.00	999.00	999.	-9.0	292.5	5.5								
12	01	01	1	20	-4.2	0.092	-9.000	-9.000	-999.	67.	16.1	0.23	2.69
1.00	0.90	323.	9.1	290.4	5.5								
12	01	01	1	21	-8.8	0.133	-9.000	-9.000	-999.	116.	23.2	0.23	2.69
1.00	1.30	34.	9.1	287.5	5.5								
12	01	01	1	22	-1.3	0.065	-9.000	-9.000	-999.	41.	18.1	0.23	2.69
1.00	0.40	359.	9.1	286.4	5.5								
12	01	01	1	23	-1.3	0.065	-9.000	-9.000	-999.	40.	18.1	0.23	2.69
1.00	0.40	351.	9.1	285.4	5.5								
12	01	01	1	24	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69
1.00	0.90	11.	9.1	284.9	5.5								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	5.5	0	-999.	-99.00	284.3	99.0	-99.00	-99.00
12	01	01	01	9.1	1	78.	0.40	-999.0	99.0	-99.00	-99.00

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

^ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 20

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING1 \*\*\*  
 INCLUDING SOURCE(S): IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		
483500.00	3716600.00	0.59825	483600.00	
3716600.00	0.64114			
483700.00	3716600.00	0.69462	483800.00	
3716600.00	0.74479			
483900.00	3716600.00	0.79653	484000.00	
3716600.00	0.84122			
485000.00	3716600.00	0.84486	485100.00	

CostcoMurrieta\_Op\_HRA

3716600.00	0.94068			
483500.00	3716700.00	0.64648		483600.00
3716700.00	0.71997			
483700.00	3716700.00	0.77958		483800.00
3716700.00	0.85101			
483900.00	3716700.00	0.90277		484000.00
3716700.00	0.95777			
485200.00	3716700.00	0.83796		485400.00
3716700.00	0.73257			
485700.00	3716700.00	0.56728		483100.00
3716800.00	0.55451			
483200.00	3716800.00	0.56863		483500.00
3716800.00	0.73210			
483600.00	3716800.00	0.81391		483700.00
3716800.00	0.94970			
483800.00	3716800.00	1.00975		483900.00
3716800.00	1.04864			
484000.00	3716800.00	1.11690		483100.00
3716900.00	0.60524			
483200.00	3716900.00	0.63722		485600.00
3716900.00	0.63231			
483200.00	3717000.00	0.69447		483300.00
3717000.00	0.77085			
485400.00	3717100.00	0.78033		485500.00
3717100.00	0.69876			
485600.00	3717100.00	0.61408		485700.00
3717100.00	0.55954			
483100.00	3717200.00	0.73750		483200.00
3717300.00	0.86117			
483300.00	3717300.00	0.99035		483400.00
3717300.00	1.10828			
483500.00	3717300.00	1.21213		483800.00
3717300.00	1.86639			
483900.00	3717300.00	2.24423		484000.00
3717300.00	2.75070			
484600.00	3717300.00	2.77418		484700.00
3717300.00	2.28358			
483100.00	3717400.00	0.78597		483200.00
3717400.00	0.89844			
483300.00	3717400.00	1.02689		483400.00
3717400.00	1.16717			
483500.00	3717400.00	1.33472		483800.00
3717400.00	2.16642			
483900.00	3717400.00	2.83407		484000.00
3717400.00	3.24266			
484600.00	3717400.00	3.31973		484700.00
3717400.00	2.68529			
484800.00	3717400.00	2.13433		483100.00

CostcoMurrieta\_Op\_HRA

3717500.00	0.83102			
483300.00	3717500.00	1.09695		483400.00
3717500.00	1.29006			
483500.00	3717500.00	1.50137		483600.00
3717500.00	1.73593			
484000.00	3717500.00	4.02365		484600.00
3717500.00	3.65362			
484700.00	3717500.00	3.03546		483600.00
3717600.00	1.99955			
484600.00	3717600.00	3.77229		484700.00
3717600.00	2.96804			
484800.00	3717600.00	2.26607		484600.00
3717700.00	3.75130			
484700.00	3717700.00	2.87012		484800.00
3717700.00	2.36691			
483400.00	3717800.00	1.56147		483500.00
3717800.00	1.89788			
483600.00	3717800.00	2.36848		484600.00
3717800.00	3.84125			
484700.00	3717800.00	2.82852		485300.00
3717800.00	0.87990			
483300.00	3717900.00	1.35070		483400.00
3717900.00	1.62712			
483500.00	3717900.00	2.04417		484600.00
3717900.00	3.87334			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 21

\*\*\* MODELOPTs:    RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING1 \*\*\*

INCLUDING SOURCE(S):    IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	2.89276	484800.00

CostcoMurrieta\_Op\_HRA

3717900.00	2.25992			
485100.00	3717900.00	1.21829		483300.00
3718000.00	1.38285			
483400.00	3718000.00	1.66650		483500.00
3718000.00	2.05209			
483600.00	3718000.00	2.56206		484600.00
3718000.00	3.94197			
484700.00	3718000.00	2.93229		484800.00
3718000.00	2.29631			
483100.00	3718100.00	0.86878		483400.00
3718100.00	1.56216			
483600.00	3718100.00	2.60372		484600.00
3718100.00	3.84896			
483900.00	3718200.00	7.25835		484500.00
3718200.00	4.39721			
484600.00	3718200.00	3.49273		484700.00
3718200.00	2.75101			
484900.00	3718200.00	1.80281		485400.00
3718200.00	0.80218			
485600.00	3718200.00	0.62725		483100.00
3718300.00	0.41521			
483900.00	3718300.00	6.12508		484000.00
3718300.00	6.89788			
484200.00	3718300.00	5.40138		485300.00
3718300.00	0.90845			
485600.00	3718300.00	0.68452		483400.00
3718400.00	1.19063			
485200.00	3718400.00	1.02298		485200.00
3718500.00	0.97627			
484600.00	3718600.00	1.75064		484800.00
3718600.00	1.46732			
485200.00	3718600.00	0.92833		483700.00
3718700.00	2.44001			
483100.00	3718800.00	0.58250		484000.00
3718800.00	1.84802			
484200.00	3718800.00	1.58734		485400.00
3718800.00	0.69343			
483100.00	3718900.00	0.63295		483200.00
3718900.00	0.68471			
483100.00	3719000.00	0.62738		483200.00
3719000.00	0.74686			
483300.00	3719000.00	0.80655		483400.00
3719000.00	0.87574			
483500.00	3719000.00	0.96933		483100.00
3719100.00	0.60444			
483200.00	3719100.00	0.70854		483300.00
3719100.00	0.82402			
483400.00	3719100.00	0.88775		483500.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.93996			
483700.00	3719100.00	0.81501		484900.00
3719100.00	0.73726			
485000.00	3719100.00	0.70424		485100.00
3719100.00	0.65955			
485200.00	3719100.00	0.63131		485300.00
3719100.00	0.60028			
485400.00	3719100.00	0.55207		485500.00
3719100.00	0.52387			
485600.00	3719100.00	0.49847		485700.00
3719100.00	0.48261			
484200.00	3719200.00	0.89884		484500.00
3719200.00	0.79819			
484800.00	3719200.00	0.70462		484900.00
3719200.00	0.67053			
485000.00	3719200.00	0.64069		485100.00
3719200.00	0.60301			
485200.00	3719200.00	0.59121		485300.00
3719200.00	0.55536			
485400.00	3719200.00	0.51844		485500.00
3719200.00	0.49444			
485600.00	3719200.00	0.47968		485700.00
3719200.00	0.46173			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 22

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING2    \*\*\*  
                                  INCLUDING SOURCE(S):    IDLING2    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.51785	483600.00
3716600.00	0.55643		
483700.00	3716600.00	0.60216	483800.00

CostcoMurrieta\_Op\_HRA

3716600.00	0.64840			
	483900.00	3716600.00	0.69745	484000.00
3716600.00	0.74502			
	485000.00	3716600.00	0.87248	485100.00
3716600.00	0.95063			
	483500.00	3716700.00	0.55565	483600.00
3716700.00	0.61142			
	483700.00	3716700.00	0.66280	483800.00
3716700.00	0.72254			
	483900.00	3716700.00	0.77606	484000.00
3716700.00	0.83388			
	485200.00	3716700.00	0.87457	485400.00
3716700.00	0.76917			
	485700.00	3716700.00	0.60024	483100.00
3716800.00	0.46316			
	483200.00	3716800.00	0.48013	483500.00
3716800.00	0.61263			
	483600.00	3716800.00	0.67493	483700.00
3716800.00	0.77022			
	483800.00	3716800.00	0.82537	483900.00
3716800.00	0.87616			
	484000.00	3716800.00	0.94670	483100.00
3716900.00	0.49916			
	483200.00	3716900.00	0.52578	485600.00
3716900.00	0.68107			
	483200.00	3717000.00	0.56476	483300.00
3717000.00	0.62146			
	485400.00	3717100.00	0.86909	485500.00
3717100.00	0.77301			
	485600.00	3717100.00	0.68081	485700.00
3717100.00	0.61382			
	483100.00	3717200.00	0.58890	483200.00
3717300.00	0.67322			
	483300.00	3717300.00	0.76195	483400.00
3717300.00	0.84378			
	483500.00	3717300.00	0.92527	483800.00
3717300.00	1.38850			
	483900.00	3717300.00	1.63702	484000.00
3717300.00	1.96307			
	484600.00	3717300.00	2.88922	484700.00
3717300.00	2.56258			
	483100.00	3717400.00	0.61911	483200.00
3717400.00	0.69635			
	483300.00	3717400.00	0.78383	483400.00
3717400.00	0.88065			
	483500.00	3717400.00	0.99721	483800.00
3717400.00	1.56171			
	483900.00	3717400.00	1.92815	484000.00



CostcoMurrieta\_Op\_HRA

3717400.00	2.26092			
484600.00	3717400.00	3.59066		484700.00
3717400.00	3.06979			
484800.00	3717400.00	2.53476		483100.00
3717500.00	0.64673			
483300.00	3717500.00	0.82450		483400.00
3717500.00	0.94795			
483500.00	3717500.00	1.08474		483600.00
3717500.00	1.24498			
484000.00	3717500.00	2.67382		484600.00
3717500.00	4.31053			
484700.00	3717500.00	3.62542		483600.00
3717600.00	1.36705			
484600.00	3717600.00	5.07305		484700.00
3717600.00	3.86961			
484800.00	3717600.00	2.91853		484600.00
3717700.00	5.69923			
484700.00	3717700.00	4.01662		484800.00
3717700.00	3.01521			
483400.00	3717800.00	1.08749		483500.00
3717800.00	1.27595			
483600.00	3717800.00	1.52755		484600.00
3717800.00	5.88199			
484700.00	3717800.00	4.00392		485300.00
3717800.00	1.02470			
483300.00	3717900.00	0.96390		483400.00
3717900.00	1.12141			
483500.00	3717900.00	1.34631		484600.00
3717900.00	5.83862			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 23

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING2      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING2      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA      IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	CONC			
484700.00	3717900.00	4.01467		484800.00
3717900.00	2.94793			
485100.00	3717900.00	1.46074		483300.00
3718000.00	0.98694			
483400.00	3718000.00	1.14605		483500.00
3718000.00	1.34920			
483600.00	3718000.00	1.60170		484600.00
3718000.00	5.93181			
484700.00	3718000.00	4.07692		484800.00
3718000.00	2.99364			
483100.00	3718100.00	0.78651		483400.00
3718100.00	1.17317			
483600.00	3718100.00	1.61355		484600.00
3718100.00	5.35153			
483900.00	3718200.00	3.62691		484500.00
3718200.00	5.03643			
484600.00	3718200.00	4.24568		484700.00
3718200.00	3.41965			
484900.00	3718200.00	2.19156		485400.00
3718200.00	0.91142			
485600.00	3718200.00	0.70085		483100.00
3718300.00	0.41843			
483900.00	3718300.00	3.57158		484000.00
3718300.00	4.48408			
484200.00	3718300.00	5.42288		485300.00
3718300.00	1.03714			
485600.00	3718300.00	0.74149		483400.00
3718400.00	1.11828			
485200.00	3718400.00	1.15342		485200.00
3718500.00	1.07655			
484600.00	3718600.00	1.69321		484800.00
3718600.00	1.46786			
485200.00	3718600.00	0.99473		483700.00
3718700.00	2.10436			
483100.00	3718800.00	0.53213		484000.00
3718800.00	2.11180			
484200.00	3718800.00	1.74341		485400.00
3718800.00	0.71806			
483100.00	3718900.00	0.57648		483200.00
3718900.00	0.60195			
483100.00	3719000.00	0.56916		483200.00
3719000.00	0.68168			
483300.00	3719000.00	0.72420		483400.00
3719000.00	0.78419			
483500.00	3719000.00	0.91694		483100.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.54036			
483200.00		3719100.00	0.64671	483300.00
3719100.00	0.78212			
483400.00		3719100.00	0.86477	483500.00
3719100.00	0.95723			
483700.00		3719100.00	0.85797	484900.00
3719100.00	0.71722			
485000.00		3719100.00	0.68799	485100.00
3719100.00	0.64798			
485200.00		3719100.00	0.62335	485300.00
3719100.00	0.59604			
485400.00		3719100.00	0.55367	485500.00
3719100.00	0.52785			
485600.00		3719100.00	0.50402	485700.00
3719100.00	0.48886			
484200.00		3719200.00	0.97193	484500.00
3719200.00	0.78312			
484800.00		3719200.00	0.68554	484900.00
3719200.00	0.65235			
485000.00		3719200.00	0.62488	485100.00
3719200.00	0.59013			
485200.00		3719200.00	0.58159	485300.00
3719200.00	0.54823			
485400.00		3719200.00	0.51503	485500.00
3719200.00	0.49342			
485600.00		3719200.00	0.48023	485700.00
3719200.00	0.46450			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*                    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
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PAGE 24

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3    \*\*\*  
    INCLUDING SOURCE(S):    IDLING3    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA            IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

483500.00	3716600.00	0.53070	483600.00
3716600.00	0.56991		
483700.00	3716600.00	0.62277	483800.00
3716600.00	0.67465		
483900.00	3716600.00	0.73294	484000.00
3716600.00	0.78898		
485000.00	3716600.00	1.09710	485100.00
3716600.00	1.26004		
483500.00	3716700.00	0.56527	483600.00
3716700.00	0.63567		
483700.00	3716700.00	0.69256	483800.00
3716700.00	0.76562		
483900.00	3716700.00	0.82296	484000.00
3716700.00	0.89132		
485200.00	3716700.00	1.17280	485400.00
3716700.00	1.03611		
485700.00	3716700.00	0.78693	483100.00
3716800.00	0.48089		
483200.00	3716800.00	0.49429	483500.00
3716800.00	0.63603		
483600.00	3716800.00	0.71018	483700.00
3716800.00	0.83020		
483800.00	3716800.00	0.89595	483900.00
3716800.00	0.94615		
484000.00	3716800.00	1.03138	483100.00
3716900.00	0.51467		
483200.00	3716900.00	0.54496	485600.00
3716900.00	0.91110		
483200.00	3717000.00	0.58227	483300.00
3717000.00	0.64379		
485400.00	3717100.00	1.19634	485500.00
3717100.00	1.04593		
485600.00	3717100.00	0.89288	485700.00
3717100.00	0.79723		
483100.00	3717200.00	0.59241	483200.00
3717300.00	0.67572		
483300.00	3717300.00	0.76452	483400.00
3717300.00	0.85273		
483500.00	3717300.00	0.93481	483800.00
3717300.00	1.42066		
483900.00	3717300.00	1.72078	484000.00
3717300.00	2.14144		
484600.00	3717300.00	4.81798	484700.00
3717300.00	4.22274		
483100.00	3717400.00	0.61545	483200.00
3717400.00	0.69253		
483300.00	3717400.00	0.78023	483400.00

CostcoMurrieta\_Op\_HRA

3717400.00	0.87717			
483500.00	3717400.00	0.99218		483800.00
3717400.00	1.56029			
483900.00	3717400.00	2.00690		484000.00
3717400.00	2.38004			
484600.00	3717400.00	6.66882		484700.00
3717400.00	5.88335			
484800.00	3717400.00	4.58206		483100.00
3717500.00	0.63674			
483300.00	3717500.00	0.81002		483400.00
3717500.00	0.93064			
483500.00	3717500.00	1.06495		483600.00
3717500.00	1.21423			
484000.00	3717500.00	2.69049		484600.00
3717500.00	9.20610			
484700.00	3717500.00	7.46504		483600.00
3717600.00	1.31198			
484600.00	3717600.00	12.06402		484700.00
3717600.00	8.82926			
484800.00	3717600.00	5.71271		484600.00
3717700.00	13.80087			
484700.00	3717700.00	8.63423		484800.00
3717700.00	6.20051			
483400.00	3717800.00	1.01079		483500.00
3717800.00	1.17711			
483600.00	3717800.00	1.39323		484600.00
3717800.00	14.49933			
484700.00	3717800.00	8.39504		485300.00
3717800.00	1.43350			
483300.00	3717900.00	0.82031		483400.00
3717900.00	0.93172			
483500.00	3717900.00	1.01657		484600.00
3717900.00	14.91446			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 25

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING3 \*\*\*  
INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

CostcoMurrieta\_Op\_HRA  
 \*\* CONC OF HRA

IN MICROGRAMS/M\*\*3

\*\*

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
3717900.00	484700.00	3717900.00	8.91394	484800.00
3718000.00	485100.00	3717900.00	2.25060	483300.00
3718000.00	483400.00	3718000.00	0.85871	483500.00
3718000.00	483600.00	3718000.00	1.23938	484600.00
3718000.00	484700.00	3718000.00	7.54404	484800.00
3718100.00	483100.00	3718100.00	0.49927	483400.00
3718100.00	483600.00	3718100.00	1.17447	484600.00
3718100.00	483900.00	3718200.00	2.28966	484500.00
3718200.00	484600.00	3718200.00	4.64145	484700.00
3718200.00	484900.00	3718200.00	3.00404	485400.00
3718300.00	485600.00	3718200.00	0.90872	483100.00
3718300.00	483900.00	3718300.00	2.40630	484000.00
3718300.00	484200.00	3718300.00	4.89299	485300.00
3718400.00	485600.00	3718300.00	0.98518	483400.00
3718500.00	485200.00	3718400.00	1.42964	485200.00
3718600.00	484600.00	3718600.00	1.74725	484800.00
3718700.00	485200.00	3718600.00	1.13572	483700.00
3718800.00	483100.00	3718800.00	0.34835	484000.00
3718800.00	484200.00	3718800.00	1.77849	485400.00
3718900.00	483100.00	3718900.00	0.37544	483200.00
	483100.00	3719000.00	0.38020	483200.00

CostcoMurrieta\_Op\_HRA

3719000.00	0.44775			
483300.00	3719000.00	0.49598		483400.00
3719000.00	0.56121			
483500.00	3719000.00	0.65471		483100.00
3719100.00	0.38005			
483200.00	3719100.00	0.44743		483300.00
3719100.00	0.52972			
483400.00	3719100.00	0.59767		483500.00
3719100.00	0.67127			
483700.00	3719100.00	0.71726		484900.00
3719100.00	0.76359			
485000.00	3719100.00	0.73320		485100.00
3719100.00	0.69352			
485200.00	3719100.00	0.66908		485300.00
3719100.00	0.64237			
485400.00	3719100.00	0.59754		485500.00
3719100.00	0.57326			
485600.00	3719100.00	0.55158		485700.00
3719100.00	0.53940			
484200.00	3719200.00	0.98695		484500.00
3719200.00	0.79478			
484800.00	3719200.00	0.72218		484900.00
3719200.00	0.69070			
485000.00	3719200.00	0.66315		485100.00
3719200.00	0.62953			
485200.00	3719200.00	0.61854		485300.00
3719200.00	0.58729			
485400.00	3719200.00	0.55369		485500.00
3719200.00	0.53271			
485600.00	3719200.00	0.52107		485700.00
3719200.00	0.50560			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 26

\*\*\* MODELOPTs:      RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING4      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA      IN MICROGRAMS/M\*\*3

\*\*

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
3716600.00	483500.00	3716600.00	0.55372	483600.00
3716600.00	483700.00	3716600.00	0.65236	483800.00
3716600.00	483900.00	3716600.00	0.77051	484000.00
3716600.00	485000.00	3716600.00	1.11517	485100.00
3716700.00	483500.00	3716700.00	0.59096	483600.00
3716700.00	483700.00	3716700.00	0.72759	483800.00
3716700.00	483900.00	3716700.00	0.86835	484000.00
3716700.00	485200.00	3716700.00	1.17195	485400.00
3716800.00	485700.00	3716700.00	0.76919	483100.00
3716800.00	483200.00	3716800.00	0.51459	483500.00
3716800.00	483600.00	3716800.00	0.74673	483700.00
3716800.00	483800.00	3716800.00	0.94850	483900.00
3716900.00	484000.00	3716800.00	1.09564	483100.00
3716900.00	483200.00	3716900.00	0.56864	485600.00
3717000.00	483200.00	3717000.00	0.60857	483300.00
3717100.00	485400.00	3717100.00	1.15235	485500.00
3717100.00	485600.00	3717100.00	0.86013	485700.00
3717300.00	483100.00	3717200.00	0.61883	483200.00
3717300.00	483300.00	3717300.00	0.80467	483400.00
3717300.00	483500.00	3717300.00	0.99147	483800.00
3717300.00	483900.00	3717300.00	1.87757	484000.00
	484600.00	3717300.00	5.12507	484700.00



CostcoMurrieta\_Op\_HRA

3717300.00	4.32382			
483100.00	3717400.00	0.64261		483200.00
3717400.00	0.72574			
483300.00	3717400.00	0.82095		483400.00
3717400.00	0.92693			
483500.00	3717400.00	1.05360		483800.00
3717400.00	1.69260			
483900.00	3717400.00	2.20618		484000.00
3717400.00	2.64706			
484600.00	3717400.00	7.04837		484700.00
3717400.00	5.89667			
484800.00	3717400.00	4.42967		483100.00
3717500.00	0.66471			
483300.00	3717500.00	0.85218		483400.00
3717500.00	0.98405			
483500.00	3717500.00	1.13221		483600.00
3717500.00	1.29842			
484000.00	3717500.00	3.01428		484600.00
3717500.00	9.45733			
484700.00	3717500.00	7.07431		483600.00
3717600.00	1.40418			
484600.00	3717600.00	11.59823		484700.00
3717600.00	7.96061			
484800.00	3717600.00	5.12941		484600.00
3717700.00	11.70671			
484700.00	3717700.00	7.44671		484800.00
3717700.00	5.46715			
483400.00	3717800.00	1.06327		483500.00
3717800.00	1.24566			
483600.00	3717800.00	1.48382		484600.00
3717800.00	12.55373			
484700.00	3717800.00	7.38917		485300.00
3717800.00	1.36103			
483300.00	3717900.00	0.85248		483400.00
3717900.00	0.97210			
483500.00	3717900.00	1.06455		484600.00
3717900.00	12.09926			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 27

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING4      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING4      ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	7.64589	484800.00
3717900.00	5.17749		
485100.00	3717900.00	2.10473	483300.00
3718000.00	0.77631		
483400.00	3718000.00	0.89423	483500.00
3718000.00	1.05161		
483600.00	3718000.00	1.30624	484600.00
3718000.00	8.51192		
484700.00	3718000.00	6.44439	484800.00
3718000.00	4.80921		
483100.00	3718100.00	0.51552	483400.00
3718100.00	0.80459		
483600.00	3718100.00	1.24384	484600.00
3718100.00	5.76255		
483900.00	3718200.00	2.59265	484500.00
3718200.00	4.71123		
484600.00	3718200.00	4.14814	484700.00
3718200.00	3.66453		
484900.00	3718200.00	2.72861	485400.00
3718200.00	1.16044		
485600.00	3718200.00	0.87067	483100.00
3718300.00	0.29073		
483900.00	3718300.00	2.67642	484000.00
3718300.00	3.54208		
484200.00	3718300.00	4.66762	485300.00
3718300.00	1.27574		
485600.00	3718300.00	0.94068	483400.00
3718400.00	0.65995		
485200.00	3718400.00	1.34272	485200.00
3718500.00	1.19703		
484600.00	3718600.00	1.61797	484800.00
3718600.00	1.49343		
485200.00	3718600.00	1.07617	483700.00
3718700.00	1.45228		
483100.00	3718800.00	0.37386	484000.00
3718800.00	1.80470		
484200.00	3718800.00	1.63975	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	0.77449			
483100.00		3718900.00	0.40341	483200.00
3718900.00	0.43566			
483100.00		3719000.00	0.40771	483200.00
3719000.00	0.47982			
483300.00		3719000.00	0.52960	483400.00
3719000.00	0.59398			
483500.00		3719000.00	0.68319	483100.00
3719100.00	0.40584			
483200.00		3719100.00	0.47577	483300.00
3719100.00	0.55869			
483400.00		3719100.00	0.62347	483500.00
3719100.00	0.69082			
483700.00		3719100.00	0.71563	484900.00
3719100.00	0.73352			
485000.00		3719100.00	0.70503	485100.00
3719100.00	0.66776			
485200.00		3719100.00	0.64451	485300.00
3719100.00	0.61912			
485400.00		3719100.00	0.57677	485500.00
3719100.00	0.55363			
485600.00		3719100.00	0.53296	485700.00
3719100.00	0.52123			
484200.00		3719200.00	0.92387	484500.00
3719200.00	0.75379			
484800.00		3719200.00	0.69383	484900.00
3719200.00	0.66500			
485000.00		3719200.00	0.63917	485100.00
3719200.00	0.60752			
485200.00		3719200.00	0.59681	485300.00
3719200.00	0.56725			
485400.00		3719200.00	0.53541	485500.00
3719200.00	0.51537			
485600.00		3719200.00	0.50412	485700.00
3719200.00	0.48927			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 28

\*\*\* MODELOPTs:      RegDFault      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING5      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

CostcoMurrieta\_Op\_HRA

\*\*\*

		** CONC OF HRA	IN MICROGRAMS/M**3
**			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.58369	483600.00
3716600.00	0.62974		
483700.00	3716600.00	0.69034	483800.00
3716600.00	0.75044		
483900.00	3716600.00	0.81712	484000.00
3716600.00	0.88099		
485000.00	3716600.00	1.09215	485100.00
3716600.00	1.23807		
483500.00	3716700.00	0.62531	483600.00
3716700.00	0.70521		
483700.00	3716700.00	0.77186	483800.00
3716700.00	0.85648		
483900.00	3716700.00	0.92420	484000.00
3716700.00	1.00327		
485200.00	3716700.00	1.11205	485400.00
3716700.00	0.95889		
485700.00	3716700.00	0.71661	483100.00
3716800.00	0.52591		
483200.00	3716800.00	0.54099	483500.00
3716800.00	0.70627		
483600.00	3716800.00	0.79306	483700.00
3716800.00	0.93767		
483800.00	3716800.00	1.01400	483900.00
3716800.00	1.07226		
484000.00	3716800.00	1.17193	483100.00
3716900.00	0.56653		
483200.00	3716900.00	0.60045	485600.00
3716900.00	0.81369		
483200.00	3717000.00	0.64542	483300.00
3717000.00	0.71866		
485400.00	3717100.00	1.04232	485500.00
3717100.00	0.91412		
485600.00	3717100.00	0.78579	485700.00
3717100.00	0.70521		
483100.00	3717200.00	0.65991	483200.00
3717300.00	0.75853		
483300.00	3717300.00	0.86841	483400.00
3717300.00	0.97593		
483500.00	3717300.00	1.07498	483800.00

CostcoMurrieta\_Op\_HRA

3717300.00	1.70132			
483900.00	3717300.00	2.10575		484000.00
3717300.00	2.70691			
484600.00	3717300.00	4.93789		484700.00
3717300.00	3.96438			
483100.00	3717400.00	0.68398		483200.00
3717400.00	0.77709			
483300.00	3717400.00	0.88424		483400.00
3717400.00	1.00349			
483500.00	3717400.00	1.14726		483800.00
3717400.00	1.89345			
483900.00	3717400.00	2.53810		484000.00
3717400.00	3.05386			
484600.00	3717400.00	6.67362		484700.00
3717400.00	5.10440			
484800.00	3717400.00	3.74261		483100.00
3717500.00	0.70875			
483300.00	3717500.00	0.91967		483400.00
3717500.00	1.07112			
483500.00	3717500.00	1.24082		483600.00
3717500.00	1.43150			
484000.00	3717500.00	3.53249		484600.00
3717500.00	8.11206			
484700.00	3717500.00	5.96396		483600.00
3717600.00	1.56089			
484600.00	3717600.00	8.58711		484700.00
3717600.00	5.92225			
484800.00	3717600.00	3.99811		484600.00
3717700.00	8.11443			
484700.00	3717700.00	5.50805		484800.00
3717700.00	4.23002			
483400.00	3717800.00	1.16335		483500.00
3717800.00	1.37308			
483600.00	3717800.00	1.65281		484600.00
3717800.00	8.69259			
484700.00	3717800.00	5.54073		485300.00
3717800.00	1.20985			
483300.00	3717900.00	1.00525		483400.00
3717900.00	1.17179			
483500.00	3717900.00	1.27370		484600.00
3717900.00	8.39801			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

\*\*\* 17:09:15

PAGE 29

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

CostcoMurrieta\_Op\_HRA

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.66234	484800.00
3717900.00	4.04463		
485100.00	3717900.00	1.80939	483300.00
3718000.00	0.90610		
483400.00	3718000.00	1.05489	483500.00
3718000.00	1.25714		
483600.00	3718000.00	1.60864	484600.00
3718000.00	6.55800		
484700.00	3718000.00	4.99019	484800.00
3718000.00	3.81814		
483100.00	3718100.00	0.58469	483400.00
3718100.00	0.94547		
483600.00	3718100.00	1.51832	484600.00
3718100.00	4.77193		
483900.00	3718200.00	3.30592	484500.00
3718200.00	3.96340		
484600.00	3718200.00	3.56123	484700.00
3718200.00	3.14306		
484900.00	3718200.00	2.33838	485400.00
3718200.00	1.04167		
485600.00	3718200.00	0.79419	483100.00
3718300.00	0.32044		
483900.00	3718300.00	3.21819	484000.00
3718300.00	3.93445		
484200.00	3718300.00	4.31831	485300.00
3718300.00	1.14261		
485600.00	3718300.00	0.85647	483400.00
3718400.00	0.79670		
485200.00	3718400.00	1.20762	485200.00
3718500.00	1.08886		
484600.00	3718600.00	1.56608	484800.00
3718600.00	1.37270		
485200.00	3718600.00	0.98822	483700.00

CostcoMurrieta\_Op\_HRA

3718700.00	1.64194			
483100.00		3718800.00	0.43428	484000.00
3718800.00	1.72455			
484200.00		3718800.00	1.48086	485400.00
3718800.00	0.72221			
483100.00		3718900.00	0.46801	483200.00
3718900.00	0.50319			
483100.00		3719000.00	0.46786	483200.00
3719000.00	0.54887			
483300.00		3719000.00	0.59671	483400.00
3719000.00	0.65617			
483500.00		3719000.00	0.73908	483100.00
3719100.00	0.45850			
483200.00		3719100.00	0.53343	483300.00
3719100.00	0.61928			
483400.00		3719100.00	0.67790	483500.00
3719100.00	0.73581			
483700.00		3719100.00	0.71824	484900.00
3719100.00	0.69399			
485000.00		3719100.00	0.66747	485100.00
3719100.00	0.63175			
485200.00		3719100.00	0.61003	485300.00
3719100.00	0.58610			
485400.00		3719100.00	0.54580	485500.00
3719100.00	0.52399			
485600.00		3719100.00	0.50451	485700.00
3719100.00	0.49373			
484200.00		3719200.00	0.85294	484500.00
3719200.00	0.74605			
484800.00		3719200.00	0.65970	484900.00
3719200.00	0.63175			
485000.00		3719200.00	0.60739	485100.00
3719200.00	0.57685			
485200.00		3719200.00	0.56768	485300.00
3719200.00	0.53901			
485400.00		3719200.00	0.50848	485500.00
3719200.00	0.48954			
485600.00		3719200.00	0.47916	485700.00
3719200.00	0.46540			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

07/10/18

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PAGE 30

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION

CostcoMurrieta\_Op\_HRA

VALUES FOR SOURCE GROUP: IDLING6 \*\*\*

INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.56214	483600.00
3716600.00	0.60504		
483700.00	3716600.00	0.66097	483800.00
3716600.00	0.71615		
483900.00	3716600.00	0.77690	484000.00
3716600.00	0.83472		
485000.00	3716600.00	1.03242	485100.00
3716600.00	1.17328		
483500.00	3716700.00	0.60192	483600.00
3716700.00	0.67561		
483700.00	3716700.00	0.73693	483800.00
3716700.00	0.81407		
483900.00	3716700.00	0.87552	484000.00
3716700.00	0.94660		
485200.00	3716700.00	1.05939	485400.00
3716700.00	0.92379		
485700.00	3716700.00	0.69989	483100.00
3716800.00	0.51002		
483200.00	3716800.00	0.52372	483500.00
3716800.00	0.67778		
483600.00	3716800.00	0.75774	483700.00
3716800.00	0.89097		
483800.00	3716800.00	0.95912	483900.00
3716800.00	1.01081		
484000.00	3716800.00	1.09950	483100.00
3716900.00	0.54996		
483200.00	3716900.00	0.58098	485600.00
3716900.00	0.79596		
483200.00	3717000.00	0.62501	483300.00
3717000.00	0.69367		
485400.00	3717100.00	1.01914	485500.00
3717100.00	0.89707		
485600.00	3717100.00	0.77401	485700.00
3717100.00	0.69560		
483100.00	3717200.00	0.64351	483200.00



CostcoMurrieta\_Op\_HRA

3717300.00	0.73859			
483300.00	3717300.00	0.84327		483400.00
3717300.00	0.94302			
483500.00	3717300.00	1.03308		483800.00
3717300.00	1.59956			
483900.00	3717300.00	1.95518		484000.00
3717300.00	2.47509			
484600.00	3717300.00	4.30759		484700.00
3717300.00	3.57201			
483100.00	3717400.00	0.66914		483200.00
3717400.00	0.75840			
483300.00	3717400.00	0.86026		483400.00
3717400.00	0.97227			
483500.00	3717400.00	1.10617		483800.00
3717400.00	1.78425			
483900.00	3717400.00	2.35575		484000.00
3717400.00	2.78844			
484600.00	3717400.00	5.76823		484700.00
3717400.00	4.60136			
484800.00	3717400.00	3.49485		483100.00
3717500.00	0.69557			
483300.00	3717500.00	0.89819		483400.00
3717500.00	1.04278			
483500.00	3717500.00	1.20220		483600.00
3717500.00	1.37891			
484000.00	3717500.00	3.23388		484600.00
3717500.00	7.06644			
484700.00	3717500.00	5.67220		483600.00
3717600.00	1.51486			
484600.00	3717600.00	7.85648		484700.00
3717600.00	5.63088			
484800.00	3717600.00	3.87669		484600.00
3717700.00	7.90752			
484700.00	3717700.00	5.34165		484800.00
3717700.00	4.09183			
483400.00	3717800.00	1.15468		483500.00
3717800.00	1.36075			
483600.00	3717800.00	1.63491		484600.00
3717800.00	8.10957			
484700.00	3717800.00	5.27278		485300.00
3717800.00	1.18576			
483300.00	3717900.00	1.00461		483400.00
3717900.00	1.17224			
483500.00	3717900.00	1.37825		484600.00
3717900.00	8.40043			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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07/10/18

CostcoMurrieta\_Op\_HRA  
17:09:15

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PAGE 31

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING6 \*\*\*  
INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.52156	484800.00
3717900.00	3.92127		
485100.00	3717900.00	1.76478	483300.00
3718000.00	0.96941		
483400.00	3718000.00	1.13185	483500.00
3718000.00	1.35708		
483600.00	3718000.00	1.66766	484600.00
3718000.00	7.21095		
484700.00	3718000.00	5.18880	484800.00
3718000.00	3.84877		
483100.00	3718100.00	0.61371	483400.00
3718100.00	0.99871		
483600.00	3718100.00	1.62010	484600.00
3718100.00	5.36772		
483900.00	3718200.00	3.37513	484500.00
3718200.00	4.44247		
484600.00	3718200.00	3.96951	484700.00
3718200.00	3.43898		
484900.00	3718200.00	2.44475	485400.00
3718200.00	1.03740		
485600.00	3718200.00	0.78789	483100.00
3718300.00	0.32460		
483900.00	3718300.00	3.31907	484000.00
3718300.00	4.21305		
484200.00	3718300.00	4.97560	485300.00
3718300.00	1.15461		
485600.00	3718300.00	0.85414	483400.00
3718400.00	0.79293		
485200.00	3718400.00	1.24185	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	1.12712			
484600.00		3718600.00	1.67992	484800.00
3718600.00	1.46191			
485200.00		3718600.00	1.02636	483700.00
3718700.00	1.71411			
483100.00		3718800.00	0.42809	484000.00
3718800.00	1.88016			
484200.00		3718800.00	1.60782	485400.00
3718800.00	0.74508			
483100.00		3718900.00	0.46295	483200.00
3718900.00	0.49670			
483100.00		3719000.00	0.46386	483200.00
3719000.00	0.54777			
483300.00		3719000.00	0.59801	483400.00
3719000.00	0.66341			
483500.00		3719000.00	0.75706	483100.00
3719100.00	0.45548			
483200.00		3719100.00	0.53451	483300.00
3719100.00	0.62758			
483400.00		3719100.00	0.69339	483500.00
3719100.00	0.76033			
483700.00		3719100.00	0.75198	484900.00
3719100.00	0.72293			
485000.00		3719100.00	0.69434	485100.00
3719100.00	0.65527			
485200.00		3719100.00	0.63200	485300.00
3719100.00	0.60618			
485400.00		3719100.00	0.56267	485500.00
3719100.00	0.53912			
485600.00		3719100.00	0.51802	485700.00
3719100.00	0.50627			
484200.00		3719200.00	0.90577	484500.00
3719200.00	0.78470			
484800.00		3719200.00	0.68760	484900.00
3719200.00	0.65697			
485000.00		3719200.00	0.63060	485100.00
3719200.00	0.59724			
485200.00		3719200.00	0.58816	485300.00
3719200.00	0.55685			
485400.00		3719200.00	0.52388	485500.00
3719200.00	0.50357			
485600.00		3719200.00	0.49249	485700.00
3719200.00	0.47780			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

07/10/18

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\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ISLAND \*\*\*

INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.75285	483600.00
3716600.00	0.79183		
483700.00	3716600.00	0.83751	483800.00
3716600.00	0.87609		
483900.00	3716600.00	0.91221	484000.00
3716600.00	0.93822		
485000.00	3716600.00	0.81259	485100.00
3716600.00	0.83372		
483500.00	3716700.00	0.82445	483600.00
3716700.00	0.89384		
483700.00	3716700.00	0.94668	483800.00
3716700.00	1.00386		
483900.00	3716700.00	1.04156	484000.00
3716700.00	1.07616		
485200.00	3716700.00	0.82326	485400.00
3716700.00	0.72987		
485700.00	3716700.00	0.59125	483100.00
3716800.00	0.71512		
483200.00	3716800.00	0.75033	483500.00
3716800.00	0.93376		
483600.00	3716800.00	1.01129	483700.00
3716800.00	1.11291		
483800.00	3716800.00	1.17073	483900.00
3716800.00	1.20971		
484000.00	3716800.00	1.25674	483100.00
3716900.00	0.77415		
483200.00	3716900.00	0.82804	485600.00
3716900.00	0.70496		
483200.00	3717000.00	0.89975	483300.00
3717000.00	0.98852		
485400.00	3717100.00	0.93765	485500.00

CostcoMurrieta\_Op\_HRA

3717100.00	0.84936			
485600.00	3717100.00	0.76239		485700.00
3717100.00	0.69862			
483100.00	3717200.00	0.94637		483200.00
3717300.00	1.11745			
483300.00	3717300.00	1.26967		483400.00
3717300.00	1.43334			
483500.00	3717300.00	1.60601		483800.00
3717300.00	2.42026			
483900.00	3717300.00	2.80932		484000.00
3717300.00	3.24615			
484600.00	3717300.00	3.16174		484700.00
3717300.00	2.73653			
483100.00	3717400.00	1.03708		483200.00
3717400.00	1.17811			
483300.00	3717400.00	1.34468		483400.00
3717400.00	1.53913			
483500.00	3717400.00	1.77433		483800.00
3717400.00	2.87076			
483900.00	3717400.00	3.52879		484000.00
3717400.00	4.07074			
484600.00	3717400.00	4.06578		484700.00
3717400.00	3.42341			
484800.00	3717400.00	2.83100		483100.00
3717500.00	1.08825			
483300.00	3717500.00	1.43120		483400.00
3717500.00	1.67299			
483500.00	3717500.00	1.96327		483600.00
3717500.00	2.31470			
484000.00	3717500.00	5.30031		484600.00
3717500.00	5.18120			
484700.00	3717500.00	4.24881		483600.00
3717600.00	2.59153			
484600.00	3717600.00	6.53394		484700.00
3717600.00	4.95679			
484800.00	3717600.00	3.74566		484600.00
3717700.00	8.03255			
484700.00	3717700.00	5.63425		484800.00
3717700.00	4.24722			
483400.00	3717800.00	1.93855		483500.00
3717800.00	2.35849			
483600.00	3717800.00	2.94814		484600.00
3717800.00	9.58430			
484700.00	3717800.00	6.18778		485300.00
3717800.00	1.43265			
483300.00	3717900.00	1.64490		483400.00
3717900.00	1.96739			
483500.00	3717900.00	2.41895		484600.00

CostcoMurrieta\_Op\_HRA

3717900.00 10.22577

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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 17:09:15

PAGE 33

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: ISLAND \*\*\*

INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	6.49350	484800.00
3717900.00	4.55519		
485100.00	3717900.00	2.09733	483300.00
3718000.00	1.63868		
483400.00	3718000.00	1.95461	483500.00
3718000.00	2.37960		
483600.00	3718000.00	2.96132	484600.00
3718000.00	9.82108		
484700.00	3718000.00	6.36783	484800.00
3718000.00	4.51250		
483100.00	3718100.00	1.19460	483400.00
3718100.00	1.90407		
483600.00	3718100.00	2.82038	484600.00
3718100.00	8.32666		
483900.00	3718200.00	5.42327	484500.00
3718200.00	8.07054		
484600.00	3718200.00	6.41603	484700.00
3718200.00	4.98510		
484900.00	3718200.00	3.06065	485400.00
3718200.00	1.21545		
485600.00	3718200.00	0.92826	483100.00
3718300.00	0.57970		
483900.00	3718300.00	4.40599	484000.00
3718300.00	5.35162		
484200.00	3718300.00	6.89823	485300.00

CostcoMurrieta\_Op\_HRA

3718300.00	1.37138			
485600.00	3718300.00	0.95442		483400.00
3718400.00	1.41935			
485200.00	3718400.00	1.52756		485200.00
3718500.00	1.42187			
484600.00	3718600.00	2.42897		484800.00
3718600.00	2.02578			
485200.00	3718600.00	1.31127		483700.00
3718700.00	2.28533			
483100.00	3718800.00	0.59850		484000.00
3718800.00	1.79587			
484200.00	3718800.00	1.88050		485400.00
3718800.00	0.92450			
483100.00	3718900.00	0.64016		483200.00
3718900.00	0.68920			
483100.00	3719000.00	0.63689		483200.00
3719000.00	0.77920			
483300.00	3719000.00	0.87899		483400.00
3719000.00	1.01628			
483500.00	3719000.00	1.17450		483100.00
3719100.00	0.62397			
483200.00	3719100.00	0.76517		483300.00
3719100.00	0.93187			
483400.00	3719100.00	1.04153		483500.00
3719100.00	1.13916			
483700.00	3719100.00	1.19030		484900.00
3719100.00	0.96467			
485000.00	3719100.00	0.91555		485100.00
3719100.00	0.86079			
485200.00	3719100.00	0.81595		485300.00
3719100.00	0.77121			
485400.00	3719100.00	0.71848		485500.00
3719100.00	0.67830			
485600.00	3719100.00	0.64093		485700.00
3719100.00	0.60971			
484200.00	3719200.00	1.03101		484500.00
3719200.00	1.00128			
484800.00	3719200.00	0.91086		484900.00
3719200.00	0.86944			
485000.00	3719200.00	0.82839		485100.00
3719200.00	0.78302			
485200.00	3719200.00	0.75142		485300.00
3719200.00	0.70879			
485400.00	3719200.00	0.66650		485500.00
3719200.00	0.63226			
485600.00	3719200.00	0.60397		485700.00
3719200.00	0.57478			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*

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\*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* 17:09:15

PAGE 34

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

INCLUDING SOURCE(S): L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 , L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 , L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 , L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , . . .

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.87737	483600.00
3716600.00	0.92473		
483700.00	3716600.00	0.97959	483800.00
3716600.00	1.02438		
483900.00	3716600.00	1.06458	484000.00
3716600.00	1.09070		
485000.00	3716600.00	0.85518	485100.00
3716600.00	0.85886		
483500.00	3716700.00	0.97156	483600.00
3716700.00	1.05839		
483700.00	3716700.00	1.12350	483800.00
3716700.00	1.19235		
483900.00	3716700.00	1.23471	484000.00
3716700.00	1.27060		
485200.00	3716700.00	0.84180	485400.00
3716700.00	0.73343		
485700.00	3716700.00	0.58751	483100.00
3716800.00	0.82933		
483200.00	3716800.00	0.87744	483500.00
3716800.00	1.11603		



CostcoMurrieta\_Op\_HRA

483600.00	3716800.00	1.21571	483700.00
3716800.00	1.34160		
483800.00	3716800.00	1.41502	483900.00
3716800.00	1.46139		
484000.00	3716800.00	1.51229	483100.00
3716900.00	0.90259		
483200.00	3716900.00	0.97562	485600.00
3716900.00	0.69711		
483200.00	3717000.00	1.06794	483300.00
3717000.00	1.18666		
485400.00	3717100.00	0.92259	485500.00
3717100.00	0.83374		
485600.00	3717100.00	0.74788	485700.00
3717100.00	0.68439		
483100.00	3717200.00	1.12223	483200.00
3717300.00	1.35373		
483300.00	3717300.00	1.56543	483400.00
3717300.00	1.80803		
483500.00	3717300.00	2.08046	483800.00
3717300.00	3.44944		
483900.00	3717300.00	4.12564	484000.00
3717300.00	4.83538		
484600.00	3717300.00	3.54142	484700.00
3717300.00	2.91478		
483100.00	3717400.00	1.24133	483200.00
3717400.00	1.43460		
483300.00	3717400.00	1.67198	483400.00
3717400.00	1.96341		
483500.00	3717400.00	2.33454	483800.00
3717400.00	4.33300		
483900.00	3717400.00	5.65893	484000.00
3717400.00	6.80678		
484600.00	3717400.00	4.44854	484700.00
3717400.00	3.53044		
484800.00	3717400.00	2.82274	483100.00
3717500.00	1.30272		
483300.00	3717500.00	1.78581	483400.00
3717500.00	2.14681		
483500.00	3717500.00	2.61263	483600.00
3717500.00	3.22670		
484000.00	3717500.00	10.86070	484600.00
3717500.00	5.48429		
484700.00	3717500.00	4.15919	483600.00
3717600.00	3.65279		
484600.00	3717600.00	6.51199	484700.00
3717600.00	4.67770		
484800.00	3717600.00	3.48722	484600.00
3717700.00	7.31228		

CostcoMurrieta\_Op\_HRA

484700.00	3717700.00	5.04526	484800.00
3717700.00	3.77910		
483400.00	3717800.00	2.43766	483500.00
3717800.00	3.07924		
483600.00	3717800.00	4.05289	484600.00
3717800.00	7.85914		
484700.00	3717800.00	5.24106	485300.00
3717800.00	1.32399		
483300.00	3717900.00	1.97719	483400.00
3717900.00	2.42151		
483500.00	3717900.00	3.04803	484600.00
3717900.00	7.67911		

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
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PAGE 35

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

INCLUDING SOURCE(S):    L0000058    ,    L0000059

, L0000060	, L0000061	, L0000062	,			
	L0000063	, L0000064	, L0000065	, L0000066	, L0000067	
, L0000068	, L0000069	, L0000070	,			
	L0000071	, L0000072	, L0000073	, L0000074	, L0000075	
, L0000076	, L0000077	, L0000078	,			
	L0000079	, L0000080	, L0000081	, L0000082	, L0000083	
, L0000084	, L0000085	, . . .	,			

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA            IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.21273	484800.00
3717900.00	3.81272		
485100.00	3717900.00	1.88073	483300.00
3718000.00	1.91612		
483400.00	3718000.00	2.33011	483500.00
3718000.00	2.90811		
483600.00	3718000.00	3.75495	484600.00

CostcoMurrieta\_Op\_HRA

3718000.00	6.89840			
484700.00	3718000.00	4.87207		484800.00
3718000.00	3.65272			
483100.00	3718100.00	1.19409		483400.00
3718100.00	2.15190			
483600.00	3718100.00	3.40500		484600.00
3718100.00	5.78510			
483900.00	3718200.00	6.14906		484500.00
3718200.00	5.84567			
484600.00	3718200.00	4.67428		484700.00
3718200.00	3.72887			
484900.00	3718200.00	2.46782		485400.00
3718200.00	1.10275			
485600.00	3718200.00	0.85978		483100.00
3718300.00	0.55912			
483900.00	3718300.00	4.74269		484000.00
3718300.00	5.26447			
484200.00	3718300.00	5.86121		485300.00
3718300.00	1.21273			
485600.00	3718300.00	0.87191		483400.00
3718400.00	1.58223			
485200.00	3718400.00	1.31294		485200.00
3718500.00	1.22162			
484600.00	3718600.00	2.06986		484800.00
3718600.00	1.72935			
485200.00	3718600.00	1.13390		483700.00
3718700.00	2.29136			
483100.00	3718800.00	0.70889		484000.00
3718800.00	1.75907			
484200.00	3718800.00	1.66235		485400.00
3718800.00	0.82086			
483100.00	3718900.00	0.74574		483200.00
3718900.00	0.81590			
483100.00	3719000.00	0.72953		483200.00
3719000.00	0.85481			
483300.00	3719000.00	0.93478		483400.00
3719000.00	1.02742			
483500.00	3719000.00	1.12826		483100.00
3719100.00	0.70190			
483200.00	3719100.00	0.81120		483300.00
3719100.00	0.92688			
483400.00	3719100.00	1.00126		483500.00
3719100.00	1.06024			
483700.00	3719100.00	0.97450		484900.00
3719100.00	0.87868			
485000.00	3719100.00	0.83508		485100.00
3719100.00	0.78722			
485200.00	3719100.00	0.74583		485300.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.70447			
	485400.00	3719100.00	0.65739	485500.00
3719100.00	0.62000			
	485600.00	3719100.00	0.58534	485700.00
3719100.00	0.55591			
	484200.00	3719200.00	0.93568	484500.00
3719200.00	0.91862			
	484800.00	3719200.00	0.83258	484900.00
3719200.00	0.79653			
	485000.00	3719200.00	0.76034	485100.00
3719200.00	0.72084			
	485200.00	3719200.00	0.69042	485300.00
3719200.00	0.65234			
	485400.00	3719200.00	0.61418	485500.00
3719200.00	0.58208			
	485600.00	3719200.00	0.55471	485700.00
3719200.00	0.52706			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 36

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1    \*\*\*  
                                  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 HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
-----	-----	-----	-----
483500.00	3716600.00	1.17031	483600.00
3716600.00	1.25020		

CostcoMurrieta\_Op\_HRA

483700.00	3716600.00	1.34167	483800.00
3716600.00	1.41654		
483900.00	3716600.00	1.48163	484000.00
3716600.00	1.52051		
485000.00	3716600.00	1.01932	485100.00
3716600.00	0.99614		
483500.00	3716700.00	1.31750	483600.00
3716700.00	1.46446		
483700.00	3716700.00	1.57948	483800.00
3716700.00	1.69957		
483900.00	3716700.00	1.77344	484000.00
3716700.00	1.83039		
485200.00	3716700.00	0.96085	485400.00
3716700.00	0.80864		
485700.00	3716700.00	0.62559	483100.00
3716800.00	1.05412		
483200.00	3716800.00	1.13750	483500.00
3716800.00	1.54600		
483600.00	3716800.00	1.72423	483700.00
3716800.00	1.94476		
483800.00	3716800.00	2.08860	483900.00
3716800.00	2.18121		
484000.00	3716800.00	2.26872	483100.00
3716900.00	1.14948		
483200.00	3716900.00	1.27260	485600.00
3716900.00	0.73733		
483200.00	3717000.00	1.39706	483300.00
3717000.00	1.59729		
485400.00	3717100.00	0.97444	485500.00
3717100.00	0.87132		
485600.00	3717100.00	0.77582	485700.00
3717100.00	0.70496		
483100.00	3717200.00	1.41554	483200.00
3717300.00	1.74276		
483300.00	3717300.00	2.08951	483400.00
3717300.00	2.53233		
483500.00	3717300.00	3.09324	483800.00
3717300.00	6.66964		
483900.00	3717300.00	8.83546	484000.00
3717300.00	11.12409		
484600.00	3717300.00	4.78838	484700.00
3717300.00	3.62492		
483100.00	3717400.00	1.52795	483200.00
3717400.00	1.81718		
483300.00	3717400.00	2.19768	483400.00
3717400.00	2.70922		
483500.00	3717400.00	3.43347	483800.00
3717400.00	9.06037		

CostcoMurrieta\_Op\_HRA

483900.00	3717400.00	14.18351	484000.00
3717400.00	19.41868		
484600.00	3717400.00	5.65281	484700.00
3717400.00	4.12533		
484800.00	3717400.00	3.12971	483100.00
3717500.00	1.56861		
483300.00	3717500.00	2.28274	483400.00
3717500.00	2.86944		
483500.00	3717500.00	3.72041	483600.00
3717500.00	5.03047		
484000.00	3717500.00	45.80703	484600.00
3717500.00	6.33316		
484700.00	3717500.00	4.34848	483600.00
3717600.00	5.30868		
484600.00	3717600.00	6.58197	484700.00
3717600.00	4.56496		
484800.00	3717600.00	3.37290	484600.00
3717700.00	6.26885		
484700.00	3717700.00	4.44098	484800.00
3717700.00	3.35861		
483400.00	3717800.00	2.72667	483500.00
3717800.00	3.47475		
483600.00	3717800.00	4.60338	484600.00
3717800.00	5.59365		
484700.00	3717800.00	4.12922	485300.00
3717800.00	1.22631		
483300.00	3717900.00	2.07563	483400.00
3717900.00	2.52252		
483500.00	3717900.00	3.02180	484600.00
3717900.00	4.70190		

\*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 37

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1 \*\*\*  
                                  INCLUDING SOURCE(S):      L000001      , L000002  
 , L000003      , L000004      , L000005      ,  
                                  L000006      , L000007      , L000008      , L000009      , L000010  
 , L000011      , L000012      , L000013      ,  
                                  L000014      , L000015      , L000016      , L000017      , L000018  
 , L000019      , L000020      , L000021      ,  
                                  L000022      , L000023      , L000024      , L000025      , L000026  
 , L000027      , L000028      , . . .      ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	3.69200	484800.00
3717900.00	2.94512		
485100.00	3717900.00	1.64653	483300.00
3718000.00	1.83654		
483400.00	3718000.00	2.20574	483500.00
3718000.00	2.69934		
483600.00	3718000.00	3.37568	484600.00
3718000.00	3.86348		
484700.00	3718000.00	3.19329	484800.00
3718000.00	2.64891		
483100.00	3718100.00	1.06785	483400.00
3718100.00	1.97682		
483600.00	3718100.00	2.88144	484600.00
3718100.00	3.16637		
483900.00	3718200.00	3.89074	484500.00
3718200.00	2.91766		
484600.00	3718200.00	2.61534	484700.00
3718200.00	2.31757		
484900.00	3718200.00	1.79441	485400.00
3718200.00	0.96307		
485600.00	3718200.00	0.77462	483100.00
3718300.00	0.61739		
483900.00	3718300.00	3.14548	484000.00
3718300.00	2.95046		
484200.00	3718300.00	2.74906	485300.00
3718300.00	1.01992		
485600.00	3718300.00	0.76946	483400.00
3718400.00	1.79056		
485200.00	3718400.00	1.05734	485200.00
3718500.00	0.97532		
484600.00	3718600.00	1.37340	484800.00
3718600.00	1.21611		
485200.00	3718600.00	0.90059	483700.00
3718700.00	1.62632		
483100.00	3718800.00	0.82588	484000.00
3718800.00	1.11909		
484200.00	3718800.00	1.06642	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	0.67639			
483100.00		3718900.00	0.82587	483200.00
3718900.00	0.87134			
483100.00		3719000.00	0.77647	483200.00
3719000.00	0.85219			
483300.00		3719000.00	0.87994	483400.00
3719000.00	0.90031			
483500.00		3719000.00	0.90730	483100.00
3719100.00	0.72086			
483200.00		3719100.00	0.77992	483300.00
3719100.00	0.83070			
483400.00		3719100.00	0.84095	483500.00
3719100.00	0.82756			
483700.00		3719100.00	0.65728	484900.00
3719100.00	0.68917			
485000.00		3719100.00	0.66168	485100.00
3719100.00	0.63201			
485200.00		3719100.00	0.60484	485300.00
3719100.00	0.57752			
485400.00		3719100.00	0.54688	485500.00
3719100.00	0.52123			
485600.00		3719100.00	0.49700	485700.00
3719100.00	0.47563			
484200.00		3719200.00	0.66976	484500.00
3719200.00	0.70957			
484800.00		3719200.00	0.65478	484900.00
3719200.00	0.63238			
485000.00		3719200.00	0.60920	485100.00
3719200.00	0.58419			
485200.00		3719200.00	0.56280	485300.00
3719200.00	0.53803			
485400.00		3719200.00	0.51271	485500.00
3719200.00	0.49042			
485600.00		3719200.00	0.47068	485700.00
3719200.00	0.45067			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
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PAGE 38

\*\*\* MODELOPTs:      RegDFault      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3      \*\*\*  
                                  INCLUDING SOURCE(S):      L0000712      ,      L0000713  
 ,      L0000714      ,      L0000715      ,      L0000716      ,  
                                  L0000717      ,      L0000718      ,      L0000719      ,      L0000720      ,      L0000721



CostcoMurrieta\_Op\_HRA

, L0000722 , L0000723 , L0000724 ,  
 , L0000730 , L0000731 , L0000732 ,  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.69697	483600.00
3716600.00	0.73609		
483700.00	3716600.00	0.78250	483800.00
3716600.00	0.82426		
483900.00	3716600.00	0.86559	484000.00
3716600.00	0.89971		
485000.00	3716600.00	0.88132	485100.00
3716600.00	0.89979		
483500.00	3716700.00	0.75592	483600.00
3716700.00	0.82111		
483700.00	3716700.00	0.87432	483800.00
3716700.00	0.93324		
483900.00	3716700.00	0.97832	484000.00
3716700.00	1.02297		
485200.00	3716700.00	0.91084	485400.00
3716700.00	0.81300		
485700.00	3716700.00	0.66337	483100.00
3716800.00	0.64234		
483200.00	3716800.00	0.67680	483500.00
3716800.00	0.84402		
483600.00	3716800.00	0.91548	483700.00
3716800.00	1.00540		
483800.00	3716800.00	1.06858	483900.00
3716800.00	1.12020		
484000.00	3716800.00	1.17998	483100.00
3716900.00	0.68682		
483200.00	3716900.00	0.73592	485600.00
3716900.00	0.80986		
483200.00	3717000.00	0.78916	483300.00
3717000.00	0.86348		
485400.00	3717100.00	1.11361	485500.00
3717100.00	1.00597		

CostcoMurrieta\_Op\_HRA

485600.00	3717100.00	0.89930	485700.00
3717100.00	0.82023		
483100.00	3717200.00	0.81362	483200.00
3717300.00	0.94490		
483300.00	3717300.00	1.05985	483400.00
3717300.00	1.18678		
483500.00	3717300.00	1.32492	483800.00
3717300.00	1.96454		
483900.00	3717300.00	2.27883	484000.00
3717300.00	2.64625		
484600.00	3717300.00	3.65295	484700.00
3717300.00	3.30069		
483100.00	3717400.00	0.88134	483200.00
3717400.00	0.98825		
483300.00	3717400.00	1.11318	483400.00
3717400.00	1.25853		
483500.00	3717400.00	1.43261	483800.00
3717400.00	2.23487		
483900.00	3717400.00	2.69350	484000.00
3717400.00	3.15660		
484600.00	3717400.00	4.92735	484700.00
3717400.00	4.36618		
484800.00	3717400.00	3.70790	483100.00
3717500.00	0.91696		
483300.00	3717500.00	1.17052	483400.00
3717500.00	1.34230		
483500.00	3717500.00	1.54695	483600.00
3717500.00	1.79300		
484000.00	3717500.00	3.80717	484600.00
3717500.00	6.93210		
484700.00	3717500.00	5.90418	483600.00
3717600.00	1.94542		
484600.00	3717600.00	10.39579	484700.00
3717600.00	7.96648		
484800.00	3717600.00	5.86269	484600.00
3717700.00	16.87992		
484700.00	3717700.00	10.74632	484800.00
3717700.00	7.33451		
483400.00	3717800.00	1.50486	483500.00
3717800.00	1.77704		
483600.00	3717800.00	2.13871	484600.00
3717800.00	28.68079		
484700.00	3717800.00	13.73984	485300.00
3717800.00	1.93792		
483300.00	3717900.00	1.30584	483400.00
3717900.00	1.52232		
483500.00	3717900.00	1.78784	484600.00
3717900.00	35.29173		

CostcoMurrieta\_Op\_HRA

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 \*\*\* AERMET - VERSION 16216 \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 39

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3 \*\*\*

INCLUDING SOURCE(S): L0000712 , L0000713  
 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 , L0000720 , L0000721  
 , L0000722 , L0000723 , L0000724 ,  
 L0000725 , L0000726 , L0000727 , L0000728 , L0000729  
 , L0000730 , L0000731 , L0000732 ,  
 L0000733 , L0000734 , L0000735 , L0000736 , L0000737  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	15.38388	484800.00
3717900.00	8.83622		
485100.00	3717900.00	3.10461	483300.00
3718000.00	1.27143		
483400.00	3718000.00	1.48467	483500.00
3718000.00	1.77006		
483600.00	3718000.00	2.15808	484600.00
3718000.00	27.10172		
484700.00	3718000.00	13.99447	484800.00
3718000.00	8.50738		
483100.00	3718100.00	0.85028	483400.00
3718100.00	1.35478		
483600.00	3718100.00	2.06916	484600.00
3718100.00	16.39778		
483900.00	3718200.00	3.62305	484500.00
3718200.00	12.03277		
484600.00	3718200.00	10.10377	484700.00
3718200.00	7.85471		
484900.00	3718200.00	4.58032	485400.00

CostcoMurrieta\_Op\_HRA

3718200.00	1.58941			
485600.00	3718200.00	1.17025		483100.00
3718300.00	0.41047			
483900.00	3718300.00	3.25671		484000.00
3718300.00	4.15736			
484200.00	3718300.00	6.31373		485300.00
3718300.00	1.79060			
485600.00	3718300.00	1.19006		483400.00
3718400.00	0.92879			
485200.00	3718400.00	1.95786		485200.00
3718500.00	1.76583			
484600.00	3718600.00	2.84952		484800.00
3718600.00	2.46674			
485200.00	3718600.00	1.58821		483700.00
3718700.00	1.71549			
483100.00	3718800.00	0.42778		484000.00
3718800.00	2.34526			
484200.00	3718800.00	2.03261		485400.00
3718800.00	1.07369			
483100.00	3718900.00	0.45113		483200.00
3718900.00	0.47915			
483100.00	3719000.00	0.44873		483200.00
3719000.00	0.53478			
483300.00	3719000.00	0.60364		483400.00
3719000.00	0.71160			
483500.00	3719000.00	0.86937		483100.00
3719100.00	0.44579			
483200.00	3719100.00	0.53697		483300.00
3719100.00	0.65567			
483400.00	3719100.00	0.76743		483500.00
3719100.00	0.89502			
483700.00	3719100.00	1.04988		484900.00
3719100.00	1.07851			
485000.00	3719100.00	1.03038		485100.00
3719100.00	0.97392			
485200.00	3719100.00	0.92398		485300.00
3719100.00	0.87268			
485400.00	3719100.00	0.81267		485500.00
3719100.00	0.76500			
485600.00	3719100.00	0.72044		485700.00
3719100.00	0.68244			
484200.00	3719200.00	1.08484		484500.00
3719200.00	1.05709			
484800.00	3719200.00	0.99621		484900.00
3719200.00	0.96057			
485000.00	3719200.00	0.92193		485100.00
3719200.00	0.87683			
485200.00	3719200.00	0.84166		485300.00

CostcoMurrieta\_Op\_HRA

3719200.00 0.79552  
 485400.00 3719200.00 0.74830 485500.00  
 3719200.00 0.70836  
 485600.00 3719200.00 0.67418 485700.00  
 3719200.00 0.63923

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 40

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT \*\*\*  
 INCLUDING SOURCE(S): VENT ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.75292	483600.00
3716600.00	0.79169		
483700.00	3716600.00	0.83713	483800.00
3716600.00	0.87541		
483900.00	3716600.00	0.91122	484000.00
3716600.00	0.93707		
485000.00	3716600.00	0.81093	485100.00
3716600.00	0.83170		
483500.00	3716700.00	0.82443	483600.00
3716700.00	0.89364		
483700.00	3716700.00	0.94617	483800.00
3716700.00	1.00302		
483900.00	3716700.00	1.04028	484000.00
3716700.00	1.07458		
485200.00	3716700.00	0.81867	485400.00
3716700.00	0.72599		
485700.00	3716700.00	0.59012	483100.00
3716800.00	0.71523		
483200.00	3716800.00	0.75017	483500.00
3716800.00	0.93369		
483600.00	3716800.00	1.01110	483700.00

CostcoMurrieta\_Op\_HRA

3716800.00	1.11303			
483800.00	3716800.00	1.17008		483900.00
3716800.00	1.20814			
484000.00	3716800.00	1.25467		483100.00
3716900.00	0.77423			
483200.00	3716900.00	0.82783		485600.00
3716900.00	0.70419			
483200.00	3717000.00	0.89937		483300.00
3717000.00	0.98821			
485400.00	3717100.00	0.93611		485500.00
3717100.00	0.84903			
485600.00	3717100.00	0.76265		485700.00
3717100.00	0.69931			
483100.00	3717200.00	0.94663		483200.00
3717300.00	1.11729			
483300.00	3717300.00	1.26916		483400.00
3717300.00	1.43172			
483500.00	3717300.00	1.60274		483800.00
3717300.00	2.41422			
483900.00	3717300.00	2.80155		484000.00
3717300.00	3.23674			
484600.00	3717300.00	3.14409		484700.00
3717300.00	2.71396			
483100.00	3717400.00	1.03741		483200.00
3717400.00	1.17810			
483300.00	3717400.00	1.34397		483400.00
3717400.00	1.53713			
483500.00	3717400.00	1.77058		483800.00
3717400.00	2.86107			
483900.00	3717400.00	3.51872		484000.00
3717400.00	4.05332			
484600.00	3717400.00	4.03267		484700.00
3717400.00	3.38926			
484800.00	3717400.00	2.80486		483100.00
3717500.00	1.08889			
483300.00	3717500.00	1.43101		483400.00
3717500.00	1.67200			
483500.00	3717500.00	1.96033		483600.00
3717500.00	2.30846			
484000.00	3717500.00	5.27135		484600.00
3717500.00	5.12075			
484700.00	3717500.00	4.20816		483600.00
3717600.00	2.58685			
484600.00	3717600.00	6.44779		484700.00
3717600.00	4.91565			
484800.00	3717600.00	3.72853		484600.00
3717700.00	7.95508			
484700.00	3717700.00	5.60797		484800.00

CostcoMurrieta\_Op\_HRA

3717700.00	4.24211			
	483400.00	3717800.00	1.93902	483500.00
3717800.00	2.35768			
	483600.00	3717800.00	2.94498	484600.00
3717800.00	9.55050			
	484700.00	3717800.00	6.18557	485300.00
3717800.00	1.43738			
	483300.00	3717900.00	1.64668	483400.00
3717900.00	1.96887			
	483500.00	3717900.00	2.42080	484600.00
3717900.00	10.24644			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 41

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT    \*\*\*  
                                  INCLUDING SOURCE(S):    VENT    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	6.52053	484800.00
3717900.00	4.57827		
485100.00	3717900.00	2.10840	483300.00
3718000.00	1.64170		
483400.00	3718000.00	1.95766	483500.00
3718000.00	2.38237		
483600.00	3718000.00	2.96237	484600.00
3718000.00	9.73032		
484700.00	3718000.00	6.36030	484800.00
3718000.00	4.52717		
483100.00	3718100.00	1.19881	483400.00
3718100.00	1.90957		
483600.00	3718100.00	2.82561	484600.00
3718100.00	8.14457		
483900.00	3718200.00	5.42367	484500.00

CostcoMurrieta\_Op\_HRA

3718200.00	8.05123			
484600.00	3718200.00	6.32514		484700.00
3718200.00	4.88369			
484900.00	3718200.00	3.01955		485400.00
3718200.00	1.22083			
485600.00	3718200.00	0.93380		483100.00
3718300.00	0.55800			
483900.00	3718300.00	4.39043		484000.00
3718300.00	5.31525			
484200.00	3718300.00	6.90608		485300.00
3718300.00	1.36703			
485600.00	3718300.00	0.95812		483400.00
3718400.00	1.37912			
485200.00	3718400.00	1.50686		485200.00
3718500.00	1.39878			
484600.00	3718600.00	2.44568		484800.00
3718600.00	2.03432			
485200.00	3718600.00	1.29227		483700.00
3718700.00	2.34695			
483100.00	3718800.00	0.60980		484000.00
3718800.00	1.88169			
484200.00	3718800.00	1.89073		485400.00
3718800.00	0.91417			
483100.00	3718900.00	0.65190		483200.00
3718900.00	0.69776			
483100.00	3719000.00	0.64451		483200.00
3719000.00	0.77959			
483300.00	3719000.00	0.86551		483400.00
3719000.00	0.99038			
483500.00	3719000.00	1.14899		483100.00
3719100.00	0.62529			
483200.00	3719100.00	0.75504		483300.00
3719100.00	0.90934			
483400.00	3719100.00	1.01700		483500.00
3719100.00	1.12294			
483700.00	3719100.00	1.16318		484900.00
3719100.00	0.97121			
485000.00	3719100.00	0.92212		485100.00
3719100.00	0.86629			
485200.00	3719100.00	0.82003		485300.00
3719100.00	0.77336			
485400.00	3719100.00	0.71827		485500.00
3719100.00	0.67623			
485600.00	3719100.00	0.63735		485700.00
3719100.00	0.60517			
484200.00	3719200.00	1.03655		484500.00
3719200.00	1.00544			
484800.00	3719200.00	0.91592		484900.00



CostcoMurrieta\_Op\_HRA

3719200.00	0.87499			
485000.00	3719200.00	0.83421		485100.00
3719200.00	0.78837			
485200.00	3719200.00	0.75634		485300.00
3719200.00	0.71219			
485400.00	3719200.00	0.66813		485500.00
3719200.00	0.63230			
485600.00	3719200.00	0.60266		485700.00
3719200.00	0.57230			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 42

\*\*\* MODELOPTs:    RegDEFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	7.59677	483600.00
3716600.00	8.09259		
483700.00	3716600.00	8.70161	483800.00
3716600.00	9.25914		
483900.00	3716600.00	9.82668	484000.00
3716600.00	10.30761		
485000.00	3716600.00	10.43351	485100.00
3716600.00	11.25490		
483500.00	3716700.00	8.27943	483600.00
3716700.00	9.14560		

CostcoMurrieta\_Op\_HRA

483700.00	3716700.00	9.84149	483800.00
3716700.00	10.64809		
483900.00	3716700.00	11.23817	484000.00
3716700.00	11.84956		
485200.00	3716700.00	10.58414	485400.00
3716700.00	9.25463		
485700.00	3716700.00	7.19798	483100.00
3716800.00	6.99082		
483200.00	3716800.00	7.31460	483500.00
3716800.00	9.40506		
483600.00	3716800.00	10.37436	483700.00
3716800.00	11.77341		
483800.00	3716800.00	12.56570	483900.00
3716800.00	13.13773		
484000.00	3716800.00	13.93444	483100.00
3716900.00	7.55899		
483200.00	3716900.00	8.09805	485600.00
3716900.00	8.37208		
483200.00	3717000.00	8.77377	483300.00
3717000.00	9.74749		
485400.00	3717100.00	10.94397	485500.00
3717100.00	9.74521		
485600.00	3717100.00	8.55572	485700.00
3717100.00	7.74779		
483100.00	3717200.00	9.08544	483200.00
3717300.00	10.69162		
483300.00	3717300.00	12.28681	483400.00
3717300.00	14.01707		
483500.00	3717300.00	15.87912	483800.00
3717300.00	26.42955		
483900.00	3717300.00	32.39133	484000.00
3717300.00	39.48918		
484600.00	3717300.00	43.14051	484700.00
3717300.00	36.21998		
483100.00	3717400.00	9.74137	483200.00
3717400.00	11.14480		
483300.00	3717400.00	12.82790	483400.00
3717400.00	14.83511		
483500.00	3717400.00	17.37666	483800.00
3717400.00	32.01879		
483900.00	3717400.00	43.45259	484000.00
3717400.00	53.87910		
484600.00	3717400.00	56.19659	484700.00
3717400.00	46.07547		
484800.00	3717400.00	36.21450	483100.00
3717500.00	10.14896		
483300.00	3717500.00	13.50279	483400.00
3717500.00	15.97012		

CostcoMurrieta\_Op\_HRA

483500.00	3717500.00	19.02988	483600.00
3717500.00	22.97730		
484000.00	3717500.00	90.21518	484600.00
3717500.00	70.85757		
484700.00	3717500.00	55.70521	483600.00
3717600.00	25.24378		
484600.00	3717600.00	85.42267	484700.00
3717600.00	62.26223		
484800.00	3717600.00	44.09852	484600.00
3717700.00	97.42871		
484700.00	3717700.00	65.29218	484800.00
3717700.00	48.33318		
483400.00	3717800.00	17.58782	483500.00
3717800.00	21.37762		
483600.00	3717800.00	26.74890	484600.00
3717800.00	114.84684		
484700.00	3717800.00	68.91362	485300.00
3717800.00	14.45299		
483300.00	3717900.00	14.64749	483400.00
3717900.00	17.39900		
483500.00	3717900.00	20.82098	484600.00
3717900.00	121.66907		

^ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 43

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	CONC		
484700.00	3717900.00	71.95381	484800.00
3717900.00	48.90493		
485100.00	3717900.00	21.44614	483300.00
3718000.00	14.07438		
483400.00	3718000.00	16.68502	483500.00
3718000.00	20.21155		
483600.00	3718000.00	25.19809	484600.00
3718000.00	99.70056		
484700.00	3718000.00	65.96459	484800.00
3718000.00	47.08904		
483100.00	3718100.00	9.37411	483400.00
3718100.00	15.55163		
483600.00	3718100.00	23.77559	484600.00
3718100.00	73.51326		
483900.00	3718200.00	46.95842	484500.00
3718200.00	64.84248		
484600.00	3718200.00	54.19329	484700.00
3718200.00	44.26616		
484900.00	3718200.00	29.43290	485400.00
3718200.00	12.26785		
485600.00	3718200.00	9.35627	483100.00
3718300.00	4.77491		
483900.00	3718300.00	41.25795	484000.00
3718300.00	49.39777		
484200.00	3718300.00	58.40708	485300.00
3718300.00	13.63399		
485600.00	3718300.00	9.80645	483400.00
3718400.00	12.27021		
485200.00	3718400.00	14.76078	485200.00
3718500.00	13.51811		
484600.00	3718600.00	21.22249	484800.00
3718600.00	18.32538		
485200.00	3718600.00	12.37577	483700.00
3718700.00	20.98858		
483100.00	3718800.00	5.87006	484000.00
3718800.00	20.15410		
484200.00	3718800.00	18.37028	485400.00
3718800.00	8.87211		
483100.00	3718900.00	6.23403	483200.00
3718900.00	6.67940		
483100.00	3719000.00	6.15230	483200.00
3719000.00	7.25331		
483300.00	3719000.00	7.91390	483400.00
3719000.00	8.78069		
483500.00	3719000.00	9.94874	483100.00

CostcoMurrieta\_Op\_HRA

3719100.00	5.96248			
483200.00	3719100.00	6.99470		483300.00
3719100.00	8.19588			
483400.00	3719100.00	9.01310		483500.00
3719100.00	9.80033			
483700.00	3719100.00	9.61123		484900.00
3719100.00	8.95074			
485000.00	3719100.00	8.55709		485100.00
3719100.00	8.07606			
485200.00	3719100.00	7.72090		485300.00
3719100.00	7.34933			
485400.00	3719100.00	6.84221		485500.00
3719100.00	6.50250			
485600.00	3719100.00	6.19061		485700.00
3719100.00	5.96097			
484200.00	3719200.00	10.29814		484500.00
3719200.00	9.35262			
484800.00	3719200.00	8.46382		484900.00
3719200.00	8.10121			
485000.00	3719200.00	7.75996		485100.00
3719200.00	7.35753			
485200.00	3719200.00	7.14663		485300.00
3719200.00	6.76086			
485400.00	3719200.00	6.36474		485500.00
3719200.00	6.07447			
485600.00	3719200.00	5.86295		485700.00
3719200.00	5.62834			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 44

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING1 \*\*\*  
 INCLUDING SOURCE(S): IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

483500.00	3716600.00	6.57487	(15091022)	483600.00
3716600.00	6.77100 (15062723)			
483700.00	3716600.00	7.09687	(14081506)	483800.00
3716600.00	7.28120 (15091920)			
483900.00	3716600.00	7.48748	(13110817)	484000.00
3716600.00	7.53213 (14080206)			
485000.00	3716600.00	6.19640	(13111217)	485100.00
3716600.00	7.10358 (14040820)			
483500.00	3716700.00	7.09044	(12082006)	483600.00
3716700.00	7.64784 (15091022)			
483700.00	3716700.00	7.92621	(16092720)	483800.00
3716700.00	8.25880 (13083005)			
483900.00	3716700.00	8.37698	(13110817)	484000.00
3716700.00	8.46121 (13081706)			
485200.00	3716700.00	6.39395	(16072906)	485400.00
3716700.00	5.93158 (12100120)			
485700.00	3716700.00	5.07302	(13082821)	483100.00
3716800.00	7.04045 (12092219)			
483200.00	3716800.00	6.92159	(12092219)	483500.00
3716800.00	8.16861 (12082006)			
483600.00	3716800.00	8.66868	(15091022)	483700.00
3716800.00	9.78450 (16092720)			
483800.00	3716800.00	9.86368	(13083005)	483900.00
3716800.00	9.64331 (15091920)			
484000.00	3716800.00	9.78449	(13081706)	483100.00
3716900.00	7.74052 (13090522)			
483200.00	3716900.00	7.89638	(12092219)	485600.00
3716900.00	5.74460 (16061920)			
483200.00	3717000.00	8.64116	(13090522)	483300.00
3717000.00	9.36496 (12092219)			
485400.00	3717100.00	6.95087	(16061920)	485500.00
3717100.00	6.45081 (14072322)			
485600.00	3717100.00	5.86910	(15093019)	485700.00
3717100.00	5.53640 (15090903)			
483100.00	3717200.00	9.52596	(15090820)	483200.00
3717300.00	10.86409 (15090820)			
483300.00	3717300.00	12.00003	(12081102)	483400.00
3717300.00	13.12906 (12081906)			
483500.00	3717300.00	13.64084	(13090522)	483800.00
3717300.00	17.73624 (12082006)			
483900.00	3717300.00	19.96628	(14072720)	484000.00
3717300.00	22.68844 (13090324)			
484600.00	3717300.00	17.72227	(12091320)	484700.00
3717300.00	15.15088 (16081420)			
483100.00	3717400.00	9.91422	(15102420)	483200.00
3717400.00	11.15664 (13082822)			
483300.00	3717400.00	12.49741	(15090820)	483400.00

CostcoMurrieta\_Op\_HRA

3717400.00	13.71008	(15090820)			
483500.00	3717400.00	15.02856	(12081906)		483800.00
3717400.00	20.75951	(15090902)			
483900.00	3717400.00	25.45204	(14091706)		484000.00
3717400.00	25.93730	(13090823)			
484600.00	3717400.00	21.43924	(16081420)		484700.00
3717400.00	18.38788	(12100120)			
484800.00	3717400.00	15.47969	(14100320)		483100.00
3717500.00	10.48255	(15061822)			
483300.00	3717500.00	13.18203	(15102420)		483400.00
3717500.00	15.19331	(13082904)			
483500.00	3717500.00	17.26213	(15090820)		483600.00
3717500.00	18.62656	(13083001)			
484000.00	3717500.00	31.71937	(12082823)		484600.00
3717500.00	23.98921	(12100120)			
484700.00	3717500.00	21.87345	(14100320)		483600.00
3717600.00	21.89440	(15090820)			
484600.00	3717600.00	26.06401	(16061920)		484700.00
3717600.00	22.39585	(14091619)			
484800.00	3717600.00	18.39652	(12081620)		484600.00
3717700.00	27.52686	(12081620)			
484700.00	3717700.00	23.04237	(15093018)		484800.00
3717700.00	20.76033	(16092819)			
483400.00	3717800.00	18.82530	(15090819)		483500.00
3717800.00	21.99218	(15090819)			
483600.00	3717800.00	25.94279	(15090819)		484600.00
3717800.00	30.60698	(16070620)			
484700.00	3717800.00	24.06710	(13070224)		485300.00
3717800.00	9.36290	(13091419)			
483300.00	3717900.00	16.47793	(12080706)		483400.00
3717900.00	19.27929	(12071301)			
483500.00	3717900.00	23.57750	(12071301)		484600.00
3717900.00	32.73426	(14091419)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* 17:09:15

PAGE 45

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING1 \*\*\*

INCLUDING SOURCE(S): IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

CostcoMurrieta\_Op\_HRA

\*\* CONC OF HRA

IN MICROGRAMS/M\*\*3

\*\*

Y-COORD (M)	X-COORD (M)	Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)
3717900.00	484700.00	3717900.00	25.84243	(14091419)	484800.00
		21.13183		(14091419)	
3718000.00	485100.00	3717900.00	12.44461	(14091419)	483300.00
		16.80548		(12093019)	
3718000.00	483400.00	3718000.00	19.59039	(13051221)	483500.00
		23.20673		(12051703)	
3718000.00	483600.00	3718000.00	27.44504	(12051703)	484600.00
		31.89375		(14102418)	
3718000.00	484700.00	3718000.00	25.10796	(14102418)	484800.00
		20.72889		(12092019)	
3718100.00	483100.00	3718100.00	17.44898	(15100921)	483400.00
		22.25003		(12072004)	
3718100.00	483600.00	3718100.00	27.30994	(12092202)	484600.00
		30.26487		(13082920)	
3718200.00	483900.00	3718200.00	51.61973	(16073020)	484500.00
		33.53085		(12081219)	
3718200.00	484600.00	3718200.00	27.28910	(13051320)	484700.00
		22.52839		(12083119)	
3718200.00	484900.00	3718200.00	16.27907	(12081119)	485400.00
		8.34300		(14080219)	
3718300.00	485600.00	3718200.00	6.86176	(14080219)	483100.00
		17.01628		(12092720)	
3718300.00	483900.00	3718300.00	43.85923	(12082919)	484000.00
		43.03734		(16062020)	
3718300.00	484200.00	3718300.00	43.46034	(13053120)	485300.00
		9.15579		(12081119)	
3718400.00	485600.00	3718300.00	7.41027	(15101418)	483400.00
		26.94488		(15101021)	
3718500.00	485200.00	3718400.00	9.71844	(14100618)	485200.00
		9.35070		(16081421)	
3718600.00	484600.00	3718600.00	17.49356	(13062720)	484800.00
		14.15467		(12080721)	
3718700.00	485200.00	3718600.00	8.96874	(13090521)	483700.00
		26.97484		(12081220)	
3718800.00	483100.00	3718800.00	14.31957	(12082002)	484000.00
		26.39494		(16072720)	
3718800.00	484200.00	3718800.00	20.19844	(14051620)	485400.00
		7.04316		(12080719)	
3718900.00	483100.00	3718900.00	13.76512	(12082921)	483200.00
		12.80562		(15091120)	
	483100.00	3719000.00	12.29109	(15091120)	483200.00



CostcoMurrieta\_Op\_HRA

3719000.00	12.75353	(13083124)			
483300.00	3719000.00		12.22093	(16072221)	483400.00
3719000.00	12.17073	(12081621)			
483500.00	3719000.00		12.64401	(14072721)	483100.00
3719100.00	10.67345	(13083124)			
483200.00	3719100.00		11.40827	(16072221)	483300.00
3719100.00	12.04804	(13090321)			
483400.00	3719100.00		12.06276	(15080521)	483500.00
3719100.00	12.32294	(14072423)			
483700.00	3719100.00		12.31819	(16062721)	484900.00
3719100.00	8.46263	(13062720)			
485000.00	3719100.00		7.98747	(12091322)	485100.00
3719100.00	7.32544	(13082223)			
485200.00	3719100.00		6.98620	(13081606)	485300.00
3719100.00	6.59860	(12080721)			
485400.00	3719100.00		5.96588	(12081003)	485500.00
3719100.00	5.65769	(13082222)			
485600.00	3719100.00		5.40740	(12081219)	485700.00
3719100.00	5.30562	(12081219)			
484200.00	3719200.00		12.44361	(13070921)	484500.00
3719200.00	9.42875	(12073021)			
484800.00	3719200.00		8.28547	(13061620)	484900.00
3719200.00	7.90037	(15081306)			
485000.00	3719200.00		7.48059	(13062720)	485100.00
3719200.00	6.91732	(13090220)			
485200.00	3719200.00		6.76361	(16080719)	485300.00
3719200.00	6.26440	(13081606)			
485400.00	3719200.00		5.77195	(13070920)	485500.00
3719200.00	5.46979	(12081003)			
485600.00	3719200.00		5.31596	(13082222)	485700.00
3719200.00	5.16022	(12081219)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*                      17:09:15

PAGE 46

\*\*\* MODELOPTs:      RegDEFAULT CONC ELEV URBAN ADJ\_U\*

   \*\*\* THE      1ST HIGHEST      1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP:      IDLING2      \*\*\*  
    INCLUDING SOURCE(S):      IDLING2      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA                      IN MICROGRAMS/M\*\*3

\*\*

CostcoMurrieta\_Op\_HRA

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	6.01385	(12082006)	483600.00
3716600.00	6.21008 (13082905)			
483700.00	3716600.00	6.50866	(15091022)	483800.00
3716600.00	6.74284 (14072720)			
483900.00	3716600.00	6.94682	(12082823)	484000.00
3716600.00	7.13333 (13090324)			
485000.00	3716600.00	6.31569	(13082921)	485100.00
3716600.00	6.96551 (13081506)			
483500.00	3716700.00	6.46423	(15090902)	483600.00
3716700.00	6.90108 (12082006)			
483700.00	3716700.00	7.13929	(14091706)	483800.00
3716700.00	7.45751 (16092720)			
483900.00	3716700.00	7.71299	(12082823)	484000.00
3716700.00	7.90778 (15091920)			
485200.00	3716700.00	6.40318	(16061921)	485400.00
3716700.00	5.91363 (12091521)			
485700.00	3716700.00	5.07900	(15010717)	483100.00
3716800.00	5.96449 (13090522)			
483200.00	3716800.00	5.99883	(13090522)	483500.00
3716800.00	7.05874 (16072103)			
483600.00	3716800.00	7.54381	(12082006)	483700.00
3716800.00	8.34279 (12082006)			
483800.00	3716800.00	8.54751	(15091022)	483900.00
3716800.00	8.65471 (14081506)			
484000.00	3716800.00	8.88615	(15091920)	483100.00
3716900.00	6.51704 (12081906)			
483200.00	3716900.00	6.62019	(13090522)	485600.00
3716900.00	5.78311 (13082821)			
483200.00	3717000.00	7.20244	(12081906)	483300.00
3717000.00	7.66808 (13090522)			
485400.00	3717100.00	7.14397	(15080106)	485500.00
3717100.00	6.71874 (16061920)			
485600.00	3717100.00	6.10207	(16061920)	485700.00
3717100.00	5.72402 (16060221)			
483100.00	3717200.00	7.62592	(12080906)	483200.00
3717300.00	8.53458 (13082822)			
483300.00	3717300.00	9.51766	(12080906)	483400.00
3717300.00	10.23036 (12080906)			
483500.00	3717300.00	10.82228	(13083001)	483800.00
3717300.00	14.31685 (16092421)			
483900.00	3717300.00	16.15924	(15090902)	484000.00
3717300.00	17.94905 (14091706)			
484600.00	3717300.00	17.70331	(13082921)	484700.00

CostcoMurrieta\_Op\_HRA

3717300.00	16.04620	(12101718)			
483100.00	3717400.00		7.93379	(16080606)	483200.00
3717400.00	8.73748	(15102420)			
483300.00	3717400.00		9.63142	(13082022)	483400.00
3717400.00	10.57611	(13082822)			
483500.00	3717400.00		11.77450	(15090820)	483800.00
3717400.00	16.36397	(14100722)			
483900.00	3717400.00		18.83673	(12080202)	484000.00
3717400.00	20.66089	(16021620)			
484600.00	3717400.00		21.36645	(13090421)	484700.00
3717400.00	18.93612	(12091320)			
484800.00	3717400.00		16.57321	(12100120)	483100.00
3717500.00	8.20624	(14091505)			
483300.00	3717500.00		10.12261	(16080606)	483400.00
3717500.00	11.35285	(12093022)			
483500.00	3717500.00		12.62058	(13082822)	483600.00
3717500.00	14.17324	(15090820)			
484000.00	3717500.00		24.61468	(15090902)	484600.00
3717500.00	25.00865	(12091320)			
484700.00	3717500.00		22.56082	(12100120)	483600.00
3717600.00	15.44371	(12073023)			
484600.00	3717600.00		29.91539	(16081420)	484700.00
3717600.00	24.98046	(14100320)			
484800.00	3717600.00		21.00475	(16061920)	484600.00
3717700.00	35.93202	(16061920)			
484700.00	3717700.00		28.17471	(15062420)	484800.00
3717700.00	23.23924	(15091219)			
483400.00	3717800.00		13.10535	(15090819)	483500.00
3717800.00	15.03393	(15090819)			
483600.00	3717800.00		17.48588	(15090819)	484600.00
3717800.00	41.55505	(16081419)			
484700.00	3717800.00		30.88600	(16092819)	485300.00
3717800.00	10.58336	(13091419)			
483300.00	3717900.00		11.96217	(12080706)	483400.00
3717900.00	13.53704	(12080706)			
483500.00	3717900.00		15.79300	(12080706)	484600.00
3717900.00	45.22430	(12092318)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 47

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE    1ST HIGHEST    1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP:    IDLING2    \*\*\*

INCLUDING SOURCE(S):    IDLING2    ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

** CONC OF HRA		IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	32.89094	(14091419)	484800.00
3717900.00	25.57033	(14091419)		
485100.00	3717900.00	14.30926	(14091419)	483300.00
3718000.00	12.21697	(12093019)		
483400.00	3718000.00	13.78020	(12093019)	483500.00
3718000.00	15.68771	(13051221)		
483600.00	3718000.00	17.82900	(13051221)	484600.00
3718000.00	43.27997	(16072019)		
484700.00	3718000.00	31.63065	(16100918)	484800.00
3718000.00	24.84777	(14102418)		
483100.00	3718100.00	10.26742	(15100921)	483400.00
3718100.00	13.92751	(12092820)		
483600.00	3718100.00	17.55437	(15100821)	484600.00
3718100.00	37.51234	(15081519)		
483900.00	3718200.00	28.24572	(12081121)	484500.00
3718200.00	38.06296	(12081719)		
484600.00	3718200.00	31.49517	(12080721)	484700.00
3718200.00	26.03159	(12080719)		
484900.00	3718200.00	18.04270	(12083119)	485400.00
3718200.00	9.02861	(15101418)		
485600.00	3718200.00	7.31678	(14080219)	483100.00
3718300.00	17.77405	(12101520)		
483900.00	3718300.00	25.26070	(13082120)	484000.00
3718300.00	28.00036	(12081120)		
484200.00	3718300.00	34.02204	(13082220)	485300.00
3718300.00	9.92590	(12081119)		
485600.00	3718300.00	7.57743	(12062921)	483400.00
3718400.00	18.24511	(15100920)		
485200.00	3718400.00	10.47599	(16081519)	485200.00
3718500.00	9.84737	(13051320)		
484600.00	3718600.00	16.51592	(12081722)	484800.00
3718600.00	13.93364	(13090220)		
485200.00	3718600.00	9.33090	(12081219)	483700.00
3718700.00	21.19250	(15081621)		
483100.00	3718800.00	15.15892	(12081705)	484000.00
3718800.00	16.07858	(15091320)		
484200.00	3718800.00	14.72467	(16072921)	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	7.14901	(12081219)			
483100.00	3718900.00	14.41108	(15081723)		483200.00
3718900.00	13.89560	(16073024)			
483100.00	3719000.00	13.22726	(16073024)		483200.00
3719000.00	13.96431	(12082921)			
483300.00	3719000.00	13.22670	(12081322)		483400.00
3719000.00	12.61911	(16072221)			
483500.00	3719000.00	13.25794	(13090321)		483100.00
3719100.00	11.62302	(12082921)			
483200.00	3719100.00	12.30633	(12081322)		483300.00
3719100.00	13.24510	(16091820)			
483400.00	3719100.00	13.29327	(15081621)		483500.00
3719100.00	13.51849	(16072722)			
483700.00	3719100.00	11.81896	(15091020)		484900.00
3719100.00	8.06188	(13063023)			
485000.00	3719100.00	7.76448	(15081306)		485100.00
3719100.00	7.12546	(13051122)			
485200.00	3719100.00	6.82739	(12080121)		485300.00
3719100.00	6.50962	(13081606)			
485400.00	3719100.00	5.93538	(13072621)		485500.00
3719100.00	5.64562	(13070920)			
485600.00	3719100.00	5.36029	(13083105)		485700.00
3719100.00	5.22205	(13082222)			
484200.00	3719200.00	9.38964	(12072021)		484500.00
3719200.00	8.74612	(12081221)			
484800.00	3719200.00	7.96392	(13062820)		484900.00
3719200.00	7.55979	(13083004)			
485000.00	3719200.00	7.21687	(15081306)		485100.00
3719200.00	6.68942	(15081306)			
485200.00	3719200.00	6.55764	(12091322)		485300.00
3719200.00	6.11299	(12080121)			
485400.00	3719200.00	5.72542	(13081606)		485500.00
3719200.00	5.40607	(13072621)			
485600.00	3719200.00	5.27926	(13070920)		485700.00
3719200.00	5.08474	(13083105)			

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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 48

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3 \*\*\*  
 INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

CostcoMurrieta\_Op\_HRA

\*\*\*

		**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)		X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)			
483500.00	3716600.00	6.43213	(16092421)		483600.00
3716600.00	6.69988	(16072103)			
483700.00	3716600.00	7.13741	(12082006)		483800.00
3716600.00	7.45244	(12082006)			
483900.00	3716600.00	7.80669	(15091022)		484000.00
3716600.00	8.03332	(16092720)			
485000.00	3716600.00	7.79078	(13083006)		485100.00
3716600.00	9.27193	(13082921)			
483500.00	3716700.00	6.88362	(12092219)		483600.00
3716700.00	7.55956	(14091404)			
483700.00	3716700.00	7.92838	(15090902)		483800.00
3716700.00	8.60533	(12082006)			
483900.00	3716700.00	8.76423	(15091022)		484000.00
3716700.00	9.06564	(16092720)			
485200.00	3716700.00	8.44004	(13111217)		485400.00
3716700.00	7.76846	(16072906)			
485700.00	3716700.00	6.51805	(13082923)		483100.00
3716800.00	6.51326	(13083001)			
483200.00	3716800.00	6.54742	(12081906)		483500.00
3716800.00	7.86160	(12092219)			
483600.00	3716800.00	8.52117	(16080906)		483700.00
3716800.00	9.78131	(12080202)			
483800.00	3716800.00	10.21118	(15090902)		483900.00
3716800.00	10.18839	(12082006)			
484000.00	3716800.00	10.53898	(15091022)		483100.00
3716900.00	7.10186	(15090820)			
483200.00	3716900.00	7.21781	(12081102)		485600.00
3716900.00	7.60224	(13082821)			
483200.00	3717000.00	7.89544	(15090820)		483300.00
3717000.00	8.47321	(15090820)			
485400.00	3717100.00	9.57374	(16081722)		485500.00
3717100.00	8.92289	(16061920)			
485600.00	3717100.00	7.86431	(15062622)		485700.00
3717100.00	7.35330	(16060221)			
483100.00	3717200.00	8.13941	(12073023)		483200.00
3717300.00	9.07499	(15101005)			
483300.00	3717300.00	10.16989	(12073023)		483400.00
3717300.00	10.97117	(12073023)			
483500.00	3717300.00	11.72384	(13082904)		483800.00

CostcoMurrieta\_Op\_HRA

3717300.00	16.20936	(13082903)			
483900.00	3717300.00		18.88378	(12010519)	484000.00
3717300.00	22.68979	(13100520)			
484600.00	3717300.00		29.97875	(15092021)	484700.00
3717300.00	25.24209	(16092619)			
483100.00	3717400.00		8.36075	(12101420)	483200.00
3717400.00	9.28907	(12071824)			
483300.00	3717400.00		10.22046	(12071824)	483400.00
3717400.00	11.22394	(15101005)			
483500.00	3717400.00		12.45764	(12073023)	483800.00
3717400.00	18.16084	(15090820)			
483900.00	3717400.00		22.42466	(15090820)	484000.00
3717400.00	25.17673	(13082903)			
484600.00	3717400.00		44.09376	(12082819)	484700.00
3717400.00	34.67311	(13090421)			
484800.00	3717400.00		27.79107	(12091320)	483100.00
3717500.00	8.66190	(14082820)			
483300.00	3717500.00		10.71747	(12101420)	483400.00
3717500.00	12.13131	(12101420)			
483500.00	3717500.00		13.51719	(12071824)	483600.00
3717500.00	14.75810	(12071824)			
484000.00	3717500.00		29.05589	(15090820)	484600.00
3717500.00	53.56572	(12091420)			
484700.00	3717500.00		53.71875	(16062820)	483600.00
3717600.00	16.29252	(16092624)			
484600.00	3717600.00		66.80484	(13062619)	484700.00
3717600.00	53.26464	(16081520)			
484800.00	3717600.00		38.48038	(16061920)	484600.00
3717700.00	84.35087	(13091318)			
484700.00	3717700.00		58.38933	(14071819)	484800.00
3717700.00	47.20116	(16092819)			
483400.00	3717800.00		13.10207	(12071301)	483500.00
3717800.00	14.92598	(12071301)			
483600.00	3717800.00		17.23624	(12071301)	484600.00
3717800.00	114.51201	(16021419)			
484700.00	3717800.00		63.98751	(12092318)	485300.00
3717800.00	14.17001	(14091419)			
483300.00	3717900.00		13.58717	(12093019)	483400.00
3717900.00	15.64304	(12093019)			
483500.00	3717900.00		19.92406	(12093019)	484600.00
3717900.00	106.09171	(16092118)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 49

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

CostcoMurrieta\_Op\_HRA

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3 \*\*\*

INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	64.56717	(12081619)	484800.00
3717900.00	43.97975	(13090619)		
485100.00	3717900.00	20.11610	(12092019)	483300.00
3718000.00	15.87294	(15100921)		
483400.00	3718000.00	17.60324	(15100921)	483500.00
3718000.00	19.46836	(12092820)		
483600.00	3718000.00	20.51074	(12072004)	484600.00
3718000.00	76.02605	(16102117)		
484700.00	3718000.00	53.33330	(15101018)	484800.00
3718000.00	40.57081	(16081519)		
483100.00	3718100.00	15.23027	(12092820)	483400.00
3718100.00	19.29697	(15100821)		
483600.00	3718100.00	21.38754	(12101520)	484600.00
3718100.00	53.01702	(16081019)		
483900.00	3718200.00	32.78098	(12081121)	484500.00
3718200.00	43.65536	(13080622)		
484600.00	3718200.00	40.85726	(13062820)	484700.00
3718200.00	34.91918	(13062720)		
484900.00	3718200.00	24.86706	(12081219)	485400.00
3718200.00	11.56684	(12081119)		
485600.00	3718200.00	9.17186	(12081119)	483100.00
3718300.00	12.66470	(12101520)		
483900.00	3718300.00	30.55011	(15083119)	484000.00
3718300.00	32.64495	(12081322)		
484200.00	3718300.00	38.88893	(13071820)	485300.00
3718300.00	12.29392	(16081421)		
485600.00	3718300.00	9.96285	(13082920)	483400.00
3718400.00	19.73620	(15100920)		
485200.00	3718400.00	13.20549	(12081219)	485200.00
3718500.00	11.90403	(13083105)		
484600.00	3718600.00	21.04562	(13053120)	484800.00
3718600.00	16.94002	(12081722)		
485200.00	3718600.00	11.23472	(12080721)	483700.00



CostcoMurrieta\_Op\_HRA

3718700.00	20.11279	(16091820)			
483100.00	3718800.00	11.11336	(12081705)		484000.00
3718800.00	21.96047	(16082920)			
484200.00	3718800.00	21.36990	(15081622)		485400.00
3718800.00	8.55169	(12080721)			
483100.00	3718900.00	10.74665	(15081723)		483200.00
3718900.00	10.14884	(13090903)			
483100.00	3719000.00	9.74182	(13090903)		483200.00
3719000.00	10.24720	(12082921)			
483300.00	3719000.00	9.93672	(15091120)		483400.00
3719000.00	9.93493	(13083124)			
483500.00	3719000.00	10.56249	(16072221)		483100.00
3719100.00	8.88876	(12082921)			
483200.00	3719100.00	9.26328	(15091120)		483300.00
3719100.00	9.69736	(13090103)			
483400.00	3719100.00	10.02718	(16072221)		483500.00
3719100.00	10.23395	(15081621)			
483700.00	3719100.00	10.60870	(12081220)		484900.00
3719100.00	9.22054	(13062820)			
485000.00	3719100.00	8.81927	(12081722)		485100.00
3719100.00	8.14806	(13061620)			
485200.00	3719100.00	7.91013	(15081306)		485300.00
3719100.00	7.54920	(13062720)			
485400.00	3719100.00	6.85848	(13090220)		485500.00
3719100.00	6.50230	(13082223)			
485600.00	3719100.00	6.24007	(13081606)		485700.00
3719100.00	6.11962	(12080721)			
484200.00	3719200.00	14.41989	(13062721)		484500.00
3719200.00	11.11305	(13070921)			
484800.00	3719200.00	8.65402	(12052219)		484900.00
3719200.00	8.40209	(13062820)			
485000.00	3719200.00	8.11384	(13062820)		485100.00
3719200.00	7.59921	(15021318)			
485200.00	3719200.00	7.45069	(15081306)		485300.00
3719200.00	7.05672	(15090619)			
485400.00	3719200.00	6.51981	(13062720)		485500.00
3719200.00	6.24941	(13090220)			
485600.00	3719200.00	6.08892	(16080719)		485700.00
3719200.00	5.87881	(12081323)			

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 \*\*\* AERMET - VERSION 16216 \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 50

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

CostcoMurrieta\_Op\_HRA

VALUES FOR SOURCE GROUP: IDLING4 \*\*\*

INCLUDING SOURCE(S): IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

** CONC OF HRA		IN MICROGRAMS/M**3	
X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
483500.00	3716600.00	6.65641 (14091404)	483600.00
3716600.00	6.92954 (16072103)		
483700.00	3716600.00	7.42808 (12082006)	483800.00
3716600.00	7.66789 (14082006)		
483900.00	3716600.00	8.05909 (16062824)	484000.00
3716600.00	8.33948 (14081506)		
485000.00	3716600.00	7.92195 (15081406)	485100.00
3716600.00	9.29047 (13090421)		
483500.00	3716700.00	7.11526 (16080906)	483600.00
3716700.00	7.84608 (14091404)		
483700.00	3716700.00	8.25311 (15090902)	483800.00
3716700.00	8.93778 (12082006)		
483900.00	3716700.00	9.14136 (15091022)	484000.00
3716700.00	9.43868 (16092720)		
485200.00	3716700.00	8.39098 (13111217)	485400.00
3716700.00	7.79912 (16081420)		
485700.00	3716700.00	6.48511 (13090523)	483100.00
3716800.00	6.73574 (13083001)		
483200.00	3716800.00	6.77399 (12081906)	483500.00
3716800.00	8.18153 (12092219)		
483600.00	3716800.00	8.87367 (16092421)	483700.00
3716800.00	10.19924 (12080202)		
483800.00	3716800.00	10.64604 (15090902)	483900.00
3716800.00	10.56367 (13082905)		
484000.00	3716800.00	10.96302 (15062723)	483100.00
3716900.00	7.36620 (15090820)		
483200.00	3716900.00	7.48910 (12081102)	485600.00
3716900.00	7.52245 (16081722)		
483200.00	3717000.00	8.20453 (15090820)	483300.00
3717000.00	8.83991 (15090820)		
485400.00	3717100.00	9.58942 (16061920)	485500.00
3717100.00	8.75914 (16061920)		
485600.00	3717100.00	7.77910 (16060221)	485700.00
3717100.00	7.25723 (15090903)		
483100.00	3717200.00	8.46332 (12073023)	483200.00

CostcoMurrieta\_Op\_HRA

3717300.00	9.43343	(15101005)			
483300.00	3717300.00		10.63242	(12073023)	483400.00
3717300.00	11.56311	(12073023)			
483500.00	3717300.00		12.31319	(13082904)	483800.00
3717300.00	17.29196	(13082903)			
483900.00	3717300.00		20.30906	(12010519)	484000.00
3717300.00	24.45603	(13100520)			
484600.00	3717300.00		30.88760	(16092620)	484700.00
3717300.00	25.74881	(13090421)			
483100.00	3717400.00		8.70320	(12101420)	483200.00
3717400.00	9.67544	(12071824)			
483300.00	3717400.00		10.73623	(12071824)	483400.00
3717400.00	11.76275	(14091505)			
483500.00	3717400.00		13.10064	(15101005)	483800.00
3717400.00	19.43382	(15090820)			
483900.00	3717400.00		24.36027	(15090820)	484000.00
3717400.00	27.42074	(13082903)			
484600.00	3717400.00		45.93399	(12091420)	484700.00
3717400.00	34.95319	(12091320)			
484800.00	3717400.00		27.98616	(12100120)	483100.00
3717500.00	9.01591	(14082820)			
483300.00	3717500.00		11.17979	(16092624)	483400.00
3717500.00	12.74524	(12101420)			
483500.00	3717500.00		14.25237	(12101420)	483600.00
3717500.00	15.73933	(12071824)			
484000.00	3717500.00		32.02404	(15090820)	484600.00
3717500.00	55.71900	(13062619)			
484700.00	3717500.00		53.65587	(13090420)	483600.00
3717600.00	17.15136	(16092624)			
484600.00	3717600.00		66.84698	(13082019)	484700.00
3717600.00	51.45262	(16061920)			
484800.00	3717600.00		36.91744	(12081620)	484600.00
3717700.00	78.60208	(13101817)			
484700.00	3717700.00		54.32372	(12070719)	484800.00
3717700.00	43.72592	(16070620)			
483400.00	3717800.00		13.66937	(12071301)	483500.00
3717800.00	15.65280	(12071301)			
483600.00	3717800.00		18.16744	(12071301)	484600.00
3717800.00	96.19733	(15103005)			
484700.00	3717800.00		55.80071	(12092318)	485300.00
3717800.00	13.52480	(13090320)			
483300.00	3717900.00		14.25587	(13051221)	483400.00
3717900.00	16.41048	(13051221)			
483500.00	3717900.00		20.79443	(13051221)	484600.00
3717900.00	86.16714	(14091518)			

↑ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

CostcoMurrieta\_Op\_HRA  
17:09:15

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PAGE 51

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING4 \*\*\*

INCLUDING SOURCE(S): IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	55.62480	(14091218)	484800.00
3717900.00	39.43813	(13081220)		
485100.00	3717900.00	19.04891	(14102418)	483300.00
3718000.00	16.31508	(12092820)		
483400.00	3718000.00	18.14887	(12092820)	483500.00
3718000.00	20.21676	(13090101)		
483600.00	3718000.00	21.63812	(15100821)	484600.00
3718000.00	64.22155	(16102117)		
484700.00	3718000.00	46.83955	(12081219)	484800.00
3718000.00	36.62846	(16081519)		
483100.00	3718100.00	15.67594	(13090101)	483400.00
3718100.00	19.69292	(12090502)		
483600.00	3718100.00	22.32786	(13083023)	484600.00
3718100.00	46.92286	(15090619)		
483900.00	3718200.00	33.45663	(12081705)	484500.00
3718200.00	40.36519	(15031619)		
484600.00	3718200.00	37.01730	(12081722)	484700.00
3718200.00	31.81558	(13062720)		
484900.00	3718200.00	23.06421	(12081219)	485400.00
3718200.00	11.00787	(13082920)		
485600.00	3718200.00	8.87096	(12081119)	483100.00
3718300.00	12.93159	(12092720)		
483900.00	3718300.00	31.24092	(12082921)	484000.00
3718300.00	33.19634	(16072221)		
484200.00	3718300.00	38.77563	(16062020)	485300.00
3718300.00	11.70560	(16081421)		
485600.00	3718300.00	9.54169	(13082920)	483400.00
3718400.00	19.77110	(16093020)		
485200.00	3718400.00	12.56134	(12081219)	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	11.36470	(13083105)			
484600.00	3718600.00	20.24356	(15031619)		484800.00
3718600.00	15.94974	(15021318)			
485200.00	3718600.00	10.76348	(12080721)		483700.00
3718700.00	20.09988	(16072221)			
483100.00	3718800.00	11.19095	(12081705)		484000.00
3718800.00	21.69019	(15092619)			
484200.00	3718800.00	20.94657	(15082420)		485400.00
3718800.00	8.25157	(12080721)			
483100.00	3718900.00	10.77108	(12082002)		483200.00
3718900.00	10.16880	(16073024)			
483100.00	3719000.00	9.78523	(16073101)		483200.00
3719000.00	10.24200	(12080822)			
483300.00	3719000.00	9.95011	(12081322)		483400.00
3719000.00	10.08099	(16091820)			
483500.00	3719000.00	10.52308	(15081621)		483100.00
3719100.00	8.87669	(12080822)			
483200.00	3719100.00	9.28825	(12081322)		483300.00
3719100.00	9.81557	(16091820)			
483400.00	3719100.00	9.93253	(15062820)		483500.00
3719100.00	10.24219	(12081621)			
483700.00	3719100.00	10.40250	(16072821)		484900.00
3719100.00	8.92403	(13062820)			
485000.00	3719100.00	8.50121	(12081722)		485100.00
3719100.00	7.89145	(13063023)			
485200.00	3719100.00	7.65951	(15090619)		485300.00
3719100.00	7.29170	(13062720)			
485400.00	3719100.00	6.65612	(13090220)		485500.00
3719100.00	6.31540	(16080719)			
485600.00	3719100.00	6.04950	(13081606)		485700.00
3719100.00	5.94677	(12080721)			
484200.00	3719200.00	14.25025	(16072720)		484500.00
3719200.00	10.97194	(12081622)			
484800.00	3719200.00	8.42811	(12073021)		484900.00
3719200.00	8.20426	(13062820)			
485000.00	3719200.00	7.86381	(12081722)		485100.00
3719200.00	7.35160	(15021318)			
485200.00	3719200.00	7.25065	(15081306)		485300.00
3719200.00	6.84249	(13062720)			
485400.00	3719200.00	6.33079	(12091322)		485500.00
3719200.00	6.06667	(13090220)			
485600.00	3719200.00	5.91661	(16080719)		485700.00
3719200.00	5.70262	(12081323)			

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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

\*\*\* 17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 52

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
483500.00	3716600.00	6.86723	(14091404)	483600.00
3716600.00	7.16103 (15090902)			
483700.00	3716600.00	7.67108	(12082006)	483800.00
3716600.00	7.97811 (15091022)			
483900.00	3716600.00	8.30928	(16092720)	484000.00
3716600.00	8.52690 (13083005)			
485000.00	3716600.00	7.68540	(13090501)	485100.00
3716600.00	9.10607 (12101718)			
483500.00	3716700.00	7.38153	(16092421)	483600.00
3716700.00	8.07570 (16072103)			
483700.00	3716700.00	8.58543	(12082006)	483800.00
3716700.00	9.05185 (13081802)			
483900.00	3716700.00	9.35655	(15062723)	484000.00
3716700.00	9.68331 (14081506)			
485200.00	3716700.00	8.14959	(16061921)	485400.00
3716700.00	7.47137 (12100120)			
485700.00	3716700.00	6.21569	(13082821)	483100.00
3716800.00	7.00530 (13083001)			
483200.00	3716800.00	7.02416	(12081906)	483500.00
3716800.00	8.48676 (12092219)			
483600.00	3716800.00	9.17323	(14091404)	483700.00
3716800.00	10.70021 (15090902)			
483800.00	3716800.00	11.03795	(12082006)	483900.00
3716800.00	10.96174 (15091022)			
484000.00	3716800.00	11.29766	(14081506)	483100.00
3716900.00	7.61649 (15090820)			
483200.00	3716900.00	7.81228	(13083001)	485600.00
3716900.00	7.21845 (16061920)			
483200.00	3717000.00	8.53311	(15090820)	483300.00
3717000.00	9.17660 (12081102)			
485400.00	3717100.00	8.96241	(16061920)	485500.00

CostcoMurrieta\_Op\_HRA

3717100.00	8.22367	(16060221)			
485600.00	3717100.00		7.34420	(15090903)	485700.00
3717100.00	6.85307	(13082021)			
483100.00	3717200.00		8.88691	(12073023)	483200.00
3717300.00	9.93920	(15101005)			
483300.00	3717300.00		11.27618	(12073023)	483400.00
3717300.00	12.21590	(15102420)			
483500.00	3717300.00		13.04238	(13082904)	483800.00
3717300.00	18.56227	(13082903)			
483900.00	3717300.00		22.02614	(14100722)	484000.00
3717300.00	26.85491	(12080202)			
484600.00	3717300.00		29.39996	(13082921)	484700.00
3717300.00	23.91588	(12091320)			
483100.00	3717400.00		9.10041	(12101420)	483200.00
3717400.00	10.16690	(12071824)			
483300.00	3717400.00		11.32659	(12071824)	483400.00
3717400.00	12.47358	(14091505)			
483500.00	3717400.00		13.91369	(12073023)	483800.00
3717400.00	20.95350	(15090820)			
483900.00	3717400.00		27.24308	(13082903)	484000.00
3717400.00	30.22642	(14100722)			
484600.00	3717400.00		38.90015	(12101718)	484700.00
3717400.00	31.67726	(16081420)			
484800.00	3717400.00		24.89576	(14100320)	483100.00
3717500.00	9.46841	(14082820)			
483300.00	3717500.00		11.81509	(16092624)	483400.00
3717500.00	13.57533	(12101420)			
483500.00	3717500.00		15.24289	(12101420)	483600.00
3717500.00	16.84167	(12071824)			
484000.00	3717500.00		34.70667	(15090820)	484600.00
3717500.00	47.01654	(16081420)			
484700.00	3717500.00		43.32022	(12091219)	483600.00
3717600.00	18.56857	(15090819)			
484600.00	3717600.00		53.54421	(13091318)	484700.00
3717600.00	41.89898	(12081620)			
484800.00	3717600.00		31.15539	(13082621)	484600.00
3717700.00	58.53411	(14063019)			
484700.00	3717700.00		42.43020	(12100119)	484800.00
3717700.00	35.98014	(13091419)			
483400.00	3717800.00		14.55075	(12071301)	483500.00
3717800.00	16.71287	(16041622)			
483600.00	3717800.00		19.51230	(15112319)	484600.00
3717800.00	65.25150	(12091318)			
484700.00	3717800.00		42.33571	(12090219)	485300.00
3717800.00	12.10059	(13090320)			
483300.00	3717900.00		12.82574	(13051221)	483400.00
3717900.00	14.60528	(15100921)			
483500.00	3717900.00		20.09184	(15100921)	484600.00

CostcoMurrieta\_Op\_HRA

3717900.00 58.92457 (14091518)

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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 53

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
484700.00	3717900.00	41.81627 (13082920)	484800.00
3717900.00	31.91782 (13081220)		
485100.00	3717900.00	16.67453 (14102418)	483300.00
3718000.00	15.42885 (12102819)		
483400.00	3718000.00	17.41925 (15100821)	483500.00
3718000.00	19.54060 (15100821)		
483600.00	3718000.00	20.19271 (12092202)	484600.00
3718000.00	47.77608 (12080919)		
484700.00	3718000.00	37.21985 (12080719)	484800.00
3718000.00	30.02395 (16081519)		
483100.00	3718100.00	15.86264 (15100821)	483400.00
3718100.00	19.72202 (12101520)		
483600.00	3718100.00	21.54252 (13051321)	484600.00
3718100.00	38.59464 (12081719)		
483900.00	3718200.00	34.03214 (12082921)	484500.00
3718200.00	35.78590 (13062820)		
484600.00	3718200.00	31.55040 (15090619)	484700.00
3718200.00	27.00742 (16080719)		
484900.00	3718200.00	20.17038 (12081219)	485400.00
3718200.00	10.04461 (12081119)		
485600.00	3718200.00	8.18771 (12081119)	483100.00
3718300.00	13.72030 (13051321)		
483900.00	3718300.00	31.24954 (16072221)	484000.00
3718300.00	31.93994 (14070421)		
484200.00	3718300.00	35.68705 (13091619)	485300.00



CostcoMurrieta\_Op\_HRA

3718300.00	10.67458	(16081421)			
485600.00	3718300.00		8.78025	(13082920)	483400.00
3718400.00	20.65083	(15101021)			
485200.00	3718400.00		11.33303	(12081219)	485200.00
3718500.00	10.41944	(13082222)			
484600.00	3718600.00		16.76556	(12073021)	484800.00
3718600.00	14.49046	(15090619)			
485200.00	3718600.00		9.88985	(12080721)	483700.00
3718700.00	20.75543	(12081621)			
483100.00	3718800.00		11.66433	(12082002)	484000.00
3718800.00	21.66342	(13091520)			
484200.00	3718800.00		19.65257	(16072720)	485400.00
3718800.00	7.68715	(12080721)			
483100.00	3718900.00		11.28563	(16073024)	483200.00
3718900.00	10.64790	(12082921)			
483100.00	3719000.00		10.23919	(12082921)	483200.00
3719000.00	10.66527	(12081322)			
483300.00	3719000.00		10.27189	(16091820)	483400.00
3719000.00	10.26598	(15081621)			
483500.00	3719000.00		10.69322	(12081621)	483100.00
3719100.00	9.16642	(12081322)			
483200.00	3719100.00		9.52868	(16091820)	483300.00
3719100.00	10.11558	(16072221)			
483400.00	3719100.00		10.21217	(12081621)	483500.00
3719100.00	10.42389	(13091420)			
483700.00	3719100.00		10.52994	(15101120)	484900.00
3719100.00	8.39161	(12081722)			
485000.00	3719100.00		7.97665	(15021318)	485100.00
3719100.00	7.52202	(15081306)			
485200.00	3719100.00		7.22760	(13062720)	485300.00
3719100.00	6.86684	(12091322)			
485400.00	3719100.00		6.24099	(13090220)	485500.00
3719100.00	5.99299	(13081606)			
485600.00	3719100.00		5.69077	(13072621)	485700.00
3719100.00	5.62325	(12080721)			
484200.00	3719200.00		13.15053	(16060320)	484500.00
3719200.00	8.64300	(13080622)			
484800.00	3719200.00		8.04466	(12073021)	484900.00
3719200.00	7.82021	(13062820)			
485000.00	3719200.00		7.43528	(12081722)	485100.00
3719200.00	6.95615	(13063023)			
485200.00	3719200.00		6.91478	(15090619)	485300.00
3719200.00	6.48647	(13062720)			
485400.00	3719200.00		6.00694	(12091322)	485500.00
3719200.00	5.71607	(13082223)			
485600.00	3719200.00		5.61002	(13081606)	485700.00
3719200.00	5.39374	(12080721)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD

CostcoMurrieta\_Op\_HRA

View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*

07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 54

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING6 \*\*\*

INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	6.59011	(16072103)	483600.00
3716600.00	6.90626	(12082006)		
483700.00	3716600.00	7.26575	(12082006)	483800.00
3716600.00	7.59288	(15091022)		
483900.00	3716600.00	7.88411	(16092720)	484000.00
3716600.00	8.06588	(13083005)		
485000.00	3716600.00	7.34056	(15081406)	485100.00
3716600.00	8.63201	(13090421)		
483500.00	3716700.00	7.08556	(14091404)	483600.00
3716700.00	7.69055	(15090902)		
483700.00	3716700.00	8.21936	(12082006)	483800.00
3716700.00	8.65191	(15091022)		
483900.00	3716700.00	8.87665	(16092720)	484000.00
3716700.00	9.13254	(13083005)		
485200.00	3716700.00	7.76577	(16061921)	485400.00
3716700.00	7.14337	(16081420)		
485700.00	3716700.00	6.00673	(13082821)	483100.00
3716800.00	6.80765	(12081906)		
483200.00	3716800.00	6.73664	(12081906)	483500.00
3716800.00	8.04685	(16080906)		
483600.00	3716800.00	8.74249	(14091404)	483700.00
3716800.00	10.12175	(15090902)		
483800.00	3716800.00	10.33585	(12082006)	483900.00
3716800.00	10.27571	(15091022)		
484000.00	3716800.00	10.62219	(14081506)	483100.00
3716900.00	7.29166	(12081102)		
483200.00	3716900.00	7.56445	(12081906)	485600.00

CostcoMurrieta\_Op\_HRA

3716900.00	6.88517	(13062923)			
483200.00	3717000.00		8.13736	(12081102)	483300.00
3717000.00	8.89261	(13083001)			
485400.00	3717100.00		8.65079	(16061920)	485500.00
3717100.00	7.91212	(15062622)			
485600.00	3717100.00		7.10902	(16060221)	485700.00
3717100.00	6.65242	(15090903)			
483100.00	3717200.00		8.58635	(15102420)	483200.00
3717300.00	9.67568	(12073023)			
483300.00	3717300.00		10.81004	(15102420)	483400.00
3717300.00	11.86179	(13082904)			
483500.00	3717300.00		12.54742	(15090820)	483800.00
3717300.00	17.24546	(13090522)			
483900.00	3717300.00		20.13705	(12092219)	484000.00
3717300.00	24.55326	(15090902)			
484600.00	3717300.00		25.90387	(13082921)	484700.00
3717300.00	21.65377	(12101718)			
483100.00	3717400.00		8.83145	(12071824)	483200.00
3717400.00	9.81170	(14091505)			
483300.00	3717400.00		10.93413	(14091505)	483400.00
3717400.00	12.09403	(12073023)			
483500.00	3717400.00		13.30095	(15102420)	483800.00
3717400.00	19.19152	(13083001)			
483900.00	3717400.00		24.73201	(13082903)	484000.00
3717400.00	26.78810	(13110119)			
484600.00	3717400.00		33.93211	(13090421)	484700.00
3717400.00	28.00616	(14060820)			
484800.00	3717400.00		22.77964	(13082923)	483100.00
3717500.00	9.19891	(16092624)			
483300.00	3717500.00		11.51756	(12101420)	483400.00
3717500.00	13.10213	(12071824)			
483500.00	3717500.00		14.51338	(12071824)	483600.00
3717500.00	16.13872	(15101005)			
484000.00	3717500.00		31.52025	(13082903)	484600.00
3717500.00	40.50775	(12091320)			
484700.00	3717500.00		36.10725	(13082923)	483600.00
3717600.00	18.11631	(12101420)			
484600.00	3717600.00		46.11384	(16081520)	484700.00
3717600.00	37.90479	(16061920)			
484800.00	3717600.00		28.84591	(12081620)	484600.00
3717700.00	52.18041	(14071819)			
484700.00	3717700.00		39.05209	(16092819)	484800.00
3717700.00	33.46125	(16070620)			
483400.00	3717800.00		14.51498	(12071301)	483500.00
3717800.00	16.65700	(12071301)			
483600.00	3717800.00		19.41990	(12071301)	484600.00
3717800.00	61.15113	(12092318)			
484700.00	3717800.00		41.14237	(14091419)	485300.00

CostcoMurrieta\_Op\_HRA

3717800.00 12.03965 (14091419)  
 483300.00 3717900.00 12.86754 (12093019) 483400.00  
 3717900.00 14.65490 (12093019)  
 483500.00 3717900.00 17.64752 (13051221) 484600.00  
 3717900.00 59.50692 (12081619)

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 55

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING6 \*\*\*  
 INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
484700.00	3717900.00	41.05228	(13090619)	484800.00
3717900.00	31.61366	(14102418)		
485100.00	3717900.00	16.38087	(12092019)	483300.00
3718000.00	13.94214	(15100921)		
483400.00	3718000.00	15.58359	(12092820)	483500.00
3718000.00	17.54332	(12072004)		
483600.00	3718000.00	19.36411	(12072004)	484600.00
3718000.00	49.94995	(15101018)		
484700.00	3718000.00	37.81017	(16081519)	484800.00
3718000.00	30.31093	(13082920)		
483100.00	3718100.00	15.19037	(12102819)	483400.00
3718100.00	18.91428	(12090502)		
483600.00	3718100.00	19.76916	(12092619)	484600.00
3718100.00	40.44369	(12081323)		
483900.00	3718200.00	34.61122	(12082922)	484500.00
3718200.00	38.34775	(13062820)		
484600.00	3718200.00	33.52416	(13062720)	484700.00
3718200.00	28.10509	(12081323)		
484900.00	3718200.00	20.38095	(12080719)	485400.00
3718200.00	10.22192	(12081119)		
485600.00	3718200.00	8.00795	(12081119)	483100.00

CostcoMurrieta\_Op\_HRA

3718300.00	14.23038	(12092720)			
483900.00	3718300.00	31.52461	(12081322)		484000.00
3718300.00	32.44246	(12081120)			
484200.00	3718300.00	36.20546	(13091619)		485300.00
3718300.00	10.71161	(12083119)			
485600.00	3718300.00	8.87947	(12081119)		483400.00
3718400.00	21.24802	(12080624)			
485200.00	3718400.00	11.41668	(12080719)		485200.00
3718500.00	10.70387	(12081219)			
484600.00	3718600.00	17.73717	(13062820)		484800.00
3718600.00	15.26865	(15090619)			
485200.00	3718600.00	9.96580	(13083105)		483700.00
3718700.00	21.66873	(13090321)			
483100.00	3718800.00	12.08686	(12062922)		484000.00
3718800.00	22.57840	(13091520)			
484200.00	3718800.00	19.72272	(16072720)		485400.00
3718800.00	7.73166	(12081003)			
483100.00	3718900.00	11.69982	(13090903)		483200.00
3718900.00	11.02638	(12082921)			
483100.00	3719000.00	10.63588	(12082921)		483200.00
3719000.00	11.04662	(15091120)			
483300.00	3719000.00	10.50718	(13083124)		483400.00
3719000.00	10.65163	(16072221)			
483500.00	3719000.00	11.02049	(13090321)		483100.00
3719100.00	9.43272	(15091120)			
483200.00	3719100.00	9.78369	(13090103)		483300.00
3719100.00	10.55700	(16072221)			
483400.00	3719100.00	10.56854	(13090321)		483500.00
3719100.00	10.80669	(13091420)			
483700.00	3719100.00	10.89239	(15091020)		484900.00
3719100.00	8.64114	(12081722)			
485000.00	3719100.00	8.15144	(13061620)		485100.00
3719100.00	7.70396	(15081306)			
485200.00	3719100.00	7.36913	(13062720)		485300.00
3719100.00	6.99476	(13090220)			
485400.00	3719100.00	6.33018	(13081606)		485500.00
3719100.00	6.06088	(13081606)			
485600.00	3719100.00	5.77856	(12080721)		485700.00
3719100.00	5.64536	(12080721)			
484200.00	3719200.00	12.93088	(16060320)		484500.00
3719200.00	8.88217	(13080622)			
484800.00	3719200.00	8.35604	(13062820)		484900.00
3719200.00	7.99809	(13062820)			
485000.00	3719200.00	7.61140	(15021318)		485100.00
3719200.00	7.13896	(15081306)			
485200.00	3719200.00	7.06377	(15090619)		485300.00
3719200.00	6.56244	(13062720)			
485400.00	3719200.00	6.09784	(13090220)		485500.00

CostcoMurrieta\_Op\_HRA

3719200.00 5.80517 (13081606)  
 485600.00 3719200.00 5.66543 (13072621) 485700.00  
 3719200.00 5.50874 (12080721)  
 \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 56

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ISLAND \*\*\*  
 INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
483500.00	3716600.00	5.11169 (12010718)	483600.00
3716600.00	5.50098 (14090307)		
483700.00	3716600.00	5.57448 (14111817)	483800.00
3716600.00	5.82577 (15112117)		
483900.00	3716600.00	5.95944 (14042905)	484000.00
3716600.00	6.23478 (12110517)		
485000.00	3716600.00	5.35818 (16021519)	485100.00
3716600.00	6.27758 (14041207)		
483500.00	3716700.00	5.38298 (12021603)	483600.00
3716700.00	6.35766 (14090307)		
483700.00	3716700.00	6.23328 (14111817)	483800.00
3716700.00	6.49691 (15112117)		
483900.00	3716700.00	6.80758 (14042905)	484000.00
3716700.00	6.98594 (12110517)		
485200.00	3716700.00	9.39176 (14041207)	485400.00
3716700.00	6.02350 (12122516)		
485700.00	3716700.00	4.41583 (14062519)	483100.00
3716800.00	5.31798 (12021517)		
483200.00	3716800.00	5.27124 (15073019)	483500.00
3716800.00	6.18079 (13011517)		
483600.00	3716800.00	6.63523 (12010718)	483700.00
3716800.00	7.75542 (15120217)		
483800.00	3716800.00	7.73992 (14111817)	483900.00

CostcoMurrieta\_Op\_HRA

3716800.00	7.81353	(14042905)			
484000.00	3716800.00		7.91308	(12110517)	483100.00
3716900.00	5.83834	(14022018)			
483200.00	3716900.00		5.96469	(12021517)	485600.00
3716900.00	4.88292	(13031818)			
483200.00	3717000.00		6.49581	(14022018)	483300.00
3717000.00	7.07867	(12021517)			
485400.00	3717100.00		6.09325	(12041701)	485500.00
3717100.00	5.74056	(12090719)			
485600.00	3717100.00		5.15012	(12090719)	485700.00
3717100.00	5.21129	(13020217)			
483100.00	3717200.00		7.01930	(15031219)	483200.00
3717300.00	8.81048	(15051418)			
483300.00	3717300.00		8.98052	(15051418)	483400.00
3717300.00	9.63891	(13112718)			
483500.00	3717300.00		10.15045	(13110618)	483800.00
3717300.00	14.36411	(12102617)			
483900.00	3717300.00		17.06390	(14090307)	484000.00
3717300.00	19.14818	(14090307)			
484600.00	3717300.00		20.26067	(14041207)	484700.00
3717300.00	34.28222	(14041207)			
483100.00	3717400.00		6.92309	(15051418)	483200.00
3717400.00	9.09194	(15051418)			
483300.00	3717400.00		11.21191	(15051418)	483400.00
3717400.00	12.66820	(15051418)			
483500.00	3717400.00		12.67174	(15051418)	483800.00
3717400.00	16.24607	(15073019)			
483900.00	3717400.00		20.28828	(12102617)	484000.00
3717400.00	29.60871	(14090307)			
484600.00	3717400.00		46.42268	(14041207)	484700.00
3717400.00	36.00106	(14041207)			
484800.00	3717400.00		28.98351	(12122516)	483100.00
3717500.00	7.49152	(12012702)			
483300.00	3717500.00		9.51151	(15051418)	483400.00
3717500.00	13.24081	(15051418)			
483500.00	3717500.00		17.06532	(15051418)	483600.00
3717500.00	19.54866	(15051418)			
484000.00	3717500.00		26.65639	(13011517)	484600.00
3717500.00	60.23882	(14041207)			
484700.00	3717500.00		42.61629	(12122516)	483600.00
3717600.00	20.86726	(15051418)			
484600.00	3717600.00		64.36639	(12122516)	484700.00
3717600.00	29.23108	(12122516)			
484800.00	3717600.00		29.41861	(13020217)	484600.00
3717700.00	62.04251	(13020217)			
484700.00	3717700.00		39.06454	(13020217)	484800.00
3717700.00	27.24947	(15011116)			
483400.00	3717800.00		11.90270	(14012317)	483500.00

CostcoMurrieta\_Op\_HRA

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3717800.00      13.55863 (14012317)
                483600.00  3717800.00      15.76074 (16082707)      484600.00
3717800.00      55.37503 (16010916)
                484700.00  3717800.00      38.34104 (16010916)      485300.00
3717800.00      8.80211 (12060420)
                483300.00  3717900.00      11.49352 (14012317)      483400.00
3717900.00      13.30222 (14012317)
                483500.00  3717900.00      15.98786 (14012317)      484600.00
3717900.00      51.75867 (14101217)

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^ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD
View\CostcoMurrieta_Op_HRA\CostcoMurrieta_Op_HRA.isc ***   07/10/18
*** AERMET - VERSION 16216 ***   ***
***                               ***   17:09:15

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PAGE 57

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ISLAND ***
INCLUDING SOURCE(S): ISLAND ,

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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
484700.00	3717900.00	34.51222	(14101217)	484800.00
3717900.00	24.76880	(14101217)		
485100.00	3717900.00	12.10072	(15121117)	483300.00
3718000.00	11.19158	(12011107)		
483400.00	3718000.00	12.76899	(12011107)	483500.00
3718000.00	14.66184	(12011107)		
483600.00	3718000.00	16.69440	(12011107)	484600.00
3718000.00	62.46158	(15091218)		
484700.00	3718000.00	47.07925	(16123016)	484800.00
3718000.00	33.43446	(16123016)		
483100.00	3718100.00	7.75646	(12011107)	483400.00
3718100.00	9.95660	(12042521)		
483600.00	3718100.00	16.60922	(12042521)	484600.00
3718100.00	46.91484	(16040918)		
483900.00	3718200.00	38.79145	(14120316)	484500.00
3718200.00	45.53838	(16010616)		
484600.00	3718200.00	58.09982	(15020517)	484700.00



CostcoMurrieta\_Op\_HRA

3718200.00	36.31657	(15020517)			
484900.00	3718200.00		17.29860	(12041318)	485400.00
3718200.00	8.65450	(16123016)			
485600.00	3718200.00		7.08947	(16123016)	483100.00
3718300.00	40.87231	(12101520)			
483900.00	3718300.00		35.73849	(14120316)	484000.00
3718300.00	41.57392	(13041407)			
484200.00	3718300.00		43.11804	(15083118)	485300.00
3718300.00	9.42204	(15091218)			
485600.00	3718300.00		6.54154	(15041418)	483400.00
3718400.00	27.23171	(12091418)			
485200.00	3718400.00		9.04739	(15102217)	485200.00
3718500.00	8.42869	(16090518)			
484600.00	3718600.00		18.97398	(15022217)	484800.00
3718600.00	12.34714	(15110218)			
485200.00	3718600.00		9.58833	(15020517)	483700.00
3718700.00	32.68114	(16073120)			
483100.00	3718800.00		33.85443	(12062922)	484000.00
3718800.00	20.82959	(12032521)			
484200.00	3718800.00		12.25356	(15083118)	485400.00
3718800.00	7.74067	(15020517)			
483100.00	3718900.00		32.41019	(13090903)	483200.00
3718900.00	32.51462	(16073101)			
483100.00	3719000.00		30.31191	(12082921)	483200.00
3719000.00	32.08148	(15091120)			
483300.00	3719000.00		31.74202	(13083124)	483400.00
3719000.00	33.02878	(15062820)			
483500.00	3719000.00		34.78553	(12081621)	483100.00
3719100.00	27.73953	(15091120)			
483200.00	3719100.00		28.67353	(13090103)	483300.00
3719100.00	31.05487	(16072221)			
483400.00	3719100.00		31.66973	(13090321)	483500.00
3719100.00	32.52929	(13091420)			
483700.00	3719100.00		38.01678	(16060321)	484900.00
3719100.00	7.16985	(15022217)			
485000.00	3719100.00		6.34362	(12052520)	485100.00
3719100.00	6.06652	(15110218)			
485200.00	3719100.00		5.73868	(16042724)	485300.00
3719100.00	5.43120	(12031621)			
485400.00	3719100.00		5.11540	(13040718)	485500.00
3719100.00	5.70801	(15020517)			
485600.00	3719100.00		6.27996	(15020517)	485700.00
3719100.00	5.53064	(15020517)			
484200.00	3719200.00		7.28292	(12032218)	484500.00
3719200.00	8.95584	(16012917)			
484800.00	3719200.00		6.71584	(16032823)	484900.00
3719200.00	6.49608	(15022217)			
485000.00	3719200.00		6.00650	(12052520)	485100.00

CostcoMurrieta\_Op\_HRA

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3719200.00      5.56844 (16052319)
      485200.00  3719200.00      5.58897 (15110218)      485300.00
3719200.00      5.09652 (16042724)
      485400.00  3719200.00      4.72453 (13040718)      485500.00
3719200.00      4.66497 (13040718)
      485600.00  3719200.00      4.91528 (15020517)      485700.00
3719200.00      5.48707 (15020517)

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^ *** AERMOD - VERSION 18081 ***      *** C:\Lakes\AERMOD
View\CostcoMurrieta_Op_HRA\CostcoMurrieta_Op_HRA.isc ***      07/10/18
*** AERMET - VERSION 16216 ***      ***
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17:09:15

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PAGE 58

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

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          INCLUDING SOURCE(S):      L0000058      , L0000059
, L0000060      , L0000061      , L0000062      ,
      L0000063      , L0000064      , L0000065      , L0000066      , L0000067
, L0000068      , L0000069      , L0000070      ,
      L0000071      , L0000072      , L0000073      , L0000074      , L0000075
, L0000076      , L0000077      , L0000078      ,
      L0000079      , L0000080      , L0000081      , L0000082      , L0000083
, L0000084      , L0000085      , . . .      ,

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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

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          **
          X-COORD (M)  Y-COORD (M)      CONC      (YYMMDDHH)      X-COORD (M)
          Y-COORD (M)      CONC      (YYMMDDHH)
          -----
          483500.00  3716600.00      3.73301 (15120217)      483600.00
3716600.00      3.86327 (15120217)
          483700.00  3716600.00      4.03610 (15112117)      483800.00
3716600.00      4.22714 (14042905)
          483900.00  3716600.00      4.36275 (12110517)      484000.00
3716600.00      4.41875 (13100424)
          485000.00  3716600.00      5.28461 (14041207)      485100.00
3716600.00      5.40419 (14041207)
          483500.00  3716700.00      4.02506 (12010718)      483600.00
3716700.00      4.42958 (15120217)
          483700.00  3716700.00      4.57599 (14111817)      483800.00
3716700.00      4.87824 (14042905)

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CostcoMurrieta\_Op\_HRA

483900.00	3716700.00	4.94150	(12110517)	484000.00
3716700.00	5.03043	(12121018)		
485200.00	3716700.00	4.57681	(14041207)	485400.00
3716700.00	3.96790	(12122516)		
485700.00	3716700.00	2.80089	(12041701)	483100.00
3716800.00	3.92120	(12021517)		
483200.00	3716800.00	3.86564	(15073019)	483500.00
3716800.00	4.57557	(13011517)		
483600.00	3716800.00	5.05765	(15120217)	483700.00
3716800.00	5.80170	(15120217)		
483800.00	3716800.00	5.90179	(15112117)	483900.00
3716800.00	5.79872	(14042905)		
484000.00	3716800.00	5.93781	(12110517)	483100.00
3716900.00	4.32062	(14022018)		
483200.00	3716900.00	4.43781	(12021517)	485600.00
3716900.00	3.25454	(12090719)		
483200.00	3717000.00	4.87205	(14022018)	483300.00
3717000.00	5.34211	(12021517)		
485400.00	3717100.00	3.98091	(12090719)	485500.00
3717100.00	3.66860	(13011817)		
485600.00	3717100.00	3.26235	(13011817)	485700.00
3717100.00	3.06668	(12051319)		
483100.00	3717200.00	5.37487	(15051418)	483200.00
3717300.00	6.79027	(15051418)		
483300.00	3717300.00	7.69537	(15051418)	483400.00
3717300.00	8.40286	(15051418)		
483500.00	3717300.00	8.66908	(15051418)	483800.00
3717300.00	11.67452	(12102617)		
483900.00	3717300.00	13.60037	(15120217)	484000.00
3717300.00	15.83351	(14042905)		
484600.00	3717300.00	21.38302	(14041207)	484700.00
3717300.00	16.75944	(12122516)		
483100.00	3717400.00	5.50587	(15051418)	483200.00
3717400.00	6.88566	(15051418)		
483300.00	3717400.00	8.47277	(15051418)	483400.00
3717400.00	10.17751	(15051418)		
483500.00	3717400.00	11.80308	(15051418)	483800.00
3717400.00	13.93878	(12102617)		
483900.00	3717400.00	17.95833	(12010718)	484000.00
3717400.00	19.29436	(14042905)		
484600.00	3717400.00	24.41664	(12122516)	484700.00
3717400.00	18.78381	(12122516)		
484800.00	3717400.00	12.99871	(12122516)	483100.00
3717500.00	5.57597	(12012702)		
483300.00	3717500.00	7.87598	(15051418)	483400.00
3717500.00	10.33323	(15051418)		
483500.00	3717500.00	13.34139	(15051418)	483600.00
3717500.00	16.73206	(15051418)		

CostcoMurrieta\_Op\_HRA

484000.00	3717500.00	30.10767	(12012316)	484600.00
3717500.00	26.85544	(12122516)		
484700.00	3717500.00	17.29160	(12122516)	483600.00
3717600.00	17.05238	(15051418)		
484600.00	3717600.00	24.04940	(12122516)	484700.00
3717600.00	14.93220	(12080219)		
484800.00	3717600.00	11.78857	(12102719)	484600.00
3717700.00	21.01234	(16010916)		
484700.00	3717700.00	15.49312	(16010916)	484800.00
3717700.00	12.99102	(12071220)		
483400.00	3717800.00	9.91262	(14012317)	483500.00
3717800.00	11.75716	(14012317)		
483600.00	3717800.00	14.28140	(14012317)	484600.00
3717800.00	22.59051	(16010916)		
484700.00	3717800.00	15.60426	(16010916)	485300.00
3717800.00	5.18627	(12110921)		
483300.00	3717900.00	8.23450	(12011107)	483400.00
3717900.00	9.63305	(12011107)		
483500.00	3717900.00	11.92973	(12011107)	484600.00
3717900.00	22.35287	(15091218)		

^ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 59

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*  
 INCLUDING SOURCE(S): L0000058 , L0000059  
 , L0000060 , L0000061 , L0000062 ,  
 L0000063 , L0000064 , L0000065 , L0000066 , L0000067  
 , L0000068 , L0000069 , L0000070 ,  
 L0000071 , L0000072 , L0000073 , L0000074 , L0000075  
 , L0000076 , L0000077 , L0000078 ,  
 L0000079 , L0000080 , L0000081 , L0000082 , L0000083  
 , L0000084 , L0000085 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

484700.00	3717900.00	15.63461	(15091218)	484800.00
3717900.00	12.46526 (16033018)			
485100.00	3717900.00	7.05724	(16033018)	483300.00
3718000.00	7.97774 (12042521)			
483400.00	3718000.00	9.63731	(12042521)	483500.00
3718000.00	11.71093 (12042521)			
483600.00	3718000.00	13.43475	(12042521)	484600.00
3718000.00	25.31415 (15091218)			
484700.00	3718000.00	18.49581	(15091218)	484800.00
3718000.00	13.95098 (15091218)			
483100.00	3718100.00	11.27277	(12122119)	483400.00
3718100.00	11.65473 (12042521)			
483600.00	3718100.00	13.39329	(16121603)	484600.00
3718100.00	22.72623 (15020517)			
483900.00	3718200.00	23.67149	(13012318)	484500.00
3718200.00	24.27292 (15020517)			
484600.00	3718200.00	22.33922	(15020517)	484700.00
3718200.00	16.88173 (15020517)			
484900.00	3718200.00	9.33710	(15091218)	485400.00
3718200.00	4.61725 (15091218)			
485600.00	3718200.00	3.69237	(14040618)	483100.00
3718300.00	18.01401 (13082323)			
483900.00	3718300.00	22.89574	(16043005)	484000.00
3718300.00	19.20228 (12072219)			
484200.00	3718300.00	27.17500	(16012917)	485300.00
3718300.00	5.15645 (15091218)			
485600.00	3718300.00	3.96875	(13031418)	483400.00
3718400.00	22.66170 (12081705)			
485200.00	3718400.00	5.25677	(16090518)	485200.00
3718500.00	4.96929 (13033018)			
484600.00	3718600.00	9.35460	(15022217)	484800.00
3718600.00	6.99384 (16042724)			
485200.00	3718600.00	5.81171	(15020517)	483700.00
3718700.00	23.46451 (14081019)			
483100.00	3718800.00	15.90327	(15083119)	484000.00
3718800.00	19.85098 (13081620)			
484200.00	3718800.00	11.03098	(12032218)	485400.00
3718800.00	4.42602 (15020517)			
483100.00	3718900.00	15.44672	(12080822)	483200.00
3718900.00	14.77730 (12081322)			
483100.00	3719000.00	14.15544	(12081322)	483200.00
3719000.00	14.64936 (16091820)			
483300.00	3719000.00	14.39639	(15081621)	483400.00
3719000.00	14.63192 (16072722)			
483500.00	3719000.00	15.13413	(12081220)	483100.00
3719100.00	12.87558 (16091820)			
483200.00	3719100.00	13.40105	(15062820)	483300.00

CostcoMurrieta\_Op\_HRA

3719100.00	14.01867	(12081621)			
483400.00	3719100.00		14.15513	(15080521)	483500.00
3719100.00	14.45504	(14081019)			
483700.00	3719100.00		15.23227	(16072819)	484900.00
3719100.00	4.09197	(12052520)			
485000.00	3719100.00		3.90818	(14042523)	485100.00
3719100.00	3.67786	(15110218)			
485200.00	3719100.00		3.46970	(16042724)	485300.00
3719100.00	3.37005	(13040718)			
485400.00	3719100.00		3.23371	(15020517)	485500.00
3719100.00	3.43206	(15020517)			
485600.00	3719100.00		3.35782	(15020517)	485700.00
3719100.00	3.06477	(15020517)			
484200.00	3719200.00		7.12835	(12032218)	484500.00
3719200.00	5.07018	(16012917)			
484800.00	3719200.00		4.02526	(12121818)	484900.00
3719200.00	3.78657	(12052520)			
485000.00	3719200.00		3.61427	(12052520)	485100.00
3719200.00	3.42899	(15110218)			
485200.00	3719200.00		3.36089	(15110218)	485300.00
3719200.00	3.11506	(12031621)			
485400.00	3719200.00		2.96619	(13040718)	485500.00
3719200.00	2.84371	(13040718)			
485600.00	3719200.00		3.01061	(15020517)	485700.00
3719200.00	2.97281	(15020517)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*                    17:09:15

PAGE 60

\*\*\* MODELOPTs:    RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1 \*\*\*  
    INCLUDING SOURCE(S):    L000001    , L000002  
 , L000003    , L000004    , L000005    ,  
    L000006    , L000007    , L000008    , L000009    , L000010  
 , L000011    , L000012    , L000013    ,  
    L000014    , L000015    , L000016    , L000017    , L000018  
 , L000019    , L000020    , L000021    ,  
    L000022    , L000023    , L000024    , L000025    , L000026  
 , L000027    , L000028    , . . .    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA                    IN MICROGRAMS/M\*\*3

CostcoMurrieta\_Op\_HRA

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	4.77792	(12010718)	483600.00
3716600.00	5.06702	(15120217)		
483700.00	3716600.00	5.27702	(14111817)	483800.00
3716600.00	5.57636	(14042905)		
483900.00	3716600.00	5.78746	(12110517)	484000.00
3716600.00	5.83964	(13100424)		
485000.00	3716600.00	6.36466	(14041207)	485100.00
3716600.00	5.77807	(12122516)		
483500.00	3716700.00	5.22464	(13011517)	483600.00
3716700.00	5.88055	(15120217)		
483700.00	3716700.00	6.19258	(14111817)	483800.00
3716700.00	6.63704	(14042905)		
483900.00	3716700.00	6.76194	(12110517)	484000.00
3716700.00	6.86866	(13100424)		
485200.00	3716700.00	5.36004	(12122516)	485400.00
3716700.00	3.88685	(12041701)		
485700.00	3716700.00	3.18521	(13011817)	483100.00
3716800.00	5.01383	(14022018)		
483200.00	3716800.00	5.02943	(14022018)	483500.00
3716800.00	6.37872	(12102617)		
483600.00	3716800.00	6.88090	(12010718)	483700.00
3716800.00	8.29751	(15120217)		
483800.00	3716800.00	8.39968	(15112117)	483900.00
3716800.00	8.23128	(14042905)		
484000.00	3716800.00	8.41291	(13100424)	483100.00
3716900.00	5.55744	(13112718)		
483200.00	3716900.00	5.80111	(13110618)	485600.00
3716900.00	3.60972	(12051319)		
483200.00	3717000.00	6.58587	(15051418)	483300.00
3717000.00	7.20998	(13110618)		
485400.00	3717100.00	4.50365	(12080219)	485500.00
3717100.00	4.11390	(15012118)		
485600.00	3717100.00	3.65234	(13020417)	485700.00
3717100.00	3.42974	(13020417)		
483100.00	3717200.00	6.84502	(15051418)	483200.00
3717300.00	7.98163	(12012702)		
483300.00	3717300.00	10.37068	(15051418)	483400.00
3717300.00	14.18871	(15051418)		
483500.00	3717300.00	18.66475	(15051418)	483800.00
3717300.00	22.38901	(15051418)		
483900.00	3717300.00	25.73969	(12102617)	484000.00
3717300.00	31.63740	(14042905)		

CostcoMurrieta\_Op\_HRA

484600.00	3717300.00	24.31560	(12122516)	484700.00
3717300.00	17.43041	(13020217)		
483100.00	3717400.00	6.48408	(16082707)	483200.00
3717400.00	7.88036	(16082707)		
483300.00	3717400.00	9.63377	(16082707)	483400.00
3717400.00	11.80326	(16082707)		
483500.00	3717400.00	17.52078	(15051418)	483800.00
3717400.00	47.26566	(15051418)		
483900.00	3717400.00	48.15656	(15051418)	484000.00
3717400.00	44.28112	(16061906)		
484600.00	3717400.00	27.00324	(16020117)	484700.00
3717400.00	17.30117	(16020117)		
484800.00	3717400.00	13.00507	(13020417)	483100.00
3717500.00	7.29639	(14012317)		
483300.00	3717500.00	9.94500	(14012317)	483400.00
3717500.00	12.02986	(14012317)		
483500.00	3717500.00	16.29973	(16082707)	483600.00
3717500.00	24.05659	(16082707)		
484000.00	3717500.00	139.21642	(15051418)	484600.00
3717500.00	26.74765	(14112016)		
484700.00	3717500.00	27.03231	(12071220)	483600.00
3717600.00	21.25051	(14012317)		
484600.00	3717600.00	26.29019	(14101217)	484700.00
3717600.00	18.08058	(14033120)		
484800.00	3717600.00	13.71477	(15121117)	484600.00
3717700.00	30.44393	(15091218)		
484700.00	3717700.00	21.59128	(16123016)	484800.00
3717700.00	15.28358	(16123016)		
483400.00	3717800.00	11.73712	(12042521)	483500.00
3717800.00	14.72650	(12042521)		
483600.00	3717800.00	18.69140	(16090507)	484600.00
3717800.00	25.12357	(15091218)		
484700.00	3717800.00	20.56903	(15091218)	485300.00
3717800.00	5.32675	(14040618)		
483300.00	3717900.00	9.60597	(12042521)	483400.00
3717900.00	11.25208	(16121603)		
483500.00	3717900.00	19.65437	(16121603)	484600.00
3717900.00	24.32201	(15020517)		

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

07/10/18

PAGE 61

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: TRAVEL1 \*\*\*



CostcoMurrieta\_Op\_HRA

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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	14.18868	(15102217)	484800.00
3717900.00	13.17848	(15091218)		
485100.00	3717900.00	7.88521	(15091218)	483300.00
3718000.00	13.75041	(16121603)		
483400.00	3718000.00	15.28876	(16121602)	483500.00
3718000.00	17.70283	(16121602)		
483600.00	3718000.00	16.37368	(14120316)	484600.00
3718000.00	21.89887	(15020517)		
484700.00	3718000.00	17.50469	(15020517)	484800.00
3718000.00	11.11800	(15020517)		
483100.00	3718100.00	19.51131	(13070124)	483400.00
3718100.00	22.54617	(12102224)		
483600.00	3718100.00	17.80989	(12121303)	484600.00
3718100.00	15.62160	(15020517)		
483900.00	3718200.00	28.33731	(14073119)	484500.00
3718200.00	12.63535	(15022217)		
484600.00	3718200.00	10.44323	(15110218)	484700.00
3718200.00	11.94122	(15020517)		
484900.00	3718200.00	10.56192	(15020517)	485400.00
3718200.00	4.36401	(15032218)		
485600.00	3718200.00	3.59056	(15032618)	483100.00
3718300.00	22.01193	(14071706)		
483900.00	3718300.00	25.62748	(12081020)	484000.00
3718300.00	22.18259	(13082319)		
484200.00	3718300.00	18.26455	(12090319)	485300.00
3718300.00	4.58642	(16090518)		
485600.00	3718300.00	3.82497	(15032218)	483400.00
3718400.00	26.82811	(13083124)		
485200.00	3718400.00	5.67071	(15020517)	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	5.96023	(15020517)			
484600.00	3718600.00		6.38697	(15022217)	484800.00
3718600.00	5.63560	(15110218)			
485200.00	3718600.00		5.43938	(15020517)	483700.00
3718700.00	22.78415	(16062721)			
483100.00	3718800.00		16.43988	(16091820)	484000.00
3718800.00	20.24516	(14092520)			
484200.00	3718800.00		14.50727	(12082419)	485400.00
3718800.00	3.97774	(15020517)			
483100.00	3718900.00		15.56470	(15062820)	483200.00
3718900.00	15.04931	(12081621)			
483100.00	3719000.00		14.19436	(13090321)	483200.00
3719000.00	14.45012	(13091420)			
483300.00	3719000.00		14.36886	(12081220)	483400.00
3719000.00	14.51405	(15091020)			
483500.00	3719000.00		14.62911	(15092619)	483100.00
3719100.00	13.03733	(16072722)			
483200.00	3719100.00		13.32257	(14072721)	483300.00
3719100.00	13.59875	(16072821)			
483400.00	3719100.00		13.65763	(16060321)	483500.00
3719100.00	13.84974	(16072819)			
483700.00	3719100.00		14.33142	(15081622)	484900.00
3719100.00	3.45403	(12052520)			
485000.00	3719100.00		3.33935	(12052520)	485100.00
3719100.00	3.19287	(14042523)			
485200.00	3719100.00		3.09612	(15110218)	485300.00
3719100.00	2.93595	(16042724)			
485400.00	3719100.00		2.75985	(13040718)	485500.00
3719100.00	2.69345	(13040718)			
485600.00	3719100.00		2.58070	(13040718)	485700.00
3719100.00	2.65707	(15020517)			
484200.00	3719200.00		10.21903	(12082419)	484500.00
3719200.00	3.84239	(16012917)			
484800.00	3719200.00		3.37191	(12121818)	484900.00
3719200.00	3.24790	(12121818)			
485000.00	3719200.00		3.12854	(12052520)	485100.00
3719200.00	2.95750	(16052319)			
485200.00	3719200.00		2.94112	(15110218)	485300.00
3719200.00	2.79792	(15110218)			
485400.00	3719200.00		2.60894	(16042724)	485500.00
3719200.00	2.54842	(13040718)			
485600.00	3719200.00		2.52423	(13040718)	485700.00
3719200.00	2.43214	(13040718)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

07/10/18

\*\*\* 17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 62

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3 \*\*\*  
 INCLUDING SOURCE(S): L0000712 , L0000713  
 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 , L0000720 , L0000721  
 , L0000722 , L0000723 , L0000724 ,  
 L0000725 , L0000726 , L0000727 , L0000728 , L0000729  
 , L0000730 , L0000731 , L0000732 ,  
 L0000733 , L0000734 , L0000735 , L0000736 , L0000737  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	371660.00	3.16908	(13011517)	483600.00
371660.00	3.29544	(12010718)		
483700.00	371660.00	3.54930	(15120217)	483800.00
371660.00	3.68724	(15120217)		
483900.00	371660.00	3.80613	(15112117)	484000.00
371660.00	3.98147	(14042905)		
485000.00	371660.00	3.86520	(12071223)	485100.00
371660.00	4.49653	(12081702)		
483500.00	3716700.00	3.47502	(12102617)	483600.00
3716700.00	3.70458	(13011517)		
483700.00	3716700.00	3.94483	(12010718)	483800.00
3716700.00	4.25105	(15120217)		
483900.00	3716700.00	4.31444	(14111817)	484000.00
3716700.00	4.47314	(15112117)		
485200.00	3716700.00	5.84028	(14041207)	485400.00
3716700.00	5.88030	(14041207)		
485700.00	3716700.00	3.92372	(13020517)	483100.00
3716800.00	3.30141	(14022018)		
483200.00	3716800.00	3.28768	(12021517)	483500.00
3716800.00	3.99402	(12102617)		
483600.00	3716800.00	4.26994	(12102617)	483700.00
3716800.00	4.74273	(13011517)		
483800.00	3716800.00	5.00772	(15120217)	483900.00
3716800.00	5.01783	(15120217)		

CostcoMurrieta\_Op\_HRA

484000.00	3716800.00	5.17284	(15112117)	483100.00
3716900.00	3.53179	(13110618)		
483200.00	3716900.00	3.67593	(14022018)	485600.00
3716900.00	4.65963	(12122516)		
483200.00	3717000.00	3.92191	(13110618)	483300.00
3717000.00	4.28981	(14022018)		
485400.00	3717100.00	6.67128	(12122516)	485500.00
3717100.00	4.95356	(12122516)		
485600.00	3717100.00	3.94668	(12090719)	485700.00
3717100.00	3.72930	(12090719)		
483100.00	3717200.00	4.10165	(15031219)	483200.00
3717300.00	4.84630	(15051418)		
483300.00	3717300.00	5.50907	(15051418)	483400.00
3717300.00	6.07360	(15051418)		
483500.00	3717300.00	6.40394	(15051418)	483800.00
3717300.00	8.32876	(12021517)		
483900.00	3717300.00	9.73590	(12102617)	484000.00
3717300.00	11.17464	(12102617)		
484600.00	3717300.00	20.64372	(13041207)	484700.00
3717300.00	14.72881	(13041207)		
483100.00	3717400.00	4.26627	(12012702)	483200.00
3717400.00	4.69812	(15051418)		
483300.00	3717400.00	5.73539	(15051418)	483400.00
3717400.00	6.86106	(15051418)		
483500.00	3717400.00	7.96433	(15051418)	483800.00
3717400.00	9.29498	(14022018)		
483900.00	3717400.00	11.46782	(12021517)	484000.00
3717400.00	12.93259	(12102617)		
484600.00	3717400.00	28.24337	(13041207)	484700.00
3717400.00	26.56830	(14041207)		
484800.00	3717400.00	31.80791	(14041207)	483100.00
3717500.00	4.43234	(12012702)		
483300.00	3717500.00	5.52942	(12012702)	483400.00
3717500.00	6.56167	(15051418)		
483500.00	3717500.00	8.33822	(15051418)	483600.00
3717500.00	10.34027	(15051418)		
484000.00	3717500.00	14.86460	(12021517)	484600.00
3717500.00	35.07040	(13041207)		
484700.00	3717500.00	50.17853	(14041207)	483600.00
3717600.00	9.70909	(15051418)		
484600.00	3717600.00	75.56352	(14041207)	484700.00
3717600.00	64.51040	(14041207)		
484800.00	3717600.00	41.59037	(12122516)	484600.00
3717700.00	139.91680	(14041207)		
484700.00	3717700.00	71.57308	(12122516)	484800.00
3717700.00	37.87617	(13020217)		
483400.00	3717800.00	6.98658	(14012317)	483500.00
3717800.00	7.95473	(14012317)		

CostcoMurrieta\_Op\_HRA

483600.00	3717800.00	9.17926	(14012317)	484600.00
3717800.00	144.38611	(12122516)		
484700.00	3717800.00	60.24731	(13020217)	485300.00
3717800.00	7.60883	(12060420)		
483300.00	3717900.00	6.48762	(14012317)	483400.00
3717900.00	7.38908	(14012317)		
483500.00	3717900.00	9.33534	(14012317)	484600.00
3717900.00	128.14616	(16010916)		

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*                    17:09:15

PAGE 63

\*\*\* MODELOPTs:    RegDEFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3 \*\*\*  
    INCLUDING SOURCE(S):    L0000712    , L0000713  
 , L0000714    , L0000715    , L0000716    ,  
    L0000717    , L0000718    , L0000719    , L0000720    , L0000721  
 , L0000722    , L0000723    , L0000724    ,  
    L0000725    , L0000726    , L0000727    , L0000728    , L0000729  
 , L0000730    , L0000731    , L0000732    ,  
    L0000733    , L0000734    , L0000735    , L0000736    , L0000737  
 , L0000738    , L0000739    , . . .    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA                    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	57.64330	(16010916)	484800.00
3717900.00	33.72008	(14101217)		
485100.00	3717900.00	12.26750	(14101217)	483300.00
3718000.00	7.82105	(12011107)		
483400.00	3718000.00	8.64016	(12011107)	483500.00
3718000.00	9.21017	(12011107)		
483600.00	3718000.00	9.51698	(12011107)	484600.00
3718000.00	115.07693	(15020517)		
484700.00	3718000.00	65.53012	(15091218)	484800.00
3718000.00	39.54683	(15091218)		
483100.00	3718100.00	9.56253	(15100918)	483400.00

CostcoMurrieta\_Op\_HRA

3718100.00	11.57948	(12122119)			
483600.00	3718100.00		9.71227	(12042521)	484600.00
3718100.00	82.48978	(15020517)			
483900.00	3718200.00		24.39187	(16121602)	484500.00
3718200.00	85.27502	(16012917)			
484600.00	3718200.00		51.80995	(16010616)	484700.00
3718200.00	43.97641	(15020517)			
484900.00	3718200.00		21.10854	(15020517)	485400.00
3718200.00	7.48891	(15091218)			
485600.00	3718200.00		5.51803	(16123016)	483100.00
3718300.00	21.88708	(12090502)			
483900.00	3718300.00		23.49142	(12090822)	484000.00
3718300.00	24.23530	(14120316)			
484200.00	3718300.00		32.04292	(13041407)	485300.00
3718300.00	8.37366	(15091218)			
485600.00	3718300.00		5.52614	(15091218)	483400.00
3718400.00	22.85977	(12080724)			
485200.00	3718400.00		8.12267	(15020517)	485200.00
3718500.00	10.60539	(15020517)			
484600.00	3718600.00		20.09989	(16012917)	484800.00
3718600.00	13.12767	(15022217)			
485200.00	3718600.00		10.60102	(15020517)	483700.00
3718700.00	27.51422	(12081322)			
483100.00	3718800.00		19.00211	(12082403)	484000.00
3718800.00	24.65654	(13082520)			
484200.00	3718800.00		15.29784	(12072822)	485400.00
3718800.00	7.03156	(15020517)			
483100.00	3718900.00		18.54807	(12081705)	483200.00
3718900.00	18.40765	(15081723)			
483100.00	3719000.00		17.04463	(15081723)	483200.00
3719000.00	17.97963	(16073024)			
483300.00	3719000.00		18.47095	(12082921)	483400.00
3719000.00	19.43838	(12081322)			
483500.00	3719000.00		20.53687	(16091820)	483100.00
3719100.00	15.84340	(16073024)			
483200.00	3719100.00		16.78786	(12082921)	483300.00
3719100.00	17.67591	(12081322)			
483400.00	3719100.00		18.28202	(13083124)	483500.00
3719100.00	19.24745	(15062820)			
483700.00	3719100.00		22.39800	(14072721)	484900.00
3719100.00	5.12465	(16032823)			
485000.00	3719100.00		5.22185	(15022217)	485100.00
3719100.00	4.62632	(15022217)			
485200.00	3719100.00		4.33435	(14042523)	485300.00
3719100.00	4.13039	(15110218)			
485400.00	3719100.00		3.71159	(12031621)	485500.00
3719100.00	3.61860	(13040718)			
485600.00	3719100.00		4.08024	(15020517)	485700.00

CostcoMurrieta\_Op\_HRA

3719100.00	4.25106	(15020517)			
484200.00	3719200.00		9.46199	(14022806)	484500.00
3719200.00	5.28361	(12032218)			
484800.00	3719200.00		5.60137	(16012917)	484900.00
3719200.00	4.67605	(12040120)			
485000.00	3719200.00		4.48494	(15022217)	485100.00
3719200.00	4.32374	(15022217)			
485200.00	3719200.00		4.05834	(12052520)	485300.00
3719200.00	3.85139	(15110218)			
485400.00	3719200.00		3.54167	(15110218)	485500.00
3719200.00	3.36542	(13040718)			
485600.00	3719200.00		3.35758	(13040718)	485700.00
3719200.00	3.52589	(15020517)			

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 64

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT \*\*\*  
 INCLUDING SOURCE(S): VENT ,  
 \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS  
 \*\*\*

X-COORD (M)		Y-COORD (M)		CONC (YYMMDDHH)		X-COORD (M)	
Y-COORD (M)	CONC	CONC	(YYMMDDHH)	(YYMMDDHH)			
483500.00	3716600.00	3.69173	(12010718)			483600.00	
3716600.00	3.96905	(14090307)					
483700.00	3716600.00	4.02377	(14111817)			483800.00	
3716600.00	4.19541	(15112117)					
483900.00	3716600.00	4.33383	(14042905)			484000.00	
3716600.00	4.48692	(12110517)					
485000.00	3716600.00	3.85320	(16021519)			485100.00	
3716600.00	5.46906	(14041207)					
483500.00	3716700.00	3.90544	(12010718)			483600.00	
3716700.00	4.51771	(14090307)					
483700.00	3716700.00	4.49922	(15120217)			483800.00	
3716700.00	4.72010	(15112117)					
483900.00	3716700.00	4.90744	(14042905)			484000.00	

CostcoMurrieta\_Op\_HRA

3716700.00	5.04511	(12110517)			
485200.00	3716700.00		6.74190	(14041207)	485400.00
3716700.00	4.54134	(12122516)			
485700.00	3716700.00		3.33487	(13020517)	483100.00
3716800.00	3.80488	(12021517)			
483200.00	3716800.00		3.77763	(15073019)	483500.00
3716800.00	4.44990	(13011517)			
483600.00	3716800.00		4.82022	(12010718)	483700.00
3716800.00	5.56352	(15120217)			
483800.00	3716800.00		5.59056	(14111817)	483900.00
3716800.00	5.64156	(14042905)			
484000.00	3716800.00		5.77058	(12110517)	483100.00
3716900.00	4.17706	(14022018)			
483200.00	3716900.00		4.26874	(12021517)	485600.00
3716900.00	3.49911	(13031818)			
483200.00	3717000.00		4.65621	(14022018)	483300.00
3717000.00	5.06654	(12021517)			
485400.00	3717100.00		4.37818	(12041701)	485500.00
3717100.00	4.11939	(12090719)			
485600.00	3717100.00		3.76657	(13020217)	485700.00
3717100.00	3.69785	(13020217)			
483100.00	3717200.00		5.09391	(15051418)	483200.00
3717300.00	6.55240	(15051418)			
483300.00	3717300.00		7.09611	(15051418)	483400.00
3717300.00	7.21073	(15051418)			
483500.00	3717300.00		7.32195	(13110618)	483800.00
3717300.00	10.41423	(12102617)			
483900.00	3717300.00		13.38065	(14090307)	484000.00
3717300.00	15.18077	(14090307)			
484600.00	3717300.00		20.38439	(14041207)	484700.00
3717300.00	25.15433	(14041207)			
483100.00	3717400.00		5.57927	(15051418)	483200.00
3717400.00	6.90716	(15051418)			
483300.00	3717400.00		8.30952	(15051418)	483400.00
3717400.00	9.57677	(15051418)			
483500.00	3717400.00		10.36469	(15051418)	483800.00
3717400.00	11.81160	(15073019)			
483900.00	3717400.00		14.83473	(12102617)	484000.00
3717400.00	21.66329	(14090307)			
484600.00	3717400.00		36.00447	(14041207)	484700.00
3717400.00	28.79371	(14041207)			
484800.00	3717400.00		22.06992	(12122516)	483100.00
3717500.00	5.39433	(12012702)			
483300.00	3717500.00		7.90545	(15051418)	483400.00
3717500.00	10.25582	(15051418)			
483500.00	3717500.00		12.84023	(15051418)	483600.00
3717500.00	15.13042	(15051418)			
484000.00	3717500.00		23.10206	(14090307)	484600.00



CostcoMurrieta\_Op\_HRA

3717500.00	46.77501	(14041207)			
484700.00	3717500.00		33.22991	(12122516)	483600.00
3717600.00	16.61626	(15051418)			
484600.00	3717600.00		51.50554	(12122516)	484700.00
3717600.00	28.71242	(12122516)			
484800.00	3717600.00		21.43701	(13020217)	484600.00
3717700.00	47.12768	(13020217)			
484700.00	3717700.00		31.03040	(13020217)	484800.00
3717700.00	20.42164	(15011116)			
483400.00	3717800.00		9.01332	(14012317)	483500.00
3717800.00	10.40934	(14012317)			
483600.00	3717800.00		13.09795	(16082707)	484600.00
3717800.00	44.74298	(16010916)			
484700.00	3717800.00		29.48906	(16010916)	485300.00
3717800.00	6.38964	(12060420)			
483300.00	3717900.00		8.33273	(14012317)	483400.00
3717900.00	9.66020	(14012317)			
483500.00	3717900.00		11.64433	(14012317)	484600.00
3717900.00	43.11201	(14101217)			

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 65

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT \*\*\*  
 INCLUDING SOURCE(S): VENT ,  
 \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS  
 \*\*\*

X-COORD (M)		Y-COORD (M)		CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	CONC	(YYMMDDHH)			
484700.00	3717900.00	28.00306	(14101217)			484800.00
3717900.00	19.75159	(14101217)				
485100.00	3717900.00	8.88789	(14101217)			483300.00
3718000.00	8.15024	(12011107)				
483400.00	3718000.00	9.37296	(12011107)			483500.00
3718000.00	10.89246	(12011107)				
483600.00	3718000.00	12.62784	(12011107)			484600.00

CostcoMurrieta\_Op\_HRA

3718000.00	52.96196	(15091218)			
484700.00	3718000.00		35.35921	(16123016)	484800.00
3718000.00	24.97867	(16123016)			
483100.00	3718100.00		6.08472	(12011107)	483400.00
3718100.00	8.47470	(12042521)			
483600.00	3718100.00		12.53567	(12042521)	484600.00
3718100.00	43.81833	(15020517)			
483900.00	3718200.00		32.08997	(14120316)	484500.00
3718200.00	40.39027	(16010616)			
484600.00	3718200.00		46.18951	(15020517)	484700.00
3718200.00	31.02029	(15020517)			
484900.00	3718200.00		14.66644	(15091218)	485400.00
3718200.00	6.34878	(16123016)			
485600.00	3718200.00		5.05245	(16123016)	483100.00
3718300.00	29.42584	(12101520)			
483900.00	3718300.00		27.53880	(14120316)	484000.00
3718300.00	31.12306	(13041407)			
484200.00	3718300.00		36.52821	(15083118)	485300.00
3718300.00	7.20283	(15091218)			
485600.00	3718300.00		4.69392	(12082719)	483400.00
3718400.00	22.77577	(12091418)			
485200.00	3718400.00		6.51713	(15102217)	485200.00
3718500.00	6.22389	(12071319)			
484600.00	3718600.00		14.66100	(15022217)	484800.00
3718600.00	9.04534	(15042018)			
485200.00	3718600.00		8.08087	(15020517)	483700.00
3718700.00	27.30706	(14070820)			
483100.00	3718800.00		24.28961	(12062922)	484000.00
3718800.00	19.48691	(12062821)			
484200.00	3718800.00		9.48517	(15083118)	485400.00
3718800.00	6.04393	(15020517)			
483100.00	3718900.00		23.25946	(13090903)	483200.00
3718900.00	23.06117	(16073101)			
483100.00	3719000.00		21.62251	(12082921)	483200.00
3719000.00	22.75867	(15091120)			
483300.00	3719000.00		22.45524	(13083124)	483400.00
3719000.00	23.40097	(15062820)			
483500.00	3719000.00		24.67554	(12081621)	483100.00
3719100.00	19.55402	(15091120)			
483200.00	3719100.00		20.35762	(13083124)	483300.00
3719100.00	21.97016	(16072221)			
483400.00	3719100.00		22.40525	(13090321)	483500.00
3719100.00	23.11669	(13091420)			
483700.00	3719100.00		26.90913	(16060321)	484900.00
3719100.00	5.33332	(15022217)			
485000.00	3719100.00		4.60545	(16052319)	485100.00
3719100.00	4.35673	(15110218)			
485200.00	3719100.00		4.11543	(16042724)	485300.00

CostcoMurrieta\_Op\_HRA

3719100.00	3.94061	(13040718)			
485400.00	3719100.00		3.84156	(15020517)	485500.00
3719100.00	4.43647	(15020517)			
485600.00	3719100.00		4.48448	(15020517)	485700.00
3719100.00	4.05493	(15020517)			
484200.00	3719200.00		5.54740	(12032218)	484500.00
3719200.00	6.68292	(16012917)			
484800.00	3719200.00		4.83585	(16032823)	484900.00
3719200.00	4.78053	(15022217)			
485000.00	3719200.00		4.31183	(12052520)	485100.00
3719200.00	4.00642	(14042523)			
485200.00	3719200.00		4.00369	(15110218)	485300.00
3719200.00	3.66222	(16042724)			
485400.00	3719200.00		3.44073	(13040718)	485500.00
3719200.00	3.32395	(15020517)			
485600.00	3719200.00		3.83906	(15020517)	485700.00
3719200.00	3.91864	(15020517)			

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 66

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
483500.00	3716600.00	48.36429 (12021603)	483600.00
3716600.00	51.14353 (12010718)		

CostcoMurrieta\_Op\_HRA

483700.00	3716600.00	53.28824	(15120217)	483800.00
3716600.00	54.81369	(15112117)		
483900.00	3716600.00	59.23979	(12101817)	484000.00
3716600.00	59.43848	(12101817)		
485000.00	3716600.00	52.44176	(14100207)	485100.00
3716600.00	61.43362	(13062619)		
483500.00	3716700.00	52.09401	(13011517)	483600.00
3716700.00	57.08575	(12010718)		
483700.00	3716700.00	60.38722	(15120217)	483800.00
3716700.00	63.05980	(14111817)		
483900.00	3716700.00	66.00524	(12101817)	484000.00
3716700.00	68.08748	(12101817)		
485200.00	3716700.00	54.55468	(13050119)	485400.00
3716700.00	51.81378	(16102617)		
485700.00	3716700.00	43.81513	(14101917)	483100.00
3716800.00	50.75022	(14022018)		
483200.00	3716800.00	49.20268	(15073019)	483500.00
3716800.00	59.92701	(15041604)		
483600.00	3716800.00	63.89156	(13011517)	483700.00
3716800.00	75.51412	(12010718)		
483800.00	3716800.00	76.30233	(15120217)	483900.00
3716800.00	75.03848	(15112117)		
484000.00	3716800.00	79.77042	(12101817)	483100.00
3716900.00	55.11555	(14022018)		
483200.00	3716900.00	56.90720	(14022018)	485600.00
3716900.00	49.93420	(13091318)		
483200.00	3717000.00	61.45530	(13110618)	483300.00
3717000.00	67.76065	(14022018)		
485400.00	3717100.00	62.47011	(13091318)	485500.00
3717100.00	57.61481	(14102117)		
485600.00	3717100.00	51.46429	(13041218)	485700.00
3717100.00	48.47335	(13101817)		
483100.00	3717200.00	65.42111	(13010118)	483200.00
3717300.00	72.48578	(13010118)		
483300.00	3717300.00	83.51272	(13010118)	483400.00
3717300.00	92.51475	(15031219)		
483500.00	3717300.00	97.60663	(13112718)	483800.00
3717300.00	137.19675	(14030818)		
483900.00	3717300.00	159.92650	(15041604)	484000.00
3717300.00	189.11486	(12010718)		
484600.00	3717300.00	184.46418	(14100207)	484700.00
3717300.00	157.42418	(13062619)		
483100.00	3717400.00	67.74322	(12012702)	483200.00
3717400.00	75.15337	(12012702)		
483300.00	3717400.00	81.96389	(12012702)	483400.00
3717400.00	91.92062	(13010118)		
483500.00	3717400.00	104.51181	(15031219)	483800.00
3717400.00	159.42477	(14022018)		

CostcoMurrieta\_Op\_HRA

483900.00	3717400.00	205.14679	(14030818)	484000.00
3717400.00	219.33563	(13011517)		
484600.00	3717400.00	247.39951	(16021519)	484700.00
3717400.00	204.60252	(14072719)		
484800.00	3717400.00	170.02425	(13102117)	483100.00
3717500.00	69.24080	(12012702)		
483300.00	3717500.00	89.30624	(12012702)	483400.00
3717500.00	102.09079	(12012702)		
483500.00	3717500.00	113.19576	(12012702)	483600.00
3717500.00	125.91326	(13010118)		
484000.00	3717500.00	283.43624	(14030818)	484600.00
3717500.00	301.53018	(13062619)		
484700.00	3717500.00	284.24043	(13102117)	483600.00
3717600.00	143.38504	(12012702)		
484600.00	3717600.00	362.86583	(13102117)	484700.00
3717600.00	295.89510	(13091318)		
484800.00	3717600.00	224.59013	(13101817)	484600.00
3717700.00	429.41563	(13101817)		
484700.00	3717700.00	318.22454	(12070719)	484800.00
3717700.00	265.74012	(14090418)		
483400.00	3717800.00	113.19078	(14012317)	483500.00
3717800.00	130.37265	(14012317)		
483600.00	3717800.00	152.38836	(14012317)	484600.00
3717800.00	517.22645	(12071220)		
484700.00	3717800.00	332.94352	(12060420)	485300.00
3717800.00	86.82262	(12092318)		
483300.00	3717900.00	104.28887	(12011107)	483400.00
3717900.00	120.34907	(12011107)		
483500.00	3717900.00	150.75530	(12011107)	484600.00
3717900.00	473.32251	(13101917)		

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 67

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L000001 , L000002  
 , L000003 , L000004 , L000005 ,  
 L000006 , L000007 , L000008 , L000009 , L000010  
 , L000011 , L000012 , L000013 ,  
 L000014 , L000015 , L000016 , L000017 , L000018  
 , L000019 , L000020 , L000021 ,  
 L000022 , L000023 , L000024 , L000025 , L000026  
 , L000027 , L000028 , . . . ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

** CONC OF HRA		IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	331.42523	(12090618)	484800.00
3717900.00	249.35237	(12091318)		
485100.00	3717900.00	122.32831	(12091318)	483300.00
3718000.00	109.94139	(12011107)		
483400.00	3718000.00	123.61138	(12122119)	483500.00
3718000.00	141.88255	(12122119)		
483600.00	3718000.00	157.17359	(12122119)	484600.00
3718000.00	382.28902	(12042019)		
484700.00	3718000.00	291.44105	(14091218)	484800.00
3718000.00	231.70905	(13101917)		
483100.00	3718100.00	113.73913	(12072004)	483400.00
3718100.00	138.33281	(12122119)		
483600.00	3718100.00	168.40317	(12042521)	484600.00
3718100.00	304.84568	(16102117)		
483900.00	3718200.00	281.18700	(16121607)	484500.00
3718200.00	275.23551	(12121818)		
484600.00	3718200.00	243.68679	(15090318)	484700.00
3718200.00	209.41914	(12091018)		
484900.00	3718200.00	150.57249	(14091518)	485400.00
3718200.00	74.74742	(13101917)		
485600.00	3718200.00	59.66389	(13101917)	483100.00
3718300.00	191.82365	(12101520)		
483900.00	3718300.00	246.57735	(16073020)	484000.00
3718300.00	256.26458	(12052505)		
484200.00	3718300.00	281.27939	(14121121)	485300.00
3718300.00	78.84377	(16040218)		
485600.00	3718300.00	64.46572	(14040718)	483400.00
3718400.00	192.72351	(12022122)		
485200.00	3718400.00	83.54565	(15041118)	485200.00
3718500.00	78.19511	(15090418)		
484600.00	3718600.00	131.90033	(16032823)	484800.00
3718600.00	112.79414	(15090318)		
485200.00	3718600.00	74.38639	(12091018)	483700.00
3718700.00	208.98215	(14070820)		
483100.00	3718800.00	161.49172	(12062922)	484000.00
3718800.00	173.17180	(12081020)		
484200.00	3718800.00	140.46933	(12081919)	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	57.67942	(12091018)			
483100.00	3718900.00	155.43629	(13090903)		483200.00
3718900.00	148.92517	(16073101)			
483100.00	3719000.00	142.63219	(12082921)		483200.00
3719000.00	148.51966	(15091120)			
483300.00	3719000.00	142.56384	(13083124)		483400.00
3719000.00	144.01439	(16072221)			
483500.00	3719000.00	149.81603	(12081621)		483100.00
3719100.00	128.12858	(15091120)			
483200.00	3719100.00	132.52581	(13090103)		483300.00
3719100.00	141.88464	(16072221)			
483400.00	3719100.00	142.28243	(13090321)		483500.00
3719100.00	145.02303	(13091420)			
483700.00	3719100.00	150.47013	(15101120)		484900.00
3719100.00	62.48427	(12121818)			
485000.00	3719100.00	59.41376	(12052520)		485100.00
3719100.00	57.02409	(15090318)			
485200.00	3719100.00	53.99406	(15090318)		485300.00
3719100.00	50.42812	(16042724)			
485400.00	3719100.00	47.49437	(16102117)		485500.00
3719100.00	45.08001	(16102117)			
485600.00	3719100.00	42.21938	(12091018)		485700.00
3719100.00	42.11865	(12091018)			
484200.00	3719200.00	95.10050	(12081919)		484500.00
3719200.00	67.16216	(12010417)			
484800.00	3719200.00	60.90552	(16032823)		484900.00
3719200.00	58.43550	(15041318)			
485000.00	3719200.00	54.62384	(12052520)		485100.00
3719200.00	52.19316	(15090318)			
485200.00	3719200.00	52.54658	(15090318)		485300.00
3719200.00	47.76826	(16032822)			
485400.00	3719200.00	44.30072	(16102117)		485500.00
3719200.00	43.50811	(16102117)			
485600.00	3719200.00	42.34041	(16102117)		485700.00
3719200.00	40.16717	(12091018)			

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 68

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

CostcoMurrieta\_Op\_HRA

\*\*

GROUP ID ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
IDLING1	1ST HIGHEST VALUE IS 607.10, 0.00) DC	7.25835 AT (	483900.00, 3718200.00, 474.32,
	2ND HIGHEST VALUE IS 607.10, 0.00) DC	6.89788 AT (	484000.00, 3718300.00, 472.61,
	3RD HIGHEST VALUE IS 607.10, 0.00) DC	6.12508 AT (	483900.00, 3718300.00, 475.92,
	4TH HIGHEST VALUE IS 607.10, 0.00) DC	5.40138 AT (	484200.00, 3718300.00, 470.68,
	5TH HIGHEST VALUE IS 607.10, 0.00) DC	4.39721 AT (	484500.00, 3718200.00, 463.25,
	6TH HIGHEST VALUE IS 607.10, 0.00) DC	4.02365 AT (	484000.00, 3717500.00, 459.98,
	7TH HIGHEST VALUE IS 600.98, 0.00) DC	3.94197 AT (	484600.00, 3718000.00, 462.34,
	8TH HIGHEST VALUE IS 496.24, 0.00) DC	3.87334 AT (	484600.00, 3717900.00, 462.18,
	9TH HIGHEST VALUE IS 607.10, 0.00) DC	3.84896 AT (	484600.00, 3718100.00, 461.98,
	10TH HIGHEST VALUE IS 496.24, 0.00) DC	3.84125 AT (	484600.00, 3717800.00, 461.20,
IDLING2	1ST HIGHEST VALUE IS 600.98, 0.00) DC	5.93181 AT (	484600.00, 3718000.00, 462.34,
	2ND HIGHEST VALUE IS 496.24, 0.00) DC	5.88199 AT (	484600.00, 3717800.00, 461.20,
	3RD HIGHEST VALUE IS 496.24, 0.00) DC	5.83862 AT (	484600.00, 3717900.00, 462.18,
	4TH HIGHEST VALUE IS 496.24, 0.00) DC	5.69923 AT (	484600.00, 3717700.00, 457.79,
	5TH HIGHEST VALUE IS 607.10, 0.00) DC	5.42288 AT (	484200.00, 3718300.00, 470.68,
	6TH HIGHEST VALUE IS 607.10, 0.00) DC	5.35153 AT (	484600.00, 3718100.00, 461.98,
	7TH HIGHEST VALUE IS 460.85, 0.00) DC	5.07305 AT (	484600.00, 3717600.00, 460.85,
	8TH HIGHEST VALUE IS 607.10, 0.00) DC	5.03643 AT (	484500.00, 3718200.00, 463.25,
	9TH HIGHEST VALUE IS 607.10, 0.00) DC	4.48408 AT (	484000.00, 3718300.00, 472.61,



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	10TH HIGHEST VALUE IS	4.31053 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
IDLING3	1ST HIGHEST VALUE IS	14.91446 AT (	484600.00,	3717900.00,	462.18,
	496.24, 0.00) DC				
	2ND HIGHEST VALUE IS	14.49933 AT (	484600.00,	3717800.00,	461.20,
	496.24, 0.00) DC				
	3RD HIGHEST VALUE IS	13.80087 AT (	484600.00,	3717700.00,	457.79,
	496.24, 0.00) DC				
	4TH HIGHEST VALUE IS	12.06402 AT (	484600.00,	3717600.00,	460.85,
	460.85, 0.00) DC				
	5TH HIGHEST VALUE IS	10.13091 AT (	484600.00,	3718000.00,	462.34,
	600.98, 0.00) DC				
	6TH HIGHEST VALUE IS	9.20610 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
	7TH HIGHEST VALUE IS	8.91394 AT (	484700.00,	3717900.00,	460.03,
	460.03, 0.00) DC				
	8TH HIGHEST VALUE IS	8.82926 AT (	484700.00,	3717600.00,	462.21,
	462.21, 0.00) DC				
	9TH HIGHEST VALUE IS	8.63423 AT (	484700.00,	3717700.00,	458.24,
	458.24, 0.00) DC				
	10TH HIGHEST VALUE IS	8.39504 AT (	484700.00,	3717800.00,	457.72,
	457.72, 0.00) DC				
IDLING4	1ST HIGHEST VALUE IS	12.55373 AT (	484600.00,	3717800.00,	461.20,
	496.24, 0.00) DC				
	2ND HIGHEST VALUE IS	12.09926 AT (	484600.00,	3717900.00,	462.18,
	496.24, 0.00) DC				
	3RD HIGHEST VALUE IS	11.70671 AT (	484600.00,	3717700.00,	457.79,
	496.24, 0.00) DC				
	4TH HIGHEST VALUE IS	11.59823 AT (	484600.00,	3717600.00,	460.85,
	460.85, 0.00) DC				
	5TH HIGHEST VALUE IS	9.45733 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
	6TH HIGHEST VALUE IS	8.51192 AT (	484600.00,	3718000.00,	462.34,
	600.98, 0.00) DC				
	7TH HIGHEST VALUE IS	7.96061 AT (	484700.00,	3717600.00,	462.21,
	462.21, 0.00) DC				
	8TH HIGHEST VALUE IS	7.64589 AT (	484700.00,	3717900.00,	460.03,
	460.03, 0.00) DC				
	9TH HIGHEST VALUE IS	7.44671 AT (	484700.00,	3717700.00,	458.24,
	458.24, 0.00) DC				
	10TH HIGHEST VALUE IS	7.38917 AT (	484700.00,	3717800.00,	457.72,
	457.72, 0.00) DC				

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\*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

\*\*\*      17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 69

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
IDLING5	1ST HIGHEST VALUE IS	8.69259 AT (	484600.00, 3717800.00, 461.20,
496.24,	0.00) DC		
	2ND HIGHEST VALUE IS	8.58711 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	3RD HIGHEST VALUE IS	8.39801 AT (	484600.00, 3717900.00, 462.18,
496.24,	0.00) DC		
	4TH HIGHEST VALUE IS	8.11443 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		
	5TH HIGHEST VALUE IS	8.11206 AT (	484600.00, 3717500.00, 464.71,
470.55,	0.00) DC		
	6TH HIGHEST VALUE IS	6.67362 AT (	484600.00, 3717400.00, 466.14,
466.14,	0.00) DC		
	7TH HIGHEST VALUE IS	6.55800 AT (	484600.00, 3718000.00, 462.34,
600.98,	0.00) DC		
	8TH HIGHEST VALUE IS	5.96396 AT (	484700.00, 3717500.00, 468.73,
470.51,	0.00) DC		
	9TH HIGHEST VALUE IS	5.92225 AT (	484700.00, 3717600.00, 462.21,
462.21,	0.00) DC		
	10TH HIGHEST VALUE IS	5.66234 AT (	484700.00, 3717900.00, 460.03,
460.03,	0.00) DC		
IDLING6	1ST HIGHEST VALUE IS	8.40043 AT (	484600.00, 3717900.00, 462.18,
496.24,	0.00) DC		
	2ND HIGHEST VALUE IS	8.10957 AT (	484600.00, 3717800.00, 461.20,
496.24,	0.00) DC		
	3RD HIGHEST VALUE IS	7.90752 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		
	4TH HIGHEST VALUE IS	7.85648 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	5TH HIGHEST VALUE IS	7.21095 AT (	484600.00, 3718000.00, 462.34,

CostcoMurrieta\_Op\_HRA

600.98,	0.00) DC			
	6TH HIGHEST VALUE IS	7.06644	AT ( 484600.00,	3717500.00,
470.55,	0.00) DC			464.71,
	7TH HIGHEST VALUE IS	5.76823	AT ( 484600.00,	3717400.00,
466.14,	0.00) DC			466.14,
	8TH HIGHEST VALUE IS	5.67220	AT ( 484700.00,	3717500.00,
470.51,	0.00) DC			468.73,
	9TH HIGHEST VALUE IS	5.63088	AT ( 484700.00,	3717600.00,
462.21,	0.00) DC			462.21,
	10TH HIGHEST VALUE IS	5.52156	AT ( 484700.00,	3717900.00,
460.03,	0.00) DC			460.03,
ISLAND	1ST HIGHEST VALUE IS	10.22577	AT ( 484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	2ND HIGHEST VALUE IS	9.82108	AT ( 484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	3RD HIGHEST VALUE IS	9.58430	AT ( 484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
	4TH HIGHEST VALUE IS	8.32666	AT ( 484600.00,	3718100.00,
607.10,	0.00) DC			461.98,
	5TH HIGHEST VALUE IS	8.07054	AT ( 484500.00,	3718200.00,
607.10,	0.00) DC			463.25,
	6TH HIGHEST VALUE IS	8.03255	AT ( 484600.00,	3717700.00,
496.24,	0.00) DC			457.79,
	7TH HIGHEST VALUE IS	6.89823	AT ( 484200.00,	3718300.00,
607.10,	0.00) DC			470.68,
	8TH HIGHEST VALUE IS	6.53394	AT ( 484600.00,	3717600.00,
460.85,	0.00) DC			460.85,
	9TH HIGHEST VALUE IS	6.49350	AT ( 484700.00,	3717900.00,
460.03,	0.00) DC			460.03,
	10TH HIGHEST VALUE IS	6.41603	AT ( 484600.00,	3718200.00,
607.10,	0.00) DC			461.86,
TRAFFIC2	1ST HIGHEST VALUE IS	10.86070	AT ( 484000.00,	3717500.00,
607.10,	0.00) DC			459.98,
	2ND HIGHEST VALUE IS	7.85914	AT ( 484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
	3RD HIGHEST VALUE IS	7.67911	AT ( 484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	4TH HIGHEST VALUE IS	7.31228	AT ( 484600.00,	3717700.00,
496.24,	0.00) DC			457.79,
	5TH HIGHEST VALUE IS	6.89840	AT ( 484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	6TH HIGHEST VALUE IS	6.80678	AT ( 484000.00,	3717400.00,
527.82,	0.00) DC			460.17,
	7TH HIGHEST VALUE IS	6.51199	AT ( 484600.00,	3717600.00,
460.85,	0.00) DC			460.85,
	8TH HIGHEST VALUE IS	6.14906	AT ( 483900.00,	3718200.00,
				474.32,

CostcoMurrieta\_Op\_HRA

607.10, 0.00) DC  
9TH HIGHEST VALUE IS 5.86121 AT ( 484200.00, 3718300.00, 470.68,  
607.10, 0.00) DC  
10TH HIGHEST VALUE IS 5.84567 AT ( 484500.00, 3718200.00, 463.25,  
607.10, 0.00) DC

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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 70

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848

HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
TRAVEL1	1ST HIGHEST VALUE IS	45.80703 AT (	484000.00, 3717500.00, 459.98,
607.10,	0.00) DC		
	2ND HIGHEST VALUE IS	19.41868 AT (	484000.00, 3717400.00, 460.17,
527.82,	0.00) DC		
	3RD HIGHEST VALUE IS	14.18351 AT (	483900.00, 3717400.00, 463.87,
527.82,	0.00) DC		
	4TH HIGHEST VALUE IS	11.12409 AT (	484000.00, 3717300.00, 463.70,
527.82,	0.00) DC		
	5TH HIGHEST VALUE IS	9.06037 AT (	483800.00, 3717400.00, 453.35,
607.10,	0.00) DC		
	6TH HIGHEST VALUE IS	8.83546 AT (	483900.00, 3717300.00, 456.93,
527.82,	0.00) DC		
	7TH HIGHEST VALUE IS	6.66964 AT (	483800.00, 3717300.00, 452.28,
606.63,	0.00) DC		
	8TH HIGHEST VALUE IS	6.58197 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	9TH HIGHEST VALUE IS	6.33316 AT (	484600.00, 3717500.00, 464.71,
470.55,	0.00) DC		
	10TH HIGHEST VALUE IS	6.26885 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		

CostcoMurrieta\_Op\_HRA

TRAVEL3	1ST HIGHEST VALUE IS	35.29173	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	28.68079	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	3RD HIGHEST VALUE IS	27.10172	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					
	4TH HIGHEST VALUE IS	16.87992	AT (	484600.00,	3717700.00,	457.79,
496.24,	0.00) DC					
	5TH HIGHEST VALUE IS	16.39778	AT (	484600.00,	3718100.00,	461.98,
607.10,	0.00) DC					
	6TH HIGHEST VALUE IS	15.38388	AT (	484700.00,	3717900.00,	460.03,
460.03,	0.00) DC					
	7TH HIGHEST VALUE IS	13.99447	AT (	484700.00,	3718000.00,	460.03,
460.03,	0.00) DC					
	8TH HIGHEST VALUE IS	13.73984	AT (	484700.00,	3717800.00,	457.72,
457.72,	0.00) DC					
	9TH HIGHEST VALUE IS	12.03277	AT (	484500.00,	3718200.00,	463.25,
607.10,	0.00) DC					
	10TH HIGHEST VALUE IS	10.74632	AT (	484700.00,	3717700.00,	458.24,
458.24,	0.00) DC					
VENT	1ST HIGHEST VALUE IS	10.24644	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	9.73032	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					
	3RD HIGHEST VALUE IS	9.55050	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	4TH HIGHEST VALUE IS	8.14457	AT (	484600.00,	3718100.00,	461.98,
607.10,	0.00) DC					
	5TH HIGHEST VALUE IS	8.05123	AT (	484500.00,	3718200.00,	463.25,
607.10,	0.00) DC					
	6TH HIGHEST VALUE IS	7.95508	AT (	484600.00,	3717700.00,	457.79,
496.24,	0.00) DC					
	7TH HIGHEST VALUE IS	6.90608	AT (	484200.00,	3718300.00,	470.68,
607.10,	0.00) DC					
	8TH HIGHEST VALUE IS	6.52053	AT (	484700.00,	3717900.00,	460.03,
460.03,	0.00) DC					
	9TH HIGHEST VALUE IS	6.44779	AT (	484600.00,	3717600.00,	460.85,
460.85,	0.00) DC					
	10TH HIGHEST VALUE IS	6.36030	AT (	484700.00,	3718000.00,	460.03,
460.03,	0.00) DC					
ALL	1ST HIGHEST VALUE IS	121.66907	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	114.84684	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	3RD HIGHEST VALUE IS	99.70056	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					

CostcoMurrieta\_Op\_HRA

4TH HIGHEST VALUE IS 97.42871 AT ( 484600.00, 3717700.00, 457.79,  
 496.24, 0.00) DC  
 5TH HIGHEST VALUE IS 90.21518 AT ( 484000.00, 3717500.00, 459.98,  
 607.10, 0.00) DC  
 6TH HIGHEST VALUE IS 85.42267 AT ( 484600.00, 3717600.00, 460.85,  
 460.85, 0.00) DC  
 7TH HIGHEST VALUE IS 73.51326 AT ( 484600.00, 3718100.00, 461.98,  
 607.10, 0.00) DC  
 8TH HIGHEST VALUE IS 71.95381 AT ( 484700.00, 3717900.00, 460.03,  
 460.03, 0.00) DC  
 9TH HIGHEST VALUE IS 70.85757 AT ( 484600.00, 3717500.00, 464.71,  
 470.55, 0.00) DC  
 10TH HIGHEST VALUE IS 68.91362 AT ( 484700.00, 3717800.00, 457.72,  
 457.72, 0.00) DC

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

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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 71

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF HIGHEST 1-HR

RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK AVERAGE CONC OF TYPE GRID-ID	DATE (YYMMDDHH)	RECEPTOR
IDLING1 HIGH 1ST HIGH VALUE IS 3718200.00, 474.32, 607.10, 0.00) DC	51.61973	ON 16073020: AT ( 483900.00,	
IDLING2 HIGH 1ST HIGH VALUE IS 3717900.00, 462.18, 496.24, 0.00) DC	45.22430	ON 12092318: AT ( 484600.00,	

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IDLING3 HIGH 1ST HIGH VALUE IS 114.51201 ON 16021419: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING4 HIGH 1ST HIGH VALUE IS 96.19733 ON 15103005: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING5 HIGH 1ST HIGH VALUE IS 65.25150 ON 12091318: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING6 HIGH 1ST HIGH VALUE IS 61.15113 ON 12092318: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

ISLAND HIGH 1ST HIGH VALUE IS 64.36639 ON 12122516: AT ( 484600.00,  
3717600.00, 460.85, 460.85, 0.00) DC

TRAFFIC2 HIGH 1ST HIGH VALUE IS 30.10767 ON 12012316: AT ( 484000.00,  
3717500.00, 459.98, 607.10, 0.00) DC

TRAVEL1 HIGH 1ST HIGH VALUE IS 139.21642 ON 15051418: AT ( 484000.00,  
3717500.00, 459.98, 607.10, 0.00) DC

TRAVEL3 HIGH 1ST HIGH VALUE IS 144.38611 ON 12122516: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

VENT HIGH 1ST HIGH VALUE IS 52.96196 ON 15091218: AT ( 484600.00,  
3718000.00, 462.34, 600.98, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 517.22645 ON 12071220: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

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

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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 72

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

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

A Total of 0 Fatal Error Message(s)

CostcoMurrieta\_Op\_HRA

A Total of 2 Warning Message(s)  
A Total of 1763 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 884 Calm Hours Identified  
  
A Total of 879 Missing Hours Identified ( 2.00 Percent)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 680 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used  
0.50  
ME W187 680 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*



GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 14  
16 to 70 Years Bin: 0

\*\*\*\*\*

PATHWAYS ENABLED

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

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

\*\*\*\*\*

INHALATION

Victoria\_Op\_30yrCancerOutput

Daily breathing rate: LongTerm24HR

**\*\*Worker Adjustment Factors\*\***

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 not used.

\*\*\*\*\*

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VICTORIAGREENS\_OPERATIONAL\hra\Victoria\_Op\_30yrCancerCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\swang\Documents\1. Projects\10029.5

Victoria Greens\HRA\HARP 2\HARP 2

Output\VICTORIAGREENS\_OPERATIONAL\hra\Victoria\_Op\_30yrCancerCancerRiskSumByRec.csv

HRA ran successfully





ia\_Op\_30yrCancerHRAInput.hra

CostcoMurrieta\_Op\_HRA

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\*\* AERMOD Input Produced by:

\*\* AERMOD View Ver. 9.6.0

\*\* Lakes Environmental Software Inc.

\*\* Date: 7/10/2018

\*\* File: C:\Lakes\AERMOD View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.ADI

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\*\* AERMOD Control Pathway

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CO STARTING

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MODELOPT DFAULT CONC

AVERTIME 1 PERIOD

URBANOPT 2189461 Riverside

POLLUTID HRA

RUNORNOT RUN

ERRORFIL CostcoMurrieta\_Op\_HRA.err

CO FINISHED

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\*\* AERMOD Source Pathway

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\*\*

SO STARTING

\*\* Source Location \*\*

\*\* Source ID - Type - X Coord. - Y Coord. \*\*

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\*\* Line Source Represented by Separated Volume Sources

\*\* LINE VOLUME Source ID = TRAVEL1

\*\* DESCRSRC Clinton Road West Truck Traveling

\*\* PREFIX

\*\* Length of Side = 3.40

\*\* Configuration = Separated

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 0.85

\*\* SZINIT = 0.40

\*\* Nodes = 6

\*\* 484308.135, 3717579.853, 462.82, 5.00, 3.11

\*\* 484088.891, 3717579.853, 465.67, 5.00, 3.11

CostcoMurrieta\_Op\_HRA

\*\* 484068.683, 3717582.067, 466.40, 5.00, 3.11  
 \*\* 484052.627, 3717583.728, 466.48, 5.00, 3.11  
 \*\* 484017.470, 3717590.649, 466.32, 5.00, 3.11  
 \*\* 483935.530, 3717616.670, 465.66, 5.00, 3.11

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LOCATION	VOLUME				
L0000001	VOLUME	484306.435	3717579.853	462.86	
L0000002	VOLUME	484299.755	3717579.853	462.82	
L0000003	VOLUME	484293.074	3717579.853	462.86	
L0000004	VOLUME	484286.393	3717579.853	462.89	
L0000005	VOLUME	484279.712	3717579.853	462.90	
L0000006	VOLUME	484273.032	3717579.853	462.90	
L0000007	VOLUME	484266.351	3717579.853	462.97	
L0000008	VOLUME	484259.670	3717579.853	463.08	
L0000009	VOLUME	484252.990	3717579.853	463.18	
L0000010	VOLUME	484246.309	3717579.853	463.29	
L0000011	VOLUME	484239.628	3717579.853	463.43	
L0000012	VOLUME	484232.948	3717579.853	463.49	
L0000013	VOLUME	484226.267	3717579.853	463.38	
L0000014	VOLUME	484219.586	3717579.853	463.30	
L0000015	VOLUME	484212.906	3717579.853	463.33	
L0000016	VOLUME	484206.225	3717579.853	463.43	
L0000017	VOLUME	484199.544	3717579.853	463.46	
L0000018	VOLUME	484192.863	3717579.853	463.50	
L0000019	VOLUME	484186.183	3717579.853	463.53	
L0000020	VOLUME	484179.502	3717579.853	463.53	
L0000021	VOLUME	484172.821	3717579.853	463.52	
L0000022	VOLUME	484166.141	3717579.853	463.51	
L0000023	VOLUME	484159.460	3717579.853	463.59	
L0000024	VOLUME	484152.779	3717579.853	463.74	
L0000025	VOLUME	484146.099	3717579.853	463.87	
L0000026	VOLUME	484139.418	3717579.853	463.87	
L0000027	VOLUME	484132.737	3717579.853	463.94	
L0000028	VOLUME	484126.057	3717579.853	464.10	
L0000029	VOLUME	484119.376	3717579.853	464.36	
L0000030	VOLUME	484112.695	3717579.853	464.66	
L0000031	VOLUME	484106.014	3717579.853	465.04	
L0000032	VOLUME	484099.334	3717579.853	465.43	
L0000033	VOLUME	484092.653	3717579.853	465.78	
L0000034	VOLUME	484085.990	3717580.171	466.00	
L0000035	VOLUME	484079.349	3717580.899	466.16	
L0000036	VOLUME	484072.708	3717581.626	466.33	
L0000037	VOLUME	484066.065	3717582.338	466.45	
L0000038	VOLUME	484059.420	3717583.026	466.48	
L0000039	VOLUME	484052.775	3717583.713	466.35	
L0000040	VOLUME	484046.218	3717584.990	466.26	
L0000041	VOLUME	484039.663	3717586.280	466.24	
L0000042	VOLUME	484033.108	3717587.571	466.29	
L0000043	VOLUME	484026.553	3717588.861	466.33	

CostcoMurrieta\_Op\_HRA

LOCATION	L0000044	VOLUME	484019.998	3717590.151	466.38
LOCATION	L0000045	VOLUME	484013.559	3717591.891	466.55
LOCATION	L0000046	VOLUME	484007.191	3717593.913	466.80
LOCATION	L0000047	VOLUME	484000.824	3717595.935	467.07
LOCATION	L0000048	VOLUME	483994.457	3717597.957	467.32
LOCATION	L0000049	VOLUME	483988.089	3717599.979	467.56
LOCATION	L0000050	VOLUME	483981.722	3717602.002	467.81
LOCATION	L0000051	VOLUME	483975.355	3717604.024	468.09
LOCATION	L0000052	VOLUME	483968.987	3717606.046	468.33
LOCATION	L0000053	VOLUME	483962.620	3717608.068	468.42
LOCATION	L0000054	VOLUME	483956.253	3717610.090	468.24
LOCATION	L0000055	VOLUME	483949.885	3717612.112	467.56
LOCATION	L0000056	VOLUME	483943.518	3717614.134	466.73
LOCATION	L0000057	VOLUME	483937.151	3717616.156	465.87
** End of LINE VOLUME Source ID = TRAVEL1					
LOCATION	IDLING1	POINT	484148.500	3717920.370	472.590
** DESCRSRC Costco delivery truck idling loading dock					
LOCATION	IDLING2	POINT	484297.020	3717916.130	489.350
** DESCRSRC Costco gas station truck delivery idling					
** -----					
** Line Source Represented by Separated Volume Sources					
** LINE VOLUME Source ID = TRAFFIC2					
** DESCRSRC Delivery truck trip traveling onsite					
** PREFIX					
** Length of Side = 3.40					
** Configuration = Separated					
** Emission Rate = 1.0					
** Vertical Dimension = 0.85					
** SZINIT = 0.40					
** Nodes = 8					
** 484303.914, 3717589.923, 462.99, 5.00, 3.16					
** 484306.036, 3717841.338, 471.30, 5.00, 3.16					
** 484330.434, 3717936.811, 493.55, 5.00, 3.16					
** 484147.973, 3717938.933, 471.82, 5.00, 3.16					
** 484084.854, 3717958.558, 469.07, 5.00, 3.16					
** 484039.769, 3717699.187, 472.63, 5.00, 3.16					
** 484086.446, 3717685.397, 474.90, 5.00, 3.16					
** 484081.141, 3717600.001, 468.82, 5.00, 3.16					
** -----					
LOCATION	L0000058	VOLUME	484303.928	3717591.623	463.03
LOCATION	L0000059	VOLUME	484303.986	3717598.421	463.17
LOCATION	L0000060	VOLUME	484304.043	3717605.220	463.34
LOCATION	L0000061	VOLUME	484304.100	3717612.019	463.43
LOCATION	L0000062	VOLUME	484304.158	3717618.817	463.44
LOCATION	L0000063	VOLUME	484304.215	3717625.616	463.56
LOCATION	L0000064	VOLUME	484304.273	3717632.414	463.67
LOCATION	L0000065	VOLUME	484304.330	3717639.213	463.75
LOCATION	L0000066	VOLUME	484304.387	3717646.012	463.89



CostcoMurrieta\_Op\_HRA

LOCATION L0000067	VOLUME	484304.445	3717652.810	464.10
LOCATION L0000068	VOLUME	484304.502	3717659.609	464.39
LOCATION L0000069	VOLUME	484304.559	3717666.407	464.85
LOCATION L0000070	VOLUME	484304.617	3717673.206	465.35
LOCATION L0000071	VOLUME	484304.674	3717680.005	465.87
LOCATION L0000072	VOLUME	484304.731	3717686.803	466.34
LOCATION L0000073	VOLUME	484304.789	3717693.602	466.80
LOCATION L0000074	VOLUME	484304.846	3717700.400	467.25
LOCATION L0000075	VOLUME	484304.904	3717707.199	467.72
LOCATION L0000076	VOLUME	484304.961	3717713.998	468.15
LOCATION L0000077	VOLUME	484305.018	3717720.796	468.56
LOCATION L0000078	VOLUME	484305.076	3717727.595	468.96
LOCATION L0000079	VOLUME	484305.133	3717734.393	469.37
LOCATION L0000080	VOLUME	484305.190	3717741.192	469.78
LOCATION L0000081	VOLUME	484305.248	3717747.991	470.14
LOCATION L0000082	VOLUME	484305.305	3717754.789	470.46
LOCATION L0000083	VOLUME	484305.363	3717761.588	470.76
LOCATION L0000084	VOLUME	484305.420	3717768.386	471.07
LOCATION L0000085	VOLUME	484305.477	3717775.185	471.36
LOCATION L0000086	VOLUME	484305.535	3717781.984	471.62
LOCATION L0000087	VOLUME	484305.592	3717788.782	471.66
LOCATION L0000088	VOLUME	484305.649	3717795.581	471.57
LOCATION L0000089	VOLUME	484305.707	3717802.379	471.32
LOCATION L0000090	VOLUME	484305.764	3717809.178	470.87
LOCATION L0000091	VOLUME	484305.822	3717815.976	470.38
LOCATION L0000092	VOLUME	484305.879	3717822.775	469.93
LOCATION L0000093	VOLUME	484305.936	3717829.574	469.80
LOCATION L0000094	VOLUME	484305.994	3717836.372	470.13
LOCATION L0000095	VOLUME	484306.490	3717843.114	471.39
LOCATION L0000096	VOLUME	484308.173	3717849.701	473.16
LOCATION L0000097	VOLUME	484309.856	3717856.288	474.94
LOCATION L0000098	VOLUME	484311.540	3717862.875	476.48
LOCATION L0000099	VOLUME	484313.223	3717869.462	478.00
LOCATION L0000100	VOLUME	484314.906	3717876.050	479.51
LOCATION L0000101	VOLUME	484316.590	3717882.637	480.90
LOCATION L0000102	VOLUME	484318.273	3717889.224	482.19
LOCATION L0000103	VOLUME	484319.957	3717895.811	483.33
LOCATION L0000104	VOLUME	484321.640	3717902.398	484.81
LOCATION L0000105	VOLUME	484323.323	3717908.985	486.53
LOCATION L0000106	VOLUME	484325.007	3717915.572	488.63
LOCATION L0000107	VOLUME	484326.690	3717922.160	490.32
LOCATION L0000108	VOLUME	484328.373	3717928.747	491.84
LOCATION L0000109	VOLUME	484330.057	3717935.334	493.41
LOCATION L0000110	VOLUME	484325.161	3717936.873	494.43
LOCATION L0000111	VOLUME	484318.363	3717936.952	494.83
LOCATION L0000112	VOLUME	484311.564	3717937.031	495.13
LOCATION L0000113	VOLUME	484304.766	3717937.110	495.08
LOCATION L0000114	VOLUME	484297.968	3717937.189	494.54

CostcoMurrieta\_Op\_HRA

LOCATION L0000115	VOLUME	484291.169	3717937.268	493.47
LOCATION L0000116	VOLUME	484284.371	3717937.347	491.87
LOCATION L0000117	VOLUME	484277.572	3717937.426	490.49
LOCATION L0000118	VOLUME	484270.774	3717937.505	489.28
LOCATION L0000119	VOLUME	484263.976	3717937.584	487.89
LOCATION L0000120	VOLUME	484257.177	3717937.663	486.03
LOCATION L0000121	VOLUME	484250.379	3717937.742	483.72
LOCATION L0000122	VOLUME	484243.581	3717937.821	481.92
LOCATION L0000123	VOLUME	484236.782	3717937.900	480.37
LOCATION L0000124	VOLUME	484229.984	3717937.979	478.99
LOCATION L0000125	VOLUME	484223.185	3717938.059	477.72
LOCATION L0000126	VOLUME	484216.387	3717938.138	476.68
LOCATION L0000127	VOLUME	484209.589	3717938.217	475.95
LOCATION L0000128	VOLUME	484202.790	3717938.296	475.44
LOCATION L0000129	VOLUME	484195.992	3717938.375	475.04
LOCATION L0000130	VOLUME	484189.193	3717938.454	474.64
LOCATION L0000131	VOLUME	484182.395	3717938.533	474.23
LOCATION L0000132	VOLUME	484175.597	3717938.612	473.77
LOCATION L0000133	VOLUME	484168.798	3717938.691	473.26
LOCATION L0000134	VOLUME	484162.000	3717938.770	472.71
LOCATION L0000135	VOLUME	484155.202	3717938.849	472.20
LOCATION L0000136	VOLUME	484148.403	3717938.928	471.87
LOCATION L0000137	VOLUME	484141.892	3717940.824	471.54
LOCATION L0000138	VOLUME	484135.399	3717942.843	471.14
LOCATION L0000139	VOLUME	484128.907	3717944.861	470.69
LOCATION L0000140	VOLUME	484122.415	3717946.880	470.25
LOCATION L0000141	VOLUME	484115.923	3717948.898	469.92
LOCATION L0000142	VOLUME	484109.430	3717950.917	469.68
LOCATION L0000143	VOLUME	484102.938	3717952.936	469.51
LOCATION L0000144	VOLUME	484096.446	3717954.954	469.38
LOCATION L0000145	VOLUME	484089.953	3717956.973	469.20
LOCATION L0000146	VOLUME	484084.604	3717957.121	469.03
LOCATION L0000147	VOLUME	484083.440	3717950.423	469.11
LOCATION L0000148	VOLUME	484082.276	3717943.724	469.17
LOCATION L0000149	VOLUME	484081.111	3717937.026	469.17
LOCATION L0000150	VOLUME	484079.947	3717930.327	469.31
LOCATION L0000151	VOLUME	484078.783	3717923.629	469.49
LOCATION L0000152	VOLUME	484077.618	3717916.931	469.72
LOCATION L0000153	VOLUME	484076.454	3717910.232	469.88
LOCATION L0000154	VOLUME	484075.290	3717903.534	470.04
LOCATION L0000155	VOLUME	484074.125	3717896.835	470.20
LOCATION L0000156	VOLUME	484072.961	3717890.137	470.43
LOCATION L0000157	VOLUME	484071.797	3717883.439	470.54
LOCATION L0000158	VOLUME	484070.632	3717876.740	470.51
LOCATION L0000159	VOLUME	484069.468	3717870.042	470.59
LOCATION L0000160	VOLUME	484068.304	3717863.343	470.70
LOCATION L0000161	VOLUME	484067.139	3717856.645	470.75
LOCATION L0000162	VOLUME	484065.975	3717849.947	470.84

CostcoMurrieta\_Op\_HRA

LOCATION	L0000163	VOLUME	484064.811	3717843.248	470.94
LOCATION	L0000164	VOLUME	484063.646	3717836.550	471.03
LOCATION	L0000165	VOLUME	484062.482	3717829.851	471.03
LOCATION	L0000166	VOLUME	484061.318	3717823.153	471.00
LOCATION	L0000167	VOLUME	484060.153	3717816.455	471.01
LOCATION	L0000168	VOLUME	484058.989	3717809.756	470.96
LOCATION	L0000169	VOLUME	484057.825	3717803.058	470.88
LOCATION	L0000170	VOLUME	484056.660	3717796.359	470.92
LOCATION	L0000171	VOLUME	484055.496	3717789.661	470.96
LOCATION	L0000172	VOLUME	484054.332	3717782.963	471.00
LOCATION	L0000173	VOLUME	484053.167	3717776.264	471.07
LOCATION	L0000174	VOLUME	484052.003	3717769.566	471.25
LOCATION	L0000175	VOLUME	484050.839	3717762.867	471.52
LOCATION	L0000176	VOLUME	484049.674	3717756.169	471.70
LOCATION	L0000177	VOLUME	484048.510	3717749.471	471.93
LOCATION	L0000178	VOLUME	484047.345	3717742.772	472.19
LOCATION	L0000179	VOLUME	484046.181	3717736.074	472.33
LOCATION	L0000180	VOLUME	484045.017	3717729.375	472.46
LOCATION	L0000181	VOLUME	484043.852	3717722.677	472.61
LOCATION	L0000182	VOLUME	484042.688	3717715.979	472.65
LOCATION	L0000183	VOLUME	484041.524	3717709.280	472.69
LOCATION	L0000184	VOLUME	484040.359	3717702.582	472.71
LOCATION	L0000185	VOLUME	484042.985	3717698.237	472.85
LOCATION	L0000186	VOLUME	484049.506	3717696.311	473.17
LOCATION	L0000187	VOLUME	484056.026	3717694.384	473.49
LOCATION	L0000188	VOLUME	484062.546	3717692.458	473.78
LOCATION	L0000189	VOLUME	484069.066	3717690.532	474.05
LOCATION	L0000190	VOLUME	484075.587	3717688.605	474.39
LOCATION	L0000191	VOLUME	484082.107	3717686.679	474.77
LOCATION	L0000192	VOLUME	484086.305	3717683.127	475.00
LOCATION	L0000193	VOLUME	484085.883	3717676.341	474.69
LOCATION	L0000194	VOLUME	484085.462	3717669.555	474.26
LOCATION	L0000195	VOLUME	484085.040	3717662.769	473.71
LOCATION	L0000196	VOLUME	484084.619	3717655.983	473.16
LOCATION	L0000197	VOLUME	484084.197	3717649.198	472.63
LOCATION	L0000198	VOLUME	484083.776	3717642.412	472.18
LOCATION	L0000199	VOLUME	484083.354	3717635.626	471.74
LOCATION	L0000200	VOLUME	484082.933	3717628.840	471.32
LOCATION	L0000201	VOLUME	484082.511	3717622.055	470.85
LOCATION	L0000202	VOLUME	484082.090	3717615.269	470.26
LOCATION	L0000203	VOLUME	484081.668	3717608.483	469.58
LOCATION	L0000204	VOLUME	484081.247	3717601.697	468.74

\*\* End of LINE VOLUME Source ID = TRAFFIC2  
\*\* -----  
\*\* Line Source Represented by Separated Volume Sources  
\*\* LINE VOLUME Source ID = TRAVEL3  
\*\* DESCRSRC Major retail truck delivery travel onsite  
\*\* PREFIX

CostcoMurrieta\_Op\_HRA

\*\* Length of Side = 3.40  
 \*\* Configuration = Separated  
 \*\* Emission Rate = 1.0  
 \*\* Vertical Dimension = 0.85  
 \*\* SZINIT = 0.40  
 \*\* Nodes = 3  
 \*\* 484339.982, 3717936.281, 492.01, 5.00, 3.13  
 \*\* 484459.855, 3717934.690, 468.72, 5.00, 3.13  
 \*\* 484463.037, 3717808.982, 463.29, 5.00, 3.13

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LOCATION	VOLUME	Source ID	Value 1	Value 2	Value 3
L0000712	484341.682	3717936.258	491.58		
L0000713	484348.410	3717936.169	490.24		
L0000714	484355.138	3717936.080	488.64		
L0000715	484361.866	3717935.991	486.55		
L0000716	484368.594	3717935.901	483.91		
L0000717	484375.322	3717935.812	482.07		
L0000718	484382.050	3717935.723	480.64		
L0000719	484388.778	3717935.633	479.42		
L0000720	484395.506	3717935.544	478.19		
L0000721	484402.234	3717935.455	477.04		
L0000722	484408.962	3717935.365	475.99		
L0000723	484415.690	3717935.276	474.98		
L0000724	484422.418	3717935.187	473.96		
L0000725	484429.146	3717935.097	472.93		
L0000726	484435.874	3717935.008	471.91		
L0000727	484442.602	3717934.919	470.88		
L0000728	484449.330	3717934.830	469.90		
L0000729	484456.059	3717934.740	469.00		
L0000730	484459.929	3717931.759	468.45		
L0000731	484460.099	3717925.032	468.22		
L0000732	484460.269	3717918.306	467.99		
L0000733	484460.440	3717911.579	467.77		
L0000734	484460.610	3717904.853	467.52		
L0000735	484460.780	3717898.126	467.14		
L0000736	484460.951	3717891.400	466.84		
L0000737	484461.121	3717884.673	466.56		
L0000738	484461.291	3717877.947	466.13		
L0000739	484461.462	3717871.220	465.70		
L0000740	484461.632	3717864.494	465.29		
L0000741	484461.802	3717857.767	465.10		
L0000742	484461.972	3717851.041	465.04		
L0000743	484462.143	3717844.314	465.07		
L0000744	484462.313	3717837.588	464.79		
L0000745	484462.483	3717830.861	464.48		
L0000746	484462.654	3717824.135	464.12		
L0000747	484462.824	3717817.408	463.80		
L0000748	484462.994	3717810.682	463.54		

\*\* End of LINE VOLUME Source ID = TRAVEL3

CostcoMurrieta\_Op\_HRA

LOCATION	IDLING3	POINT	484449.250	3717812.700	463.750
**	DESCRSRC	Major retail delivery truck idling			
LOCATION	IDLING4	POINT	484415.830	3717786.170	463.540
**	DESCRSRC	Shop truck delivery idling			
LOCATION	IDLING5	POINT	484350.590	3717765.490	466.610
**	DESCRSRC	Fast food truck delivery idling			
LOCATION	IDLING6	POINT	484347.410	3717814.290	468.840
**	DESCRSRC	Shop delivery trip idling			
LOCATION	ISLAND	VOLUME	484274.671	3717886.698	483.020
**	DESCRSRC	Costco Fuel Station Island Refueling and Spillage			
LOCATION	VENT	POINT	484274.480	3717887.270	483.090
**	DESCRSRC	Ventpipe loading and breathing			
**	Source Parameters **				
**	LINE	VOLUME	Source	ID	= TRAVEL1
	SRCPARAM	L0000001	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000002	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000003	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000004	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000005	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000006	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000007	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000008	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000009	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000010	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000011	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000012	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000013	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000014	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000015	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000016	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000017	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000018	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000019	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000020	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000021	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000022	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000023	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000024	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000025	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000026	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000027	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000028	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000029	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000030	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000031	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000032	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000033	0.0175438596	5.00	3.11 0.40
	SRCPARAM	L0000034	0.0175438596	5.00	3.11 0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000035	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000036	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000037	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000038	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000039	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000040	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000041	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000042	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000043	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000044	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000045	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000046	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000047	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000048	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000049	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000050	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000051	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000052	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000053	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000054	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000055	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000056	0.0175438596	5.00	3.11	0.40
SRCPARAM	L0000057	0.0175438596	5.00	3.11	0.40

\*\*

SRCPARAM	IDLING1	1.0	3.962	501.000	49.00000	0.100
SRCPARAM	IDLING2	1.0	3.962	501.000	49.00000	0.100

\*\*

LINE VOLUME Source ID = TRAFFIC2

SRCPARAM	L0000058	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000059	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000060	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000061	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000062	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000063	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000064	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000065	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000066	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000067	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000068	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000069	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000070	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000071	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000072	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000073	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000074	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000075	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000076	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000077	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000078	0.0068027211	5.00	3.16	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000079	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000080	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000081	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000082	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000083	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000084	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000085	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000086	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000087	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000088	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000089	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000090	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000091	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000092	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000093	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000094	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000095	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000096	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000097	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000098	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000099	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000100	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000101	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000102	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000103	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000104	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000105	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000106	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000107	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000108	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000109	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000110	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000111	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000112	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000113	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000114	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000115	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000116	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000117	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000118	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000119	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000120	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000121	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000122	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000123	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000124	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000125	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000126	0.0068027211	5.00	3.16	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM L0000127	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000128	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000129	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000130	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000131	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000132	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000133	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000134	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000135	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000136	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000137	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000138	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000139	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000140	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000141	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000142	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000143	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000144	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000145	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000146	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000147	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000148	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000149	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000150	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000151	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000152	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000153	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000154	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000155	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000156	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000157	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000158	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000159	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000160	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000161	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000162	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000163	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000164	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000165	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000166	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000167	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000168	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000169	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000170	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000171	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000172	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000173	0.0068027211	5.00	3.16	0.40
SRCPARAM L0000174	0.0068027211	5.00	3.16	0.40



CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000175	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000176	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000177	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000178	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000179	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000180	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000181	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000182	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000183	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000184	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000185	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000186	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000187	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000188	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000189	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000190	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000191	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000192	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000193	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000194	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000195	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000196	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000197	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000198	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000199	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000200	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000201	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000202	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000203	0.0068027211	5.00	3.16	0.40
SRCPARAM	L0000204	0.0068027211	5.00	3.16	0.40

\*\*

\*\* LINE VOLUME Source ID = TRAVEL3

SRCPARAM	L0000712	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000713	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000714	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000715	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000716	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000717	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000718	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000719	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000720	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000721	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000722	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000723	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000724	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000725	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000726	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000727	0.027027027	5.00	3.13	0.40

CostcoMurrieta\_Op\_HRA

SRCPARAM	L0000728	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000729	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000730	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000731	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000732	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000733	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000734	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000735	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000736	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000737	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000738	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000739	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000740	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000741	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000742	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000743	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000744	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000745	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000746	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000747	0.027027027	5.00	3.13	0.40
SRCPARAM	L0000748	0.027027027	5.00	3.13	0.40

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SRCPARAM	IDLING3	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING4	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING5	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	IDLING6	1.0	3.962	501.000	49.00000	0.100	
SRCPARAM	ISLAND	1.0	1.000	10.428	1.860		
SRCPARAM	VENT	1.0	3.658	289.000	0.00274	0.052	
URBANSRC	ALL						
SRCGROUP	IDLING1	IDLING1					
SRCGROUP	IDLING2	IDLING2					
SRCGROUP	IDLING3	IDLING3					
SRCGROUP	IDLING4	IDLING4					
SRCGROUP	IDLING5	IDLING5					
SRCGROUP	IDLING6	IDLING6					
SRCGROUP	ISLAND	ISLAND					
SRCGROUP	TRAFFIC2	L0000058	L0000059	L0000060	L0000061	L0000062	L0000063
SRCGROUP	TRAFFIC2	L0000064	L0000065	L0000066	L0000067	L0000068	L0000069
SRCGROUP	TRAFFIC2	L0000070	L0000071	L0000072	L0000073	L0000074	L0000075
SRCGROUP	TRAFFIC2	L0000076	L0000077	L0000078	L0000079	L0000080	L0000081
SRCGROUP	TRAFFIC2	L0000082	L0000083	L0000084	L0000085	L0000086	L0000087
SRCGROUP	TRAFFIC2	L0000088	L0000089	L0000090	L0000091	L0000092	L0000093
SRCGROUP	TRAFFIC2	L0000094	L0000095	L0000096	L0000097	L0000098	L0000099
SRCGROUP	TRAFFIC2	L0000100	L0000101	L0000102	L0000103	L0000104	L0000105
SRCGROUP	TRAFFIC2	L0000106	L0000107	L0000108	L0000109	L0000110	L0000111
SRCGROUP	TRAFFIC2	L0000112	L0000113	L0000114	L0000115	L0000116	L0000117
SRCGROUP	TRAFFIC2	L0000118	L0000119	L0000120	L0000121	L0000122	L0000123
SRCGROUP	TRAFFIC2	L0000124	L0000125	L0000126	L0000127	L0000128	L0000129

CostcoMurrieta\_Op\_HRA

SRCGROUP TRAFFIC2 L0000130 L0000131 L0000132 L0000133 L0000134 L0000135  
SRCGROUP TRAFFIC2 L0000136 L0000137 L0000138 L0000139 L0000140 L0000141  
SRCGROUP TRAFFIC2 L0000142 L0000143 L0000144 L0000145 L0000146 L0000147  
SRCGROUP TRAFFIC2 L0000148 L0000149 L0000150 L0000151 L0000152 L0000153  
SRCGROUP TRAFFIC2 L0000154 L0000155 L0000156 L0000157 L0000158 L0000159  
SRCGROUP TRAFFIC2 L0000160 L0000161 L0000162 L0000163 L0000164 L0000165  
SRCGROUP TRAFFIC2 L0000166 L0000167 L0000168 L0000169 L0000170 L0000171  
SRCGROUP TRAFFIC2 L0000172 L0000173 L0000174 L0000175 L0000176 L0000177  
SRCGROUP TRAFFIC2 L0000178 L0000179 L0000180 L0000181 L0000182 L0000183  
SRCGROUP TRAFFIC2 L0000184 L0000185 L0000186 L0000187 L0000188 L0000189  
SRCGROUP TRAFFIC2 L0000190 L0000191 L0000192 L0000193 L0000194 L0000195  
SRCGROUP TRAFFIC2 L0000196 L0000197 L0000198 L0000199 L0000200 L0000201  
SRCGROUP TRAFFIC2 L0000202 L0000203 L0000204  
SRCGROUP TRAVEL1 L0000001 L0000002 L0000003 L0000004 L0000005 L0000006  
SRCGROUP TRAVEL1 L0000007 L0000008 L0000009 L0000010 L0000011 L0000012  
SRCGROUP TRAVEL1 L0000013 L0000014 L0000015 L0000016 L0000017 L0000018  
SRCGROUP TRAVEL1 L0000019 L0000020 L0000021 L0000022 L0000023 L0000024  
SRCGROUP TRAVEL1 L0000025 L0000026 L0000027 L0000028 L0000029 L0000030  
SRCGROUP TRAVEL1 L0000031 L0000032 L0000033 L0000034 L0000035 L0000036  
SRCGROUP TRAVEL1 L0000037 L0000038 L0000039 L0000040 L0000041 L0000042  
SRCGROUP TRAVEL1 L0000043 L0000044 L0000045 L0000046 L0000047 L0000048  
SRCGROUP TRAVEL1 L0000049 L0000050 L0000051 L0000052 L0000053 L0000054  
SRCGROUP TRAVEL1 L0000055 L0000056 L0000057  
SRCGROUP TRAVEL3 L0000712 L0000713 L0000714 L0000715 L0000716 L0000717  
SRCGROUP TRAVEL3 L0000718 L0000719 L0000720 L0000721 L0000722 L0000723  
SRCGROUP TRAVEL3 L0000724 L0000725 L0000726 L0000727 L0000728 L0000729  
SRCGROUP TRAVEL3 L0000730 L0000731 L0000732 L0000733 L0000734 L0000735  
SRCGROUP TRAVEL3 L0000736 L0000737 L0000738 L0000739 L0000740 L0000741  
SRCGROUP TRAVEL3 L0000742 L0000743 L0000744 L0000745 L0000746 L0000747  
SRCGROUP TRAVEL3 L0000748  
SRCGROUP VENT VENT  
SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

\*\*\*\*\*

\*\*

\*\*

RE STARTING

INCLUDED CostcoMurrieta\_Op\_HRA.rou

RE FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Meteorology Pathway

\*\*\*\*\*

\*\*

\*\*

CostcoMurrieta\_Op\_HRA

ME STARTING

SURFFILE "C:\Users\swang\Documents\1. Projects\11092 Costco Murrieta\HRA\MET\LakeElsinoreADJU\ELSI\_V9\_ADJU\ELSI\_v9.SFC"

PROFFILE "C:\Users\swang\Documents\1. Projects\11092 Costco Murrieta\HRA\MET\LakeElsinoreADJU\ELSI\_V9\_ADJU\ELSI\_v9.PFL"

SURFDATA 3171 2012

UAIRDATA 3190 2012

SITEDATA 99999 2012

PROFBASE 406.0 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST CostcoMurrieta\_Op\_HRA.AD\01H1GALL.PLT 31

PLOTFILE 1 IDLING1 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G001.PLT 32

PLOTFILE 1 IDLING2 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G002.PLT 33

PLOTFILE 1 IDLING3 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G003.PLT 34

PLOTFILE 1 IDLING4 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G004.PLT 35

PLOTFILE 1 IDLING5 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G005.PLT 36

PLOTFILE 1 IDLING6 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G006.PLT 37

PLOTFILE 1 ISLAND 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G007.PLT 38

PLOTFILE 1 TRAFFIC2 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G008.PLT 39

PLOTFILE 1 TRAVEL1 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G009.PLT 40

PLOTFILE 1 TRAVEL3 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G010.PLT 41

PLOTFILE 1 VENT 1ST CostcoMurrieta\_Op\_HRA.AD\01H1G011.PLT 42

PLOTFILE PERIOD ALL CostcoMurrieta\_Op\_HRA.AD\PE00GALL.PLT 43

PLOTFILE PERIOD IDLING1 CostcoMurrieta\_Op\_HRA.AD\PE00G001.PLT 44

PLOTFILE PERIOD IDLING2 CostcoMurrieta\_Op\_HRA.AD\PE00G002.PLT 45

PLOTFILE PERIOD IDLING3 CostcoMurrieta\_Op\_HRA.AD\PE00G003.PLT 46

PLOTFILE PERIOD IDLING4 CostcoMurrieta\_Op\_HRA.AD\PE00G004.PLT 47

PLOTFILE PERIOD IDLING5 CostcoMurrieta\_Op\_HRA.AD\PE00G005.PLT 48

PLOTFILE PERIOD IDLING6 CostcoMurrieta\_Op\_HRA.AD\PE00G006.PLT 49

PLOTFILE PERIOD ISLAND CostcoMurrieta\_Op\_HRA.AD\PE00G007.PLT 50

PLOTFILE PERIOD TRAFFIC2 CostcoMurrieta\_Op\_HRA.AD\PE00G008.PLT 51

PLOTFILE PERIOD TRAVEL1 CostcoMurrieta\_Op\_HRA.AD\PE00G009.PLT 52

PLOTFILE PERIOD TRAVEL3 CostcoMurrieta\_Op\_HRA.AD\PE00G010.PLT 53

PLOTFILE PERIOD VENT CostcoMurrieta\_Op\_HRA.AD\PE00G011.PLT 54

SUMMFILE CostcoMurrieta\_Op\_HRA.sum

OU FINISHED

CostcoMurrieta\_Op\_HRA

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*
ME W186 680 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 680 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

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

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18
\*\*\* AERMET - VERSION 16216 \*\*\*
\*\*\* 17:09:15

PAGE 1
\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 249 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2189461.0 ; Urban Roughness Length = 1.000 m

CostcoMurrieta\_Op\_HRA

\*\*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:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET  
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: HRA

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 249 Source(s); 12 Source Group(s); and 152  
Receptor(s)

with: 7 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 242 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: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD 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

CostcoMurrieta\_Op\_HRA

Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 406.00 ; Decay  
 Coef. = 0.000 ; Rot. Angle = 0.0  
 Emission Units = GRAMS/SEC ;  
 Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.7 MB of RAM.

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: CostcoMurrieta\_Op\_HRA.err

\*\*File for Summary of Results: CostcoMurrieta\_Op\_HRA.sum

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 2

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* POINT SOURCE DATA \*\*\*

STACK	STACK	BLDG	URBAN	CAP/	EMIS	BASE	STACK	STACK	
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT	
VEL. DIAMETER	EXISTS	SOURCE	HOR	SCALAR	(METERS)	(METERS)	(DEG.K)		
ID (M/SEC)	CATS. (METERS)			(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	
VARY BY									
IDLING1	0	0.10000E+01	484148.5	3717920.4	472.6	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING2	0	0.10000E+01	484297.0	3717916.1	489.4	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING3	0	0.10000E+01	484449.2	3717812.7	463.8	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING4	0	0.10000E+01	484415.8	3717786.2	463.5	3.96	501.00		
49.00	0.10	NO	YES	NO					
IDLING5	0	0.10000E+01	484350.6	3717765.5	466.6	3.96	501.00		

CostcoMurrieta\_Op\_HRA

49.00 0.10 NO YES NO  
 IDLING6 0 0.10000E+01 484347.4 3717814.3 468.8 3.96 501.00  
 49.00 0.10 NO YES NO  
 VENT 0 0.10000E+01 484274.5 3717887.3 483.1 3.66 289.00  
 0.00 0.05 NO YES NO

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 3

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE	BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE		ELEV.	HEIGHT	SY
(METERS)	ID	SCALAR	(GRAMS/SEC)	X Y	(METERS)	(METERS)	(METERS)
		CATS.	VARY	(METERS) (METERS)			
		BY					
L0000001		0	0.17544E-01	484306.4 3717579.9	462.9	5.00	3.11
0.40	YES						
L0000002		0	0.17544E-01	484299.8 3717579.9	462.8	5.00	3.11
0.40	YES						
L0000003		0	0.17544E-01	484293.1 3717579.9	462.9	5.00	3.11
0.40	YES						
L0000004		0	0.17544E-01	484286.4 3717579.9	462.9	5.00	3.11
0.40	YES						
L0000005		0	0.17544E-01	484279.7 3717579.9	462.9	5.00	3.11
0.40	YES						
L0000006		0	0.17544E-01	484273.0 3717579.9	462.9	5.00	3.11
0.40	YES						
L0000007		0	0.17544E-01	484266.4 3717579.9	463.0	5.00	3.11
0.40	YES						
L0000008		0	0.17544E-01	484259.7 3717579.9	463.1	5.00	3.11
0.40	YES						
L0000009		0	0.17544E-01	484253.0 3717579.9	463.2	5.00	3.11
0.40	YES						
L0000010		0	0.17544E-01	484246.3 3717579.9	463.3	5.00	3.11
0.40	YES						
L0000011		0	0.17544E-01	484239.6 3717579.9	463.4	5.00	3.11
0.40	YES						
L0000012		0	0.17544E-01	484232.9 3717579.9	463.5	5.00	3.11



CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000013		0	0.17544E-01	484226.3	3717579.9	463.4	5.00	3.11
0.40	YES							
L0000014		0	0.17544E-01	484219.6	3717579.9	463.3	5.00	3.11
0.40	YES							
L0000015		0	0.17544E-01	484212.9	3717579.9	463.3	5.00	3.11
0.40	YES							
L0000016		0	0.17544E-01	484206.2	3717579.9	463.4	5.00	3.11
0.40	YES							
L0000017		0	0.17544E-01	484199.5	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000018		0	0.17544E-01	484192.9	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000019		0	0.17544E-01	484186.2	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000020		0	0.17544E-01	484179.5	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000021		0	0.17544E-01	484172.8	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000022		0	0.17544E-01	484166.1	3717579.9	463.5	5.00	3.11
0.40	YES							
L0000023		0	0.17544E-01	484159.5	3717579.9	463.6	5.00	3.11
0.40	YES							
L0000024		0	0.17544E-01	484152.8	3717579.9	463.7	5.00	3.11
0.40	YES							
L0000025		0	0.17544E-01	484146.1	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000026		0	0.17544E-01	484139.4	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000027		0	0.17544E-01	484132.7	3717579.9	463.9	5.00	3.11
0.40	YES							
L0000028		0	0.17544E-01	484126.1	3717579.9	464.1	5.00	3.11
0.40	YES							
L0000029		0	0.17544E-01	484119.4	3717579.9	464.4	5.00	3.11
0.40	YES							
L0000030		0	0.17544E-01	484112.7	3717579.9	464.7	5.00	3.11
0.40	YES							
L0000031		0	0.17544E-01	484106.0	3717579.9	465.0	5.00	3.11
0.40	YES							
L0000032		0	0.17544E-01	484099.3	3717579.9	465.4	5.00	3.11
0.40	YES							
L0000033		0	0.17544E-01	484092.7	3717579.9	465.8	5.00	3.11
0.40	YES							
L0000034		0	0.17544E-01	484086.0	3717580.2	466.0	5.00	3.11
0.40	YES							
L0000035		0	0.17544E-01	484079.3	3717580.9	466.2	5.00	3.11
0.40	YES							
L0000036		0	0.17544E-01	484072.7	3717581.6	466.3	5.00	3.11

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000037		0	0.17544E-01	484066.1	3717582.3	466.4	5.00	3.11
0.40	YES							
L0000038		0	0.17544E-01	484059.4	3717583.0	466.5	5.00	3.11
0.40	YES							
L0000039		0	0.17544E-01	484052.8	3717583.7	466.4	5.00	3.11
0.40	YES							
L0000040		0	0.17544E-01	484046.2	3717585.0	466.3	5.00	3.11

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*    17:09:15

PAGE 4

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE	SOURCE	EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	ID	SCALAR	VARY	X	Y	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
L0000041		0	0.17544E-01	484039.7	3717586.3	466.2	5.00	3.11
0.40	YES							
L0000042		0	0.17544E-01	484033.1	3717587.6	466.3	5.00	3.11
0.40	YES							
L0000043		0	0.17544E-01	484026.6	3717588.9	466.3	5.00	3.11
0.40	YES							
L0000044		0	0.17544E-01	484020.0	3717590.2	466.4	5.00	3.11
0.40	YES							
L0000045		0	0.17544E-01	484013.6	3717591.9	466.6	5.00	3.11
0.40	YES							
L0000046		0	0.17544E-01	484007.2	3717593.9	466.8	5.00	3.11
0.40	YES							
L0000047		0	0.17544E-01	484000.8	3717595.9	467.1	5.00	3.11
0.40	YES							
L0000048		0	0.17544E-01	483994.5	3717598.0	467.3	5.00	3.11
0.40	YES							
L0000049		0	0.17544E-01	483988.1	3717600.0	467.6	5.00	3.11
0.40	YES							
L0000050		0	0.17544E-01	483981.7	3717602.0	467.8	5.00	3.11

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000051		0	0.17544E-01	483975.4	3717604.0	468.1	5.00	3.11
0.40	YES							
L0000052		0	0.17544E-01	483969.0	3717606.0	468.3	5.00	3.11
0.40	YES							
L0000053		0	0.17544E-01	483962.6	3717608.1	468.4	5.00	3.11
0.40	YES							
L0000054		0	0.17544E-01	483956.3	3717610.1	468.2	5.00	3.11
0.40	YES							
L0000055		0	0.17544E-01	483949.9	3717612.1	467.6	5.00	3.11
0.40	YES							
L0000056		0	0.17544E-01	483943.5	3717614.1	466.7	5.00	3.11
0.40	YES							
L0000057		0	0.17544E-01	483937.2	3717616.2	465.9	5.00	3.11
0.40	YES							
L0000058		0	0.68027E-02	484303.9	3717591.6	463.0	5.00	3.16
0.40	YES							
L0000059		0	0.68027E-02	484304.0	3717598.4	463.2	5.00	3.16
0.40	YES							
L0000060		0	0.68027E-02	484304.0	3717605.2	463.3	5.00	3.16
0.40	YES							
L0000061		0	0.68027E-02	484304.1	3717612.0	463.4	5.00	3.16
0.40	YES							
L0000062		0	0.68027E-02	484304.2	3717618.8	463.4	5.00	3.16
0.40	YES							
L0000063		0	0.68027E-02	484304.2	3717625.6	463.6	5.00	3.16
0.40	YES							
L0000064		0	0.68027E-02	484304.3	3717632.4	463.7	5.00	3.16
0.40	YES							
L0000065		0	0.68027E-02	484304.3	3717639.2	463.8	5.00	3.16
0.40	YES							
L0000066		0	0.68027E-02	484304.4	3717646.0	463.9	5.00	3.16
0.40	YES							
L0000067		0	0.68027E-02	484304.4	3717652.8	464.1	5.00	3.16
0.40	YES							
L0000068		0	0.68027E-02	484304.5	3717659.6	464.4	5.00	3.16
0.40	YES							
L0000069		0	0.68027E-02	484304.6	3717666.4	464.9	5.00	3.16
0.40	YES							
L0000070		0	0.68027E-02	484304.6	3717673.2	465.4	5.00	3.16
0.40	YES							
L0000071		0	0.68027E-02	484304.7	3717680.0	465.9	5.00	3.16
0.40	YES							
L0000072		0	0.68027E-02	484304.7	3717686.8	466.3	5.00	3.16
0.40	YES							
L0000073		0	0.68027E-02	484304.8	3717693.6	466.8	5.00	3.16
0.40	YES							
L0000074		0	0.68027E-02	484304.8	3717700.4	467.2	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES	L0000075	0	0.68027E-02	484304.9	3717707.2	467.7	5.00	3.16
0.40	YES	L0000076	0	0.68027E-02	484305.0	3717714.0	468.2	5.00	3.16
0.40	YES	L0000077	0	0.68027E-02	484305.0	3717720.8	468.6	5.00	3.16
0.40	YES	L0000078	0	0.68027E-02	484305.1	3717727.6	469.0	5.00	3.16
0.40	YES	L0000079	0	0.68027E-02	484305.1	3717734.4	469.4	5.00	3.16
0.40	YES	L0000080	0	0.68027E-02	484305.2	3717741.2	469.8	5.00	3.16

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*      17:09:15

PAGE 5

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.	
SOURCE	SOURCE	EMISSION	PART.	(GRAMS/SEC)	X	ELEV.	HEIGHT	SY	
SZ	ID	SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)	
(METERS)		CATS.	BY						
L0000081		0	0.68027E-02	484305.2	3717748.0	470.1	5.00	3.16	
0.40	YES	L0000082	0	0.68027E-02	484305.3	3717754.8	470.5	5.00	3.16
0.40	YES	L0000083	0	0.68027E-02	484305.4	3717761.6	470.8	5.00	3.16
0.40	YES	L0000084	0	0.68027E-02	484305.4	3717768.4	471.1	5.00	3.16
0.40	YES	L0000085	0	0.68027E-02	484305.5	3717775.2	471.4	5.00	3.16
0.40	YES	L0000086	0	0.68027E-02	484305.5	3717782.0	471.6	5.00	3.16
0.40	YES	L0000087	0	0.68027E-02	484305.6	3717788.8	471.7	5.00	3.16
0.40	YES	L0000088	0	0.68027E-02	484305.6	3717795.6	471.6	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000089		0	0.68027E-02	484305.7	3717802.4	471.3	5.00	3.16
0.40	YES							
L0000090		0	0.68027E-02	484305.8	3717809.2	470.9	5.00	3.16
0.40	YES							
L0000091		0	0.68027E-02	484305.8	3717816.0	470.4	5.00	3.16
0.40	YES							
L0000092		0	0.68027E-02	484305.9	3717822.8	469.9	5.00	3.16
0.40	YES							
L0000093		0	0.68027E-02	484305.9	3717829.6	469.8	5.00	3.16
0.40	YES							
L0000094		0	0.68027E-02	484306.0	3717836.4	470.1	5.00	3.16
0.40	YES							
L0000095		0	0.68027E-02	484306.5	3717843.1	471.4	5.00	3.16
0.40	YES							
L0000096		0	0.68027E-02	484308.2	3717849.7	473.2	5.00	3.16
0.40	YES							
L0000097		0	0.68027E-02	484309.9	3717856.3	474.9	5.00	3.16
0.40	YES							
L0000098		0	0.68027E-02	484311.5	3717862.9	476.5	5.00	3.16
0.40	YES							
L0000099		0	0.68027E-02	484313.2	3717869.5	478.0	5.00	3.16
0.40	YES							
L0000100		0	0.68027E-02	484314.9	3717876.0	479.5	5.00	3.16
0.40	YES							
L0000101		0	0.68027E-02	484316.6	3717882.6	480.9	5.00	3.16
0.40	YES							
L0000102		0	0.68027E-02	484318.3	3717889.2	482.2	5.00	3.16
0.40	YES							
L0000103		0	0.68027E-02	484320.0	3717895.8	483.3	5.00	3.16
0.40	YES							
L0000104		0	0.68027E-02	484321.6	3717902.4	484.8	5.00	3.16
0.40	YES							
L0000105		0	0.68027E-02	484323.3	3717909.0	486.5	5.00	3.16
0.40	YES							
L0000106		0	0.68027E-02	484325.0	3717915.6	488.6	5.00	3.16
0.40	YES							
L0000107		0	0.68027E-02	484326.7	3717922.2	490.3	5.00	3.16
0.40	YES							
L0000108		0	0.68027E-02	484328.4	3717928.7	491.8	5.00	3.16
0.40	YES							
L0000109		0	0.68027E-02	484330.1	3717935.3	493.4	5.00	3.16
0.40	YES							
L0000110		0	0.68027E-02	484325.2	3717936.9	494.4	5.00	3.16
0.40	YES							
L0000111		0	0.68027E-02	484318.4	3717937.0	494.8	5.00	3.16
0.40	YES							
L0000112		0	0.68027E-02	484311.6	3717937.0	495.1	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000113		0	0.68027E-02	484304.8	3717937.1	495.1	5.00	3.16
0.40	YES							
L0000114		0	0.68027E-02	484298.0	3717937.2	494.5	5.00	3.16
0.40	YES							
L0000115		0	0.68027E-02	484291.2	3717937.3	493.5	5.00	3.16
0.40	YES							
L0000116		0	0.68027E-02	484284.4	3717937.3	491.9	5.00	3.16
0.40	YES							
L0000117		0	0.68027E-02	484277.6	3717937.4	490.5	5.00	3.16
0.40	YES							
L0000118		0	0.68027E-02	484270.8	3717937.5	489.3	5.00	3.16
0.40	YES							
L0000119		0	0.68027E-02	484264.0	3717937.6	487.9	5.00	3.16
0.40	YES							
L0000120		0	0.68027E-02	484257.2	3717937.7	486.0	5.00	3.16

0.40 YES  
 ↑ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 6

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE			ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR	(GRAMS/SEC)	X	Y	(METERS)	(METERS)	(METERS)
(METERS)		CATS.	VARY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0000121		0	0.68027E-02	484250.4	3717937.7	483.7	5.00	3.16
0.40	YES							
L0000122		0	0.68027E-02	484243.6	3717937.8	481.9	5.00	3.16
0.40	YES							
L0000123		0	0.68027E-02	484236.8	3717937.9	480.4	5.00	3.16
0.40	YES							
L0000124		0	0.68027E-02	484230.0	3717938.0	479.0	5.00	3.16
0.40	YES							
L0000125		0	0.68027E-02	484223.2	3717938.1	477.7	5.00	3.16
0.40	YES							
L0000126		0	0.68027E-02	484216.4	3717938.1	476.7	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000127		0	0.68027E-02	484209.6	3717938.2	475.9	5.00	3.16
0.40	YES							
L0000128		0	0.68027E-02	484202.8	3717938.3	475.4	5.00	3.16
0.40	YES							
L0000129		0	0.68027E-02	484196.0	3717938.4	475.0	5.00	3.16
0.40	YES							
L0000130		0	0.68027E-02	484189.2	3717938.5	474.6	5.00	3.16
0.40	YES							
L0000131		0	0.68027E-02	484182.4	3717938.5	474.2	5.00	3.16
0.40	YES							
L0000132		0	0.68027E-02	484175.6	3717938.6	473.8	5.00	3.16
0.40	YES							
L0000133		0	0.68027E-02	484168.8	3717938.7	473.3	5.00	3.16
0.40	YES							
L0000134		0	0.68027E-02	484162.0	3717938.8	472.7	5.00	3.16
0.40	YES							
L0000135		0	0.68027E-02	484155.2	3717938.8	472.2	5.00	3.16
0.40	YES							
L0000136		0	0.68027E-02	484148.4	3717938.9	471.9	5.00	3.16
0.40	YES							
L0000137		0	0.68027E-02	484141.9	3717940.8	471.5	5.00	3.16
0.40	YES							
L0000138		0	0.68027E-02	484135.4	3717942.8	471.1	5.00	3.16
0.40	YES							
L0000139		0	0.68027E-02	484128.9	3717944.9	470.7	5.00	3.16
0.40	YES							
L0000140		0	0.68027E-02	484122.4	3717946.9	470.2	5.00	3.16
0.40	YES							
L0000141		0	0.68027E-02	484115.9	3717948.9	469.9	5.00	3.16
0.40	YES							
L0000142		0	0.68027E-02	484109.4	3717950.9	469.7	5.00	3.16
0.40	YES							
L0000143		0	0.68027E-02	484102.9	3717952.9	469.5	5.00	3.16
0.40	YES							
L0000144		0	0.68027E-02	484096.4	3717955.0	469.4	5.00	3.16
0.40	YES							
L0000145		0	0.68027E-02	484090.0	3717957.0	469.2	5.00	3.16
0.40	YES							
L0000146		0	0.68027E-02	484084.6	3717957.1	469.0	5.00	3.16
0.40	YES							
L0000147		0	0.68027E-02	484083.4	3717950.4	469.1	5.00	3.16
0.40	YES							
L0000148		0	0.68027E-02	484082.3	3717943.7	469.2	5.00	3.16
0.40	YES							
L0000149		0	0.68027E-02	484081.1	3717937.0	469.2	5.00	3.16
0.40	YES							
L0000150		0	0.68027E-02	484079.9	3717930.3	469.3	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000151		0	0.68027E-02	484078.8	3717923.6	469.5	5.00	3.16
0.40	YES							
L0000152		0	0.68027E-02	484077.6	3717916.9	469.7	5.00	3.16
0.40	YES							
L0000153		0	0.68027E-02	484076.5	3717910.2	469.9	5.00	3.16
0.40	YES							
L0000154		0	0.68027E-02	484075.3	3717903.5	470.0	5.00	3.16
0.40	YES							
L0000155		0	0.68027E-02	484074.1	3717896.8	470.2	5.00	3.16
0.40	YES							
L0000156		0	0.68027E-02	484073.0	3717890.1	470.4	5.00	3.16
0.40	YES							
L0000157		0	0.68027E-02	484071.8	3717883.4	470.5	5.00	3.16
0.40	YES							
L0000158		0	0.68027E-02	484070.6	3717876.7	470.5	5.00	3.16
0.40	YES							
L0000159		0	0.68027E-02	484069.5	3717870.0	470.6	5.00	3.16
0.40	YES							
L0000160		0	0.68027E-02	484068.3	3717863.3	470.7	5.00	3.16
0.40	YES							

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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*                    17:09:15

PAGE 7

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

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

L0000161		0	0.68027E-02	484067.1	3717856.6	470.8	5.00	3.16
0.40	YES							
L0000162		0	0.68027E-02	484066.0	3717849.9	470.8	5.00	3.16
0.40	YES							
L0000163		0	0.68027E-02	484064.8	3717843.2	470.9	5.00	3.16
0.40	YES							
L0000164		0	0.68027E-02	484063.6	3717836.5	471.0	5.00	3.16



CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000165		0	0.68027E-02	484062.5	3717829.9	471.0	5.00	3.16
0.40	YES							
L0000166		0	0.68027E-02	484061.3	3717823.2	471.0	5.00	3.16
0.40	YES							
L0000167		0	0.68027E-02	484060.2	3717816.5	471.0	5.00	3.16
0.40	YES							
L0000168		0	0.68027E-02	484059.0	3717809.8	471.0	5.00	3.16
0.40	YES							
L0000169		0	0.68027E-02	484057.8	3717803.1	470.9	5.00	3.16
0.40	YES							
L0000170		0	0.68027E-02	484056.7	3717796.4	470.9	5.00	3.16
0.40	YES							
L0000171		0	0.68027E-02	484055.5	3717789.7	471.0	5.00	3.16
0.40	YES							
L0000172		0	0.68027E-02	484054.3	3717783.0	471.0	5.00	3.16
0.40	YES							
L0000173		0	0.68027E-02	484053.2	3717776.3	471.1	5.00	3.16
0.40	YES							
L0000174		0	0.68027E-02	484052.0	3717769.6	471.2	5.00	3.16
0.40	YES							
L0000175		0	0.68027E-02	484050.8	3717762.9	471.5	5.00	3.16
0.40	YES							
L0000176		0	0.68027E-02	484049.7	3717756.2	471.7	5.00	3.16
0.40	YES							
L0000177		0	0.68027E-02	484048.5	3717749.5	471.9	5.00	3.16
0.40	YES							
L0000178		0	0.68027E-02	484047.3	3717742.8	472.2	5.00	3.16
0.40	YES							
L0000179		0	0.68027E-02	484046.2	3717736.1	472.3	5.00	3.16
0.40	YES							
L0000180		0	0.68027E-02	484045.0	3717729.4	472.5	5.00	3.16
0.40	YES							
L0000181		0	0.68027E-02	484043.9	3717722.7	472.6	5.00	3.16
0.40	YES							
L0000182		0	0.68027E-02	484042.7	3717716.0	472.7	5.00	3.16
0.40	YES							
L0000183		0	0.68027E-02	484041.5	3717709.3	472.7	5.00	3.16
0.40	YES							
L0000184		0	0.68027E-02	484040.4	3717702.6	472.7	5.00	3.16
0.40	YES							
L0000185		0	0.68027E-02	484043.0	3717698.2	472.9	5.00	3.16
0.40	YES							
L0000186		0	0.68027E-02	484049.5	3717696.3	473.2	5.00	3.16
0.40	YES							
L0000187		0	0.68027E-02	484056.0	3717694.4	473.5	5.00	3.16
0.40	YES							
L0000188		0	0.68027E-02	484062.5	3717692.5	473.8	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000189		0	0.68027E-02	484069.1	3717690.5	474.1	5.00	3.16
0.40	YES							
L0000190		0	0.68027E-02	484075.6	3717688.6	474.4	5.00	3.16
0.40	YES							
L0000191		0	0.68027E-02	484082.1	3717686.7	474.8	5.00	3.16
0.40	YES							
L0000192		0	0.68027E-02	484086.3	3717683.1	475.0	5.00	3.16
0.40	YES							
L0000193		0	0.68027E-02	484085.9	3717676.3	474.7	5.00	3.16
0.40	YES							
L0000194		0	0.68027E-02	484085.5	3717669.6	474.3	5.00	3.16
0.40	YES							
L0000195		0	0.68027E-02	484085.0	3717662.8	473.7	5.00	3.16
0.40	YES							
L0000196		0	0.68027E-02	484084.6	3717656.0	473.2	5.00	3.16
0.40	YES							
L0000197		0	0.68027E-02	484084.2	3717649.2	472.6	5.00	3.16
0.40	YES							
L0000198		0	0.68027E-02	484083.8	3717642.4	472.2	5.00	3.16
0.40	YES							
L0000199		0	0.68027E-02	484083.4	3717635.6	471.7	5.00	3.16
0.40	YES							
L0000200		0	0.68027E-02	484082.9	3717628.8	471.3	5.00	3.16

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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 8

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SZ	SOURCE	EMISSION	RATE		X	ELEV.	HEIGHT	SY
ID	SOURCE	PART.	(GRAMS/SEC)		(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		SCALAR	VARY		(METERS)	(METERS)	(METERS)	(METERS)
		CATS.	BY					
L0000201		0	0.68027E-02	484082.5	3717622.1	470.9	5.00	3.16
0.40	YES							
L0000202		0	0.68027E-02	484082.1	3717615.3	470.3	5.00	3.16

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000203		0	0.68027E-02	484081.7	3717608.5	469.6	5.00	3.16
0.40	YES							
L0000204		0	0.68027E-02	484081.2	3717601.7	468.7	5.00	3.16
0.40	YES							
L0000712		0	0.27027E-01	484341.7	3717936.3	491.6	5.00	3.13
0.40	YES							
L0000713		0	0.27027E-01	484348.4	3717936.2	490.2	5.00	3.13
0.40	YES							
L0000714		0	0.27027E-01	484355.1	3717936.1	488.6	5.00	3.13
0.40	YES							
L0000715		0	0.27027E-01	484361.9	3717936.0	486.6	5.00	3.13
0.40	YES							
L0000716		0	0.27027E-01	484368.6	3717935.9	483.9	5.00	3.13
0.40	YES							
L0000717		0	0.27027E-01	484375.3	3717935.8	482.1	5.00	3.13
0.40	YES							
L0000718		0	0.27027E-01	484382.0	3717935.7	480.6	5.00	3.13
0.40	YES							
L0000719		0	0.27027E-01	484388.8	3717935.6	479.4	5.00	3.13
0.40	YES							
L0000720		0	0.27027E-01	484395.5	3717935.5	478.2	5.00	3.13
0.40	YES							
L0000721		0	0.27027E-01	484402.2	3717935.5	477.0	5.00	3.13
0.40	YES							
L0000722		0	0.27027E-01	484409.0	3717935.4	476.0	5.00	3.13
0.40	YES							
L0000723		0	0.27027E-01	484415.7	3717935.3	475.0	5.00	3.13
0.40	YES							
L0000724		0	0.27027E-01	484422.4	3717935.2	474.0	5.00	3.13
0.40	YES							
L0000725		0	0.27027E-01	484429.1	3717935.1	472.9	5.00	3.13
0.40	YES							
L0000726		0	0.27027E-01	484435.9	3717935.0	471.9	5.00	3.13
0.40	YES							
L0000727		0	0.27027E-01	484442.6	3717934.9	470.9	5.00	3.13
0.40	YES							
L0000728		0	0.27027E-01	484449.3	3717934.8	469.9	5.00	3.13
0.40	YES							
L0000729		0	0.27027E-01	484456.1	3717934.7	469.0	5.00	3.13
0.40	YES							
L0000730		0	0.27027E-01	484459.9	3717931.8	468.4	5.00	3.13
0.40	YES							
L0000731		0	0.27027E-01	484460.1	3717925.0	468.2	5.00	3.13
0.40	YES							
L0000732		0	0.27027E-01	484460.3	3717918.3	468.0	5.00	3.13
0.40	YES							
L0000733		0	0.27027E-01	484460.4	3717911.6	467.8	5.00	3.13

CostcoMurrieta\_Op\_HRA

0.40	YES							
L0000734		0	0.27027E-01	484460.6	3717904.9	467.5	5.00	3.13
0.40	YES							
L0000735		0	0.27027E-01	484460.8	3717898.1	467.1	5.00	3.13
0.40	YES							
L0000736		0	0.27027E-01	484461.0	3717891.4	466.8	5.00	3.13
0.40	YES							
L0000737		0	0.27027E-01	484461.1	3717884.7	466.6	5.00	3.13
0.40	YES							
L0000738		0	0.27027E-01	484461.3	3717877.9	466.1	5.00	3.13
0.40	YES							
L0000739		0	0.27027E-01	484461.5	3717871.2	465.7	5.00	3.13
0.40	YES							
L0000740		0	0.27027E-01	484461.6	3717864.5	465.3	5.00	3.13
0.40	YES							
L0000741		0	0.27027E-01	484461.8	3717857.8	465.1	5.00	3.13
0.40	YES							
L0000742		0	0.27027E-01	484462.0	3717851.0	465.0	5.00	3.13
0.40	YES							
L0000743		0	0.27027E-01	484462.1	3717844.3	465.1	5.00	3.13
0.40	YES							
L0000744		0	0.27027E-01	484462.3	3717837.6	464.8	5.00	3.13
0.40	YES							
L0000745		0	0.27027E-01	484462.5	3717830.9	464.5	5.00	3.13
0.40	YES							
L0000746		0	0.27027E-01	484462.7	3717824.1	464.1	5.00	3.13
0.40	YES							
L0000747		0	0.27027E-01	484462.8	3717817.4	463.8	5.00	3.13
0.40	YES							

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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 9

\*\*\* MODELOPTs:      RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

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

CostcoMurrieta\_Op\_HRA

L0000748            0   0.27027E-01  484463.0 3717810.7   463.5        5.00        3.13  
 0.40        YES  
 ISLAND            0   0.10000E+01  484274.7 3717886.7   483.0        1.00        10.43  
 1.86        YES

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 \*\*\* AERMET - VERSION 16216 \*\*\*        \*\*\*  
                                  \*\*\*            17:09:15

PAGE 10

\*\*\* MODELOPTs:        RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID -----	SOURCE IDs -----
IDLING1    IDLING1        ,	
IDLING2    IDLING2        ,	
IDLING3    IDLING3        ,	
IDLING4    IDLING4        ,	
IDLING5    IDLING5        ,	
IDLING6    IDLING6        ,	
ISLAND     ISLAND         ,	
TRAFFIC2   L0000058       , L0000059       , L0000060       , L0000061       , L0000062       ,	
L0000063    , L0000064       , L0000065       ,	
L0000066       , L0000067       , L0000068       , L0000069       , L0000070       ,	
L0000071    , L0000072       , L0000073       ,	
L0000074       , L0000075       , L0000076       , L0000077       , L0000078       ,	
L0000079    , L0000080       , L0000081       ,	
L0000082       , L0000083       , L0000084       , L0000085       , L0000086       ,	
L0000087    , L0000088       , L0000089       ,	
L0000090       , L0000091       , L0000092       , L0000093       , L0000094       ,	
L0000095    , L0000096       , L0000097       ,	

CostcoMurrieta\_Op\_HRA

L0000103      L0000098      , L0000099      , L0000100      , L0000101      , L0000102      ,  
                   , L0000104      , L0000105      ,  
  
 L0000111      L0000106      , L0000107      , L0000108      , L0000109      , L0000110      ,  
                   , L0000112      , L0000113      ,  
  
 L0000119      L0000114      , L0000115      , L0000116      , L0000117      , L0000118      ,  
                   , L0000120      , L0000121      ,  
  
 L0000127      L0000122      , L0000123      , L0000124      , L0000125      , L0000126      ,  
                   , L0000128      , L0000129      ,  
  
 L0000135      L0000130      , L0000131      , L0000132      , L0000133      , L0000134      ,  
                   , L0000136      , L0000137      ,  
  
 L0000143      L0000138      , L0000139      , L0000140      , L0000141      , L0000142      ,  
                   , L0000144      , L0000145      ,  
  
 L0000151      L0000146      , L0000147      , L0000148      , L0000149      , L0000150      ,  
                   , L0000152      , L0000153      ,  
  
 L0000159      L0000154      , L0000155      , L0000156      , L0000157      , L0000158      ,  
                   , L0000160      , L0000161      ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*      17:09:15

PAGE 11

\*\*\* MODELOPTs:      RegDEFAULT      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-----	-----
L0000167	L0000162      , L0000163      , L0000164      , L0000165      , L0000166      , , L0000168      , L0000169      ,
L0000175	L0000170      , L0000171      , L0000172      , L0000173      , L0000174      , , L0000176      , L0000177      ,
L0000183	L0000178      , L0000179      , L0000180      , L0000181      , L0000182      , , L0000184      , L0000185      ,

CostcoMurrieta\_Op\_HRA

L0000191 L0000186 , L0000187 , L0000188 , L0000189 , L0000190 ,  
 , L0000192 , L0000193 ,

L0000199 L0000194 , L0000195 , L0000196 , L0000197 , L0000198 ,  
 , L0000200 , L0000201 ,

L0000202 , L0000203 , L0000204 ,

TRAVEL1 L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,  
 L0000006 , L0000007 , L0000008 ,

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

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

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

L0000038 L0000033 , L0000034 , L0000035 , L0000036 , L0000037 ,  
 , L0000039 , L0000040 ,

L0000046 L0000041 , L0000042 , L0000043 , L0000044 , L0000045 ,  
 , L0000047 , L0000048 ,

L0000054 L0000049 , L0000050 , L0000051 , L0000052 , L0000053 ,  
 , L0000055 , L0000056 ,

L0000057 ,

TRAVEL3 L0000712 , L0000713 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 ,

L0000725 L0000720 , L0000721 , L0000722 , L0000723 , L0000724 ,  
 , L0000726 , L0000727 ,

L0000733 L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,  
 , L0000734 , L0000735 ,

L0000741 L0000736 , L0000737 , L0000738 , L0000739 , L0000740 ,  
 , L0000742 , L0000743 ,

L0000744 , L0000745 , L0000746 , L0000747 , L0000748 ,

VENT VENT ,  
 \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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CostcoMurrieta\_Op\_HRA

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* \*\*

17:09:15

PAGE 12

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs					
-----	-----					
ALL	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	,
L0000006	, L0000007	, L0000008	,			
L0000014	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	,
	, L0000015	, L0000016	,			
L0000022	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	,
	, L0000023	, L0000024	,			
L0000030	L0000025	, L0000026	, L0000027	, L0000028	, L0000029	,
	, L0000031	, L0000032	,			
L0000038	L0000033	, L0000034	, L0000035	, L0000036	, L0000037	,
	, L0000039	, L0000040	,			
L0000046	L0000041	, L0000042	, L0000043	, L0000044	, L0000045	,
	, L0000047	, L0000048	,			
L0000054	L0000049	, L0000050	, L0000051	, L0000052	, L0000053	,
	, L0000055	, L0000056	,			
L0000060	L0000057	, IDLING1	, IDLING2	, L0000058	, L0000059	,
	, L0000061	, L0000062	,			
L0000068	L0000063	, L0000064	, L0000065	, L0000066	, L0000067	,
	, L0000069	, L0000070	,			
L0000076	L0000071	, L0000072	, L0000073	, L0000074	, L0000075	,
	, L0000077	, L0000078	,			
L0000084	L0000079	, L0000080	, L0000081	, L0000082	, L0000083	,
	, L0000085	, L0000086	,			
L0000092	L0000087	, L0000088	, L0000089	, L0000090	, L0000091	,
	, L0000093	, L0000094	,			



CostcoMurrieta\_Op\_HRA

L0000100      L0000095      , L0000096      , L0000097      , L0000098      , L0000099      ,  
                 , L0000101      , L0000102      ,  
  
L0000108      L0000103      , L0000104      , L0000105      , L0000106      , L0000107      ,  
                 , L0000109      , L0000110      ,  
  
L0000116      L0000111      , L0000112      , L0000113      , L0000114      , L0000115      ,  
                 , L0000117      , L0000118      ,  
  
L0000124      L0000119      , L0000120      , L0000121      , L0000122      , L0000123      ,  
                 , L0000125      , L0000126      ,  
  
L0000132      L0000127      , L0000128      , L0000129      , L0000130      , L0000131      ,  
                 , L0000133      , L0000134      ,  
  
L0000140      L0000135      , L0000136      , L0000137      , L0000138      , L0000139      ,  
                 , L0000141      , L0000142      ,  
  
L0000148      L0000143      , L0000144      , L0000145      , L0000146      , L0000147      ,  
                 , L0000149      , L0000150      ,  
  
L0000156      L0000151      , L0000152      , L0000153      , L0000154      , L0000155      ,  
                 , L0000157      , L0000158      ,

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\*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                 \*\*\*      17:09:15

PAGE 13

\*\*\* MODELOPTs:      RegDEFAULT      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE IDs
-----	-----
L0000164	L0000159      , L0000160      , L0000161      , L0000162      , L0000163      , , L0000165      , L0000166      ,
L0000172	L0000167      , L0000168      , L0000169      , L0000170      , L0000171      , , L0000173      , L0000174      ,
L0000180	L0000175      , L0000176      , L0000177      , L0000178      , L0000179      , , L0000181      , L0000182      ,

CostcoMurrieta\_Op\_HRA

L0000188 , L0000183 , L0000184 , L0000185 , L0000186 , L0000187 ,  
 , L0000189 , L0000190 , ,  
 L0000196 , L0000191 , L0000192 , L0000193 , L0000194 , L0000195 ,  
 , L0000197 , L0000198 , ,  
 L0000204 , L0000199 , L0000200 , L0000201 , L0000202 , L0000203 ,  
 , L0000712 , L0000713 , ,  
 L0000719 , L0000714 , L0000715 , L0000716 , L0000717 , L0000718 ,  
 , L0000720 , L0000721 , ,  
 L0000727 , L0000722 , L0000723 , L0000724 , L0000725 , L0000726 ,  
 , L0000728 , L0000729 , ,  
 L0000735 , L0000730 , L0000731 , L0000732 , L0000733 , L0000734 ,  
 , L0000736 , L0000737 , ,  
 L0000743 , L0000738 , L0000739 , L0000740 , L0000741 , L0000742 ,  
 , L0000744 , L0000745 , ,  
 IDLING5 , L0000746 , L0000747 , L0000748 , IDLING3 , IDLING4 ,  
 , IDLING6 , ISLAND ,

VENT ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 14

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

\*\*\*

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000005	2189461.	L0000001 , L0000002 , L0000003 , L0000004 ,
L0000008	, L0000006	, L0000007 ,
	,	
L0000014	L0000009	, L0000010 , L0000011 , L0000012 , L0000013 ,
	, L0000015	, L0000016 ,

CostcoMurrieta\_Op\_HRA

L0000022	L0000017 , L0000023	, L0000018 , L0000024	, L0000019 ,	, L0000020 ,	L0000021 ,
L0000030	L0000025 , L0000031	, L0000026 , L0000032	, L0000027 ,	, L0000028 ,	L0000029 ,
L0000038	L0000033 , L0000039	, L0000034 , L0000040	, L0000035 ,	, L0000036 ,	L0000037 ,
L0000046	L0000041 , L0000047	, L0000042 , L0000048	, L0000043 ,	, L0000044 ,	L0000045 ,
L0000054	L0000049 , L0000055	, L0000050 , L0000056	, L0000051 ,	, L0000052 ,	L0000053 ,
L0000060	L0000057 , L0000061	, IDLING1 , L0000062	, IDLING2 ,	, L0000058 ,	L0000059 ,
L0000068	L0000063 , L0000069	, L0000064 , L0000070	, L0000065 ,	, L0000066 ,	L0000067 ,
L0000076	L0000071 , L0000077	, L0000072 , L0000078	, L0000073 ,	, L0000074 ,	L0000075 ,
L0000084	L0000079 , L0000085	, L0000080 , L0000086	, L0000081 ,	, L0000082 ,	L0000083 ,
L0000092	L0000087 , L0000093	, L0000088 , L0000094	, L0000089 ,	, L0000090 ,	L0000091 ,
L0000100	L0000095 , L0000101	, L0000096 , L0000102	, L0000097 ,	, L0000098 ,	L0000099 ,
L0000108	L0000103 , L0000109	, L0000104 , L0000110	, L0000105 ,	, L0000106 ,	L0000107 ,
L0000116	L0000111 , L0000117	, L0000112 , L0000118	, L0000113 ,	, L0000114 ,	L0000115 ,
L0000124	L0000119 , L0000125	, L0000120 , L0000126	, L0000121 ,	, L0000122 ,	L0000123 ,
L0000132	L0000127 , L0000133	, L0000128 , L0000134	, L0000129 ,	, L0000130 ,	L0000131 ,
L0000140	L0000135 , L0000141	, L0000136 , L0000142	, L0000137 ,	, L0000138 ,	L0000139 ,

CostcoMurrieta\_Op\_HRA

L0000143 , L0000144 , L0000145 , L0000146 , L0000147 ,  
L0000148 , L0000149 , L0000150 ,

L0000151 , L0000152 , L0000153 , L0000154 , L0000155 ,  
L0000156 , L0000157 , L0000158 ,

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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 15

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

\*\*\*

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000164	L0000159 , L0000165	L0000160 , L0000161 , L0000162 , L0000163 , L0000166 ,
L0000172	L0000167 , L0000173	L0000168 , L0000169 , L0000170 , L0000171 , L0000174 ,
L0000180	L0000175 , L0000181	L0000176 , L0000177 , L0000178 , L0000179 , L0000182 ,
L0000188	L0000183 , L0000189	L0000184 , L0000185 , L0000186 , L0000187 , L0000190 ,
L0000196	L0000191 , L0000197	L0000192 , L0000193 , L0000194 , L0000195 , L0000198 ,
L0000204	L0000199 , L0000712	L0000200 , L0000201 , L0000202 , L0000203 , L0000713 ,
L0000719	L0000714 , L0000720	L0000715 , L0000716 , L0000717 , L0000718 , L0000721 ,
L0000727	L0000722 , L0000728	L0000723 , L0000724 , L0000725 , L0000726 , L0000729 ,
L0000735	L0000730 , L0000736	L0000731 , L0000732 , L0000733 , L0000734 , L0000737 ,

CostcoMurrieta\_Op\_HRA

L0000738 , L0000739 , L0000740 , L0000741 , L0000742 ,  
L0000743 , L0000744 , L0000745 ,  
L0000746 , L0000747 , L0000748 , IDLING3 , IDLING4 ,  
IDLING5 , IDLING6 , ISLAND ,

VENT ,

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 17:09:15

PAGE 16

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

( 483500.0, 3716600.0, 423.7, 527.8, 0.0); ( 483600.0,  
3716600.0, 422.5, 527.8, 0.0);  
( 483700.0, 3716600.0, 425.5, 527.8, 0.0); ( 483800.0,  
3716600.0, 425.9, 527.8, 0.0);  
( 483900.0, 3716600.0, 426.9, 527.8, 0.0); ( 484000.0,  
3716600.0, 425.9, 527.8, 0.0);  
( 485000.0, 3716600.0, 426.9, 545.4, 0.0); ( 485100.0,  
3716600.0, 464.0, 545.4, 0.0);  
( 483500.0, 3716700.0, 424.1, 527.8, 0.0); ( 483600.0,  
3716700.0, 432.8, 527.8, 0.0);  
( 483700.0, 3716700.0, 433.3, 527.8, 0.0); ( 483800.0,  
3716700.0, 436.5, 527.8, 0.0);  
( 483900.0, 3716700.0, 433.7, 527.8, 0.0); ( 484000.0,  
3716700.0, 432.5, 527.8, 0.0);  
( 485200.0, 3716700.0, 440.8, 545.4, 0.0); ( 485400.0,  
3716700.0, 446.2, 545.4, 0.0);  
( 485700.0, 3716700.0, 445.0, 545.4, 0.0); ( 483100.0,  
3716800.0, 447.7, 522.3, 0.0);  
( 483200.0, 3716800.0, 435.5, 527.8, 0.0); ( 483500.0,  
3716800.0, 436.9, 527.8, 0.0);  
( 483600.0, 3716800.0, 441.5, 527.8, 0.0); ( 483700.0,  
3716800.0, 454.4, 527.8, 0.0);  
( 483800.0, 3716800.0, 450.5, 527.8, 0.0); ( 483900.0,  
3716800.0, 443.1, 527.8, 0.0);  
( 484000.0, 3716800.0, 441.6, 527.8, 0.0); ( 483100.0,  
3716900.0, 454.1, 522.3, 0.0);  
( 483200.0, 3716900.0, 447.0, 527.8, 0.0); ( 485600.0,  
3716900.0, 442.9, 545.4, 0.0);  
( 483200.0, 3717000.0, 451.5, 522.3, 0.0); ( 483300.0,

CostcoMurrieta\_Op\_HRA

3717000.0, 453.5, 527.8, 0.0);  
 ( 485400.0, 3717100.0, 439.5, 545.4, 0.0); ( 485500.0,  
 3717100.0, 438.8, 545.4, 0.0);  
 ( 485600.0, 3717100.0, 432.3, 545.4, 0.0); ( 485700.0,  
 3717100.0, 433.3, 545.4, 0.0);  
 ( 483100.0, 3717200.0, 459.1, 582.4, 0.0); ( 483200.0,  
 3717300.0, 456.7, 607.1, 0.0);  
 ( 483300.0, 3717300.0, 460.4, 582.4, 0.0); ( 483400.0,  
 3717300.0, 458.1, 606.6, 0.0);  
 ( 483500.0, 3717300.0, 451.7, 607.1, 0.0); ( 483800.0,  
 3717300.0, 452.3, 606.6, 0.0);  
 ( 483900.0, 3717300.0, 456.9, 527.8, 0.0); ( 484000.0,  
 3717300.0, 463.7, 527.8, 0.0);  
 ( 484600.0, 3717300.0, 460.3, 527.1, 0.0); ( 484700.0,  
 3717300.0, 452.9, 521.2, 0.0);  
 ( 483100.0, 3717400.0, 451.4, 607.1, 0.0); ( 483200.0,  
 3717400.0, 454.1, 607.1, 0.0);  
 ( 483300.0, 3717400.0, 455.3, 607.1, 0.0); ( 483400.0,  
 3717400.0, 454.3, 607.1, 0.0);  
 ( 483500.0, 3717400.0, 453.0, 607.1, 0.0); ( 483800.0,  
 3717400.0, 453.4, 607.1, 0.0);  
 ( 483900.0, 3717400.0, 463.9, 527.8, 0.0); ( 484000.0,  
 3717400.0, 460.2, 527.8, 0.0);  
 ( 484600.0, 3717400.0, 466.1, 466.1, 0.0); ( 484700.0,  
 3717400.0, 462.2, 470.7, 0.0);  
 ( 484800.0, 3717400.0, 456.2, 492.7, 0.0); ( 483100.0,  
 3717500.0, 453.5, 647.8, 0.0);  
 ( 483300.0, 3717500.0, 456.2, 607.1, 0.0); ( 483400.0,  
 3717500.0, 458.6, 607.1, 0.0);  
 ( 483500.0, 3717500.0, 457.7, 607.1, 0.0); ( 483600.0,  
 3717500.0, 454.5, 607.1, 0.0);  
 ( 484000.0, 3717500.0, 460.0, 607.1, 0.0); ( 484600.0,  
 3717500.0, 464.7, 470.6, 0.0);  
 ( 484700.0, 3717500.0, 468.7, 470.5, 0.0); ( 483600.0,  
 3717600.0, 460.4, 607.1, 0.0);  
 ( 484600.0, 3717600.0, 460.9, 460.9, 0.0); ( 484700.0,  
 3717600.0, 462.2, 462.2, 0.0);  
 ( 484800.0, 3717600.0, 457.7, 465.8, 0.0); ( 484600.0,  
 3717700.0, 457.8, 496.2, 0.0);  
 ( 484700.0, 3717700.0, 458.2, 458.2, 0.0); ( 484800.0,  
 3717700.0, 463.2, 465.6, 0.0);  
 ( 483400.0, 3717800.0, 463.8, 647.8, 0.0); ( 483500.0,  
 3717800.0, 463.5, 647.8, 0.0);  
 ( 483600.0, 3717800.0, 463.4, 607.1, 0.0); ( 484600.0,  
 3717800.0, 461.2, 496.2, 0.0);  
 ( 484700.0, 3717800.0, 457.7, 457.7, 0.0); ( 485300.0,  
 3717800.0, 438.5, 446.1, 0.0);  
 ( 483300.0, 3717900.0, 466.4, 647.8, 0.0); ( 483400.0,

CostcoMurrieta\_Op\_HRA

3717900.0, 466.9, 647.8, 0.0);  
 ( 483500.0, 3717900.0, 469.7, 647.8, 0.0); ( 484600.0,  
 3717900.0, 462.2, 496.2, 0.0);  
 ( 484700.0, 3717900.0, 460.0, 460.0, 0.0); ( 484800.0,  
 3717900.0, 458.4, 458.4, 0.0);  
 ( 485100.0, 3717900.0, 447.3, 447.3, 0.0); ( 483300.0,  
 3718000.0, 470.3, 647.8, 0.0);  
 ( 483400.0, 3718000.0, 470.2, 647.8, 0.0); ( 483500.0,  
 3718000.0, 469.9, 647.8, 0.0);  
 ( 483600.0, 3718000.0, 467.9, 647.8, 0.0); ( 484600.0,  
 3718000.0, 462.3, 601.0, 0.0);  
 ( 484700.0, 3718000.0, 460.0, 460.0, 0.0); ( 484800.0,  
 3718000.0, 458.8, 458.8, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 17

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

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

( 483100.0, 3718100.0, 478.7, 647.8, 0.0); ( 483400.0,  
 3718100.0, 475.0, 647.8, 0.0);  
 ( 483600.0, 3718100.0, 470.0, 647.8, 0.0); ( 484600.0,  
 3718100.0, 462.0, 607.1, 0.0);  
 ( 483900.0, 3718200.0, 474.3, 607.1, 0.0); ( 484500.0,  
 3718200.0, 463.2, 607.1, 0.0);  
 ( 484600.0, 3718200.0, 461.9, 607.1, 0.0); ( 484700.0,  
 3718200.0, 459.4, 607.1, 0.0);  
 ( 484900.0, 3718200.0, 455.3, 457.3, 0.0); ( 485400.0,  
 3718200.0, 440.1, 440.1, 0.0);  
 ( 485600.0, 3718200.0, 433.3, 503.5, 0.0); ( 483100.0,  
 3718300.0, 528.6, 647.8, 0.0);  
 ( 483900.0, 3718300.0, 475.9, 607.1, 0.0); ( 484000.0,  
 3718300.0, 472.6, 607.1, 0.0);  
 ( 484200.0, 3718300.0, 470.7, 607.1, 0.0); ( 485300.0,  
 3718300.0, 442.1, 442.1, 0.0);  
 ( 485600.0, 3718300.0, 452.8, 453.3, 0.0); ( 483400.0,  
 3718400.0, 495.1, 647.8, 0.0);  
 ( 485200.0, 3718400.0, 445.8, 465.1, 0.0); ( 485200.0,  
 3718500.0, 445.1, 465.1, 0.0);  
 ( 484600.0, 3718600.0, 466.0, 607.1, 0.0); ( 484800.0,  
 3718600.0, 462.1, 607.1, 0.0);  
 ( 485200.0, 3718600.0, 446.8, 464.9, 0.0); ( 483700.0,

CostcoMurrieta\_Op\_HRA

3718700.0, 499.0, 647.8, 0.0);  
 ( 483100.0, 3718800.0, 529.4, 647.8, 0.0); ( 484000.0,  
 3718800.0, 490.3, 619.1, 0.0);  
 ( 484200.0, 3718800.0, 476.3, 619.1, 0.0); ( 485400.0,  
 3718800.0, 448.3, 452.9, 0.0);  
 ( 483100.0, 3718900.0, 529.6, 647.8, 0.0); ( 483200.0,  
 3718900.0, 542.6, 647.8, 0.0);  
 ( 483100.0, 3719000.0, 537.9, 647.8, 0.0); ( 483200.0,  
 3719000.0, 537.5, 647.8, 0.0);  
 ( 483300.0, 3719000.0, 548.7, 647.8, 0.0); ( 483400.0,  
 3719000.0, 558.7, 607.1, 0.0);  
 ( 483500.0, 3719000.0, 556.8, 607.1, 0.0); ( 483100.0,  
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 ( 483200.0, 3719100.0, 547.9, 647.8, 0.0); ( 483300.0,  
 3719100.0, 544.1, 647.8, 0.0);  
 ( 483400.0, 3719100.0, 547.9, 647.8, 0.0); ( 483500.0,  
 3719100.0, 549.1, 607.1, 0.0);  
 ( 483700.0, 3719100.0, 597.5, 599.1, 0.0); ( 484900.0,  
 3719100.0, 459.2, 601.0, 0.0);  
 ( 485000.0, 3719100.0, 458.2, 599.2, 0.0); ( 485100.0,  
 3719100.0, 453.0, 599.2, 0.0);  
 ( 485200.0, 3719100.0, 453.2, 458.6, 0.0); ( 485300.0,  
 3719100.0, 452.4, 459.4, 0.0);  
 ( 485400.0, 3719100.0, 444.1, 459.4, 0.0); ( 485500.0,  
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 ( 485600.0, 3719100.0, 444.2, 472.2, 0.0); ( 485700.0,  
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 ( 484200.0, 3719200.0, 476.2, 619.1, 0.0); ( 484500.0,  
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 ( 484800.0, 3719200.0, 464.0, 601.0, 0.0); ( 484900.0,  
 3719200.0, 460.8, 601.0, 0.0);  
 ( 485000.0, 3719200.0, 458.8, 599.2, 0.0); ( 485100.0,  
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 ( 485400.0, 3719200.0, 446.9, 459.4, 0.0); ( 485500.0,  
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 ( 485600.0, 3719200.0, 450.6, 450.6, 0.0); ( 485700.0,  
 3719200.0, 453.7, 453.7, 0.0);

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 18

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* METEOROLOGICAL DAYS SELECTED FOR



CostcoMurrieta\_Op\_HRA

PROCESSING \*\*\*

(1=YES; 0=NO)

```

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

```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED

CATEGORIES \*\*\*

(METERS/SEC)

1.54, 3.09, 5.14, 8.23,

10.80,

```

^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD
View\CostcoMurrieta_Op_HRA\CostcoMurrieta_Op_HRA.isc *** 07/10/18
*** AERMET - VERSION 16216 *** ***
*** 17:09:15

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PAGE 19

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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

DATA \*\*\*

```

Surface file: C:\Users\swang\Documents\1. Projects\11092 Costco
Murrieta\HRA\MET\LakeElsinoreA Met Version: 16216
Profile file: C:\Users\swang\Documents\1. Projects\11092 Costco
Murrieta\HRA\MET\LakeElsinoreA
Surface format: FREE

Profile format: FREE

```

CostcoMurrieta\_Op\_HRA

Surface station no.: 3171  
 Name: UNKNOWN

Upper air station no.: 3190  
 Name: UNKNOWN

Year: 2012

Year: 2012

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							
12	01	01	1	01	-1.3	0.065	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	78.		9.1	284.2	5.5								
12	01	01	1	02	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	69.		9.1	283.8	5.5								
12	01	01	1	03	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	286.		9.1	282.5	5.5								
12	01	01	1	04	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	348.		9.1	282.5	5.5								
12	01	01	1	05	-1.3	0.066	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	17.		9.1	282.0	5.5								
12	01	01	1	06	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69	
1.00	0.90	161.		9.1	282.0	5.5								
12	01	01	1	07	-1.3	0.066	-9.000	-9.000	-999.	40.	18.2	0.23	2.69	
1.00	0.40	273.		9.1	282.0	5.5								
12	01	01	1	08	-3.6	0.091	-9.000	-9.000	-999.	66.	18.3	0.23	2.69	
0.54	0.90	113.		9.1	283.8	5.5								
12	01	01	1	09	39.6	0.087	0.358	0.016	40.	61.	-1.4	0.23	2.69	
0.33	0.40	336.		9.1	285.9	5.5								
12	01	01	1	10	110.7	0.206	0.740	0.007	127.	225.	-6.9	0.23	2.69	
0.25	1.30	158.		9.1	291.4	5.5								
12	01	01	1	11	161.7	0.105	1.203	0.005	374.	87.	-1.0	0.23	2.69	
0.23	0.40	33.		9.1	297.0	5.5								
12	01	01	1	12	185.5	0.271	1.535	0.005	676.	339.	-9.3	0.23	2.69	
0.22	1.80	313.		9.1	298.8	5.5								
12	01	01	1	13	183.9	0.219	1.828	0.005	1154.	247.	-4.9	0.23	2.69	
0.22	1.30	250.		9.1	300.4	5.5								
12	01	01	1	14	156.6	0.266	1.869	0.005	1446.	330.	-10.4	0.23	2.69	
0.23	1.80	217.		9.1	301.4	5.5								
12	01	01	1	15	104.7	0.256	1.677	0.005	1562.	311.	-13.8	0.23	2.69	
0.27	1.80	248.		9.1	302.0	5.5								
12	01	01	1	16	32.7	0.319	1.147	0.005	1596.	433.	-85.9	0.23	2.69	
0.36	2.70	235.		9.1	302.0	5.5								
12	01	01	1	17	-15.5	0.190	-9.000	-9.000	-999.	208.	39.6	0.23	2.69	
0.63	1.80	46.		9.1	299.2	5.5								
12	01	01	1	18	-4.1	0.092	-9.000	-9.000	-999.	73.	16.2	0.23	2.69	
1.00	0.90	107.		9.1	294.9	5.5								
12	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.23	2.69	

CostcoMurrieta\_Op\_HRA

1.00	999.00	999.	-9.0	292.5	5.5								
12	01	01	1	20	-4.2	0.092	-9.000	-9.000	-999.	67.	16.1	0.23	2.69
1.00	0.90	323.	9.1	290.4	5.5								
12	01	01	1	21	-8.8	0.133	-9.000	-9.000	-999.	116.	23.2	0.23	2.69
1.00	1.30	34.	9.1	287.5	5.5								
12	01	01	1	22	-1.3	0.065	-9.000	-9.000	-999.	41.	18.1	0.23	2.69
1.00	0.40	359.	9.1	286.4	5.5								
12	01	01	1	23	-1.3	0.065	-9.000	-9.000	-999.	40.	18.1	0.23	2.69
1.00	0.40	351.	9.1	285.4	5.5								
12	01	01	1	24	-4.2	0.092	-9.000	-9.000	-999.	67.	16.0	0.23	2.69
1.00	0.90	11.	9.1	284.9	5.5								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	5.5	0	-999.	-99.00	284.3	99.0	-99.00	-99.00
12	01	01	01	9.1	1	78.	0.40	-999.0	99.0	-99.00	-99.00

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

^ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 20

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING1 \*\*\*  
 INCLUDING SOURCE(S): IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		
483500.00	3716600.00	0.59825	483600.00	
3716600.00	0.64114			
483700.00	3716600.00	0.69462	483800.00	
3716600.00	0.74479			
483900.00	3716600.00	0.79653	484000.00	
3716600.00	0.84122			
485000.00	3716600.00	0.84486	485100.00	

CostcoMurrieta\_Op\_HRA

3716600.00	0.94068			
483500.00	3716700.00	0.64648		483600.00
3716700.00	0.71997			
483700.00	3716700.00	0.77958		483800.00
3716700.00	0.85101			
483900.00	3716700.00	0.90277		484000.00
3716700.00	0.95777			
485200.00	3716700.00	0.83796		485400.00
3716700.00	0.73257			
485700.00	3716700.00	0.56728		483100.00
3716800.00	0.55451			
483200.00	3716800.00	0.56863		483500.00
3716800.00	0.73210			
483600.00	3716800.00	0.81391		483700.00
3716800.00	0.94970			
483800.00	3716800.00	1.00975		483900.00
3716800.00	1.04864			
484000.00	3716800.00	1.11690		483100.00
3716900.00	0.60524			
483200.00	3716900.00	0.63722		485600.00
3716900.00	0.63231			
483200.00	3717000.00	0.69447		483300.00
3717000.00	0.77085			
485400.00	3717100.00	0.78033		485500.00
3717100.00	0.69876			
485600.00	3717100.00	0.61408		485700.00
3717100.00	0.55954			
483100.00	3717200.00	0.73750		483200.00
3717300.00	0.86117			
483300.00	3717300.00	0.99035		483400.00
3717300.00	1.10828			
483500.00	3717300.00	1.21213		483800.00
3717300.00	1.86639			
483900.00	3717300.00	2.24423		484000.00
3717300.00	2.75070			
484600.00	3717300.00	2.77418		484700.00
3717300.00	2.28358			
483100.00	3717400.00	0.78597		483200.00
3717400.00	0.89844			
483300.00	3717400.00	1.02689		483400.00
3717400.00	1.16717			
483500.00	3717400.00	1.33472		483800.00
3717400.00	2.16642			
483900.00	3717400.00	2.83407		484000.00
3717400.00	3.24266			
484600.00	3717400.00	3.31973		484700.00
3717400.00	2.68529			
484800.00	3717400.00	2.13433		483100.00

CostcoMurrieta\_Op\_HRA

3717500.00	0.83102			
483300.00	3717500.00	1.09695		483400.00
3717500.00	1.29006			
483500.00	3717500.00	1.50137		483600.00
3717500.00	1.73593			
484000.00	3717500.00	4.02365		484600.00
3717500.00	3.65362			
484700.00	3717500.00	3.03546		483600.00
3717600.00	1.99955			
484600.00	3717600.00	3.77229		484700.00
3717600.00	2.96804			
484800.00	3717600.00	2.26607		484600.00
3717700.00	3.75130			
484700.00	3717700.00	2.87012		484800.00
3717700.00	2.36691			
483400.00	3717800.00	1.56147		483500.00
3717800.00	1.89788			
483600.00	3717800.00	2.36848		484600.00
3717800.00	3.84125			
484700.00	3717800.00	2.82852		485300.00
3717800.00	0.87990			
483300.00	3717900.00	1.35070		483400.00
3717900.00	1.62712			
483500.00	3717900.00	2.04417		484600.00
3717900.00	3.87334			

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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 21

\*\*\* MODELOPTs:    RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING1 \*\*\*

INCLUDING SOURCE(S):    IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	2.89276	484800.00

CostcoMurrieta\_Op\_HRA

3717900.00	2.25992			
485100.00	3717900.00	1.21829		483300.00
3718000.00	1.38285			
483400.00	3718000.00	1.66650		483500.00
3718000.00	2.05209			
483600.00	3718000.00	2.56206		484600.00
3718000.00	3.94197			
484700.00	3718000.00	2.93229		484800.00
3718000.00	2.29631			
483100.00	3718100.00	0.86878		483400.00
3718100.00	1.56216			
483600.00	3718100.00	2.60372		484600.00
3718100.00	3.84896			
483900.00	3718200.00	7.25835		484500.00
3718200.00	4.39721			
484600.00	3718200.00	3.49273		484700.00
3718200.00	2.75101			
484900.00	3718200.00	1.80281		485400.00
3718200.00	0.80218			
485600.00	3718200.00	0.62725		483100.00
3718300.00	0.41521			
483900.00	3718300.00	6.12508		484000.00
3718300.00	6.89788			
484200.00	3718300.00	5.40138		485300.00
3718300.00	0.90845			
485600.00	3718300.00	0.68452		483400.00
3718400.00	1.19063			
485200.00	3718400.00	1.02298		485200.00
3718500.00	0.97627			
484600.00	3718600.00	1.75064		484800.00
3718600.00	1.46732			
485200.00	3718600.00	0.92833		483700.00
3718700.00	2.44001			
483100.00	3718800.00	0.58250		484000.00
3718800.00	1.84802			
484200.00	3718800.00	1.58734		485400.00
3718800.00	0.69343			
483100.00	3718900.00	0.63295		483200.00
3718900.00	0.68471			
483100.00	3719000.00	0.62738		483200.00
3719000.00	0.74686			
483300.00	3719000.00	0.80655		483400.00
3719000.00	0.87574			
483500.00	3719000.00	0.96933		483100.00
3719100.00	0.60444			
483200.00	3719100.00	0.70854		483300.00
3719100.00	0.82402			
483400.00	3719100.00	0.88775		483500.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.93996			
483700.00	3719100.00	0.81501		484900.00
3719100.00	0.73726			
485000.00	3719100.00	0.70424		485100.00
3719100.00	0.65955			
485200.00	3719100.00	0.63131		485300.00
3719100.00	0.60028			
485400.00	3719100.00	0.55207		485500.00
3719100.00	0.52387			
485600.00	3719100.00	0.49847		485700.00
3719100.00	0.48261			
484200.00	3719200.00	0.89884		484500.00
3719200.00	0.79819			
484800.00	3719200.00	0.70462		484900.00
3719200.00	0.67053			
485000.00	3719200.00	0.64069		485100.00
3719200.00	0.60301			
485200.00	3719200.00	0.59121		485300.00
3719200.00	0.55536			
485400.00	3719200.00	0.51844		485500.00
3719200.00	0.49444			
485600.00	3719200.00	0.47968		485700.00
3719200.00	0.46173			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 22

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING2    \*\*\*  
                                  INCLUDING SOURCE(S):    IDLING2    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.51785	483600.00
3716600.00	0.55643		
483700.00	3716600.00	0.60216	483800.00

CostcoMurrieta\_Op\_HRA

3716600.00	0.64840			
	483900.00	3716600.00	0.69745	484000.00
3716600.00	0.74502			
	485000.00	3716600.00	0.87248	485100.00
3716600.00	0.95063			
	483500.00	3716700.00	0.55565	483600.00
3716700.00	0.61142			
	483700.00	3716700.00	0.66280	483800.00
3716700.00	0.72254			
	483900.00	3716700.00	0.77606	484000.00
3716700.00	0.83388			
	485200.00	3716700.00	0.87457	485400.00
3716700.00	0.76917			
	485700.00	3716700.00	0.60024	483100.00
3716800.00	0.46316			
	483200.00	3716800.00	0.48013	483500.00
3716800.00	0.61263			
	483600.00	3716800.00	0.67493	483700.00
3716800.00	0.77022			
	483800.00	3716800.00	0.82537	483900.00
3716800.00	0.87616			
	484000.00	3716800.00	0.94670	483100.00
3716900.00	0.49916			
	483200.00	3716900.00	0.52578	485600.00
3716900.00	0.68107			
	483200.00	3717000.00	0.56476	483300.00
3717000.00	0.62146			
	485400.00	3717100.00	0.86909	485500.00
3717100.00	0.77301			
	485600.00	3717100.00	0.68081	485700.00
3717100.00	0.61382			
	483100.00	3717200.00	0.58890	483200.00
3717300.00	0.67322			
	483300.00	3717300.00	0.76195	483400.00
3717300.00	0.84378			
	483500.00	3717300.00	0.92527	483800.00
3717300.00	1.38850			
	483900.00	3717300.00	1.63702	484000.00
3717300.00	1.96307			
	484600.00	3717300.00	2.88922	484700.00
3717300.00	2.56258			
	483100.00	3717400.00	0.61911	483200.00
3717400.00	0.69635			
	483300.00	3717400.00	0.78383	483400.00
3717400.00	0.88065			
	483500.00	3717400.00	0.99721	483800.00
3717400.00	1.56171			
	483900.00	3717400.00	1.92815	484000.00



CostcoMurrieta\_Op\_HRA

3717400.00	2.26092			
484600.00	3717400.00	3.59066		484700.00
3717400.00	3.06979			
484800.00	3717400.00	2.53476		483100.00
3717500.00	0.64673			
483300.00	3717500.00	0.82450		483400.00
3717500.00	0.94795			
483500.00	3717500.00	1.08474		483600.00
3717500.00	1.24498			
484000.00	3717500.00	2.67382		484600.00
3717500.00	4.31053			
484700.00	3717500.00	3.62542		483600.00
3717600.00	1.36705			
484600.00	3717600.00	5.07305		484700.00
3717600.00	3.86961			
484800.00	3717600.00	2.91853		484600.00
3717700.00	5.69923			
484700.00	3717700.00	4.01662		484800.00
3717700.00	3.01521			
483400.00	3717800.00	1.08749		483500.00
3717800.00	1.27595			
483600.00	3717800.00	1.52755		484600.00
3717800.00	5.88199			
484700.00	3717800.00	4.00392		485300.00
3717800.00	1.02470			
483300.00	3717900.00	0.96390		483400.00
3717900.00	1.12141			
483500.00	3717900.00	1.34631		484600.00
3717900.00	5.83862			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 23

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING2      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING2      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA      IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	CONC			
484700.00	3717900.00	4.01467		484800.00
3717900.00	2.94793			
485100.00	3717900.00	1.46074		483300.00
3718000.00	0.98694			
483400.00	3718000.00	1.14605		483500.00
3718000.00	1.34920			
483600.00	3718000.00	1.60170		484600.00
3718000.00	5.93181			
484700.00	3718000.00	4.07692		484800.00
3718000.00	2.99364			
483100.00	3718100.00	0.78651		483400.00
3718100.00	1.17317			
483600.00	3718100.00	1.61355		484600.00
3718100.00	5.35153			
483900.00	3718200.00	3.62691		484500.00
3718200.00	5.03643			
484600.00	3718200.00	4.24568		484700.00
3718200.00	3.41965			
484900.00	3718200.00	2.19156		485400.00
3718200.00	0.91142			
485600.00	3718200.00	0.70085		483100.00
3718300.00	0.41843			
483900.00	3718300.00	3.57158		484000.00
3718300.00	4.48408			
484200.00	3718300.00	5.42288		485300.00
3718300.00	1.03714			
485600.00	3718300.00	0.74149		483400.00
3718400.00	1.11828			
485200.00	3718400.00	1.15342		485200.00
3718500.00	1.07655			
484600.00	3718600.00	1.69321		484800.00
3718600.00	1.46786			
485200.00	3718600.00	0.99473		483700.00
3718700.00	2.10436			
483100.00	3718800.00	0.53213		484000.00
3718800.00	2.11180			
484200.00	3718800.00	1.74341		485400.00
3718800.00	0.71806			
483100.00	3718900.00	0.57648		483200.00
3718900.00	0.60195			
483100.00	3719000.00	0.56916		483200.00
3719000.00	0.68168			
483300.00	3719000.00	0.72420		483400.00
3719000.00	0.78419			
483500.00	3719000.00	0.91694		483100.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.54036			
483200.00	3719100.00	0.64671		483300.00
3719100.00	0.78212			
483400.00	3719100.00	0.86477		483500.00
3719100.00	0.95723			
483700.00	3719100.00	0.85797		484900.00
3719100.00	0.71722			
485000.00	3719100.00	0.68799		485100.00
3719100.00	0.64798			
485200.00	3719100.00	0.62335		485300.00
3719100.00	0.59604			
485400.00	3719100.00	0.55367		485500.00
3719100.00	0.52785			
485600.00	3719100.00	0.50402		485700.00
3719100.00	0.48886			
484200.00	3719200.00	0.97193		484500.00
3719200.00	0.78312			
484800.00	3719200.00	0.68554		484900.00
3719200.00	0.65235			
485000.00	3719200.00	0.62488		485100.00
3719200.00	0.59013			
485200.00	3719200.00	0.58159		485300.00
3719200.00	0.54823			
485400.00	3719200.00	0.51503		485500.00
3719200.00	0.49342			
485600.00	3719200.00	0.48023		485700.00
3719200.00	0.46450			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
 \*\*\*                                    \*\*\*                                    17:09:15

PAGE 24

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3    \*\*\*

INCLUDING SOURCE(S):    IDLING3    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA            IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

483500.00	3716600.00	0.53070	483600.00
3716600.00	0.56991		
483700.00	3716600.00	0.62277	483800.00
3716600.00	0.67465		
483900.00	3716600.00	0.73294	484000.00
3716600.00	0.78898		
485000.00	3716600.00	1.09710	485100.00
3716600.00	1.26004		
483500.00	3716700.00	0.56527	483600.00
3716700.00	0.63567		
483700.00	3716700.00	0.69256	483800.00
3716700.00	0.76562		
483900.00	3716700.00	0.82296	484000.00
3716700.00	0.89132		
485200.00	3716700.00	1.17280	485400.00
3716700.00	1.03611		
485700.00	3716700.00	0.78693	483100.00
3716800.00	0.48089		
483200.00	3716800.00	0.49429	483500.00
3716800.00	0.63603		
483600.00	3716800.00	0.71018	483700.00
3716800.00	0.83020		
483800.00	3716800.00	0.89595	483900.00
3716800.00	0.94615		
484000.00	3716800.00	1.03138	483100.00
3716900.00	0.51467		
483200.00	3716900.00	0.54496	485600.00
3716900.00	0.91110		
483200.00	3717000.00	0.58227	483300.00
3717000.00	0.64379		
485400.00	3717100.00	1.19634	485500.00
3717100.00	1.04593		
485600.00	3717100.00	0.89288	485700.00
3717100.00	0.79723		
483100.00	3717200.00	0.59241	483200.00
3717300.00	0.67572		
483300.00	3717300.00	0.76452	483400.00
3717300.00	0.85273		
483500.00	3717300.00	0.93481	483800.00
3717300.00	1.42066		
483900.00	3717300.00	1.72078	484000.00
3717300.00	2.14144		
484600.00	3717300.00	4.81798	484700.00
3717300.00	4.22274		
483100.00	3717400.00	0.61545	483200.00
3717400.00	0.69253		
483300.00	3717400.00	0.78023	483400.00

CostcoMurrieta\_Op\_HRA

3717400.00	0.87717			
483500.00	3717400.00	0.99218		483800.00
3717400.00	1.56029			
483900.00	3717400.00	2.00690		484000.00
3717400.00	2.38004			
484600.00	3717400.00	6.66882		484700.00
3717400.00	5.88335			
484800.00	3717400.00	4.58206		483100.00
3717500.00	0.63674			
483300.00	3717500.00	0.81002		483400.00
3717500.00	0.93064			
483500.00	3717500.00	1.06495		483600.00
3717500.00	1.21423			
484000.00	3717500.00	2.69049		484600.00
3717500.00	9.20610			
484700.00	3717500.00	7.46504		483600.00
3717600.00	1.31198			
484600.00	3717600.00	12.06402		484700.00
3717600.00	8.82926			
484800.00	3717600.00	5.71271		484600.00
3717700.00	13.80087			
484700.00	3717700.00	8.63423		484800.00
3717700.00	6.20051			
483400.00	3717800.00	1.01079		483500.00
3717800.00	1.17711			
483600.00	3717800.00	1.39323		484600.00
3717800.00	14.49933			
484700.00	3717800.00	8.39504		485300.00
3717800.00	1.43350			
483300.00	3717900.00	0.82031		483400.00
3717900.00	0.93172			
483500.00	3717900.00	1.01657		484600.00
3717900.00	14.91446			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 25

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING3 \*\*\*  
INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

CostcoMurrieta\_Op\_HRA  
 \*\* CONC OF HRA

IN MICROGRAMS/M\*\*3

\*\*

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
3717900.00	484700.00	3717900.00	8.91394	484800.00
3718000.00	485100.00	3717900.00	2.25060	483300.00
3718000.00	483400.00	3718000.00	0.85871	483500.00
3718000.00	483600.00	3718000.00	1.23938	484600.00
3718000.00	484700.00	3718000.00	7.54404	484800.00
3718100.00	483100.00	3718100.00	0.49927	483400.00
3718100.00	483600.00	3718100.00	1.17447	484600.00
3718100.00	483900.00	3718200.00	2.28966	484500.00
3718200.00	484600.00	3718200.00	4.64145	484700.00
3718200.00	484900.00	3718200.00	3.00404	485400.00
3718300.00	485600.00	3718200.00	0.90872	483100.00
3718300.00	483900.00	3718300.00	2.40630	484000.00
3718300.00	484200.00	3718300.00	4.89299	485300.00
3718400.00	485600.00	3718300.00	0.98518	483400.00
3718500.00	485200.00	3718400.00	1.42964	485200.00
3718600.00	484600.00	3718600.00	1.74725	484800.00
3718700.00	485200.00	3718600.00	1.13572	483700.00
3718800.00	483100.00	3718800.00	0.34835	484000.00
3718800.00	484200.00	3718800.00	1.77849	485400.00
3718900.00	483100.00	3718900.00	0.37544	483200.00
	483100.00	3719000.00	0.38020	483200.00

CostcoMurrieta\_Op\_HRA

3719000.00	0.44775			
483300.00	3719000.00	0.49598		483400.00
3719000.00	0.56121			
483500.00	3719000.00	0.65471		483100.00
3719100.00	0.38005			
483200.00	3719100.00	0.44743		483300.00
3719100.00	0.52972			
483400.00	3719100.00	0.59767		483500.00
3719100.00	0.67127			
483700.00	3719100.00	0.71726		484900.00
3719100.00	0.76359			
485000.00	3719100.00	0.73320		485100.00
3719100.00	0.69352			
485200.00	3719100.00	0.66908		485300.00
3719100.00	0.64237			
485400.00	3719100.00	0.59754		485500.00
3719100.00	0.57326			
485600.00	3719100.00	0.55158		485700.00
3719100.00	0.53940			
484200.00	3719200.00	0.98695		484500.00
3719200.00	0.79478			
484800.00	3719200.00	0.72218		484900.00
3719200.00	0.69070			
485000.00	3719200.00	0.66315		485100.00
3719200.00	0.62953			
485200.00	3719200.00	0.61854		485300.00
3719200.00	0.58729			
485400.00	3719200.00	0.55369		485500.00
3719200.00	0.53271			
485600.00	3719200.00	0.52107		485700.00
3719200.00	0.50560			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 26

\*\*\* MODELOPTs:      RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING4      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA      IN MICROGRAMS/M\*\*3

\*\*

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
3716600.00	483500.00	3716600.00	0.55372	483600.00
3716600.00	483700.00	3716600.00	0.65236	483800.00
3716600.00	483900.00	3716600.00	0.77051	484000.00
3716600.00	485000.00	3716600.00	1.11517	485100.00
3716700.00	483500.00	3716700.00	0.59096	483600.00
3716700.00	483700.00	3716700.00	0.72759	483800.00
3716700.00	483900.00	3716700.00	0.86835	484000.00
3716700.00	485200.00	3716700.00	1.17195	485400.00
3716800.00	485700.00	3716700.00	0.76919	483100.00
3716800.00	483200.00	3716800.00	0.51459	483500.00
3716800.00	483600.00	3716800.00	0.74673	483700.00
3716800.00	483800.00	3716800.00	0.94850	483900.00
3716900.00	484000.00	3716800.00	1.09564	483100.00
3716900.00	483200.00	3716900.00	0.56864	485600.00
3717000.00	483200.00	3717000.00	0.60857	483300.00
3717100.00	485400.00	3717100.00	1.15235	485500.00
3717100.00	485600.00	3717100.00	0.86013	485700.00
3717300.00	483100.00	3717200.00	0.61883	483200.00
3717300.00	483300.00	3717300.00	0.80467	483400.00
3717300.00	483500.00	3717300.00	0.99147	483800.00
3717300.00	483900.00	3717300.00	1.87757	484000.00
	484600.00	3717300.00	5.12507	484700.00



CostcoMurrieta\_Op\_HRA

3717300.00	4.32382			
	483100.00	3717400.00	0.64261	483200.00
3717400.00	0.72574			
	483300.00	3717400.00	0.82095	483400.00
3717400.00	0.92693			
	483500.00	3717400.00	1.05360	483800.00
3717400.00	1.69260			
	483900.00	3717400.00	2.20618	484000.00
3717400.00	2.64706			
	484600.00	3717400.00	7.04837	484700.00
3717400.00	5.89667			
	484800.00	3717400.00	4.42967	483100.00
3717500.00	0.66471			
	483300.00	3717500.00	0.85218	483400.00
3717500.00	0.98405			
	483500.00	3717500.00	1.13221	483600.00
3717500.00	1.29842			
	484000.00	3717500.00	3.01428	484600.00
3717500.00	9.45733			
	484700.00	3717500.00	7.07431	483600.00
3717600.00	1.40418			
	484600.00	3717600.00	11.59823	484700.00
3717600.00	7.96061			
	484800.00	3717600.00	5.12941	484600.00
3717700.00	11.70671			
	484700.00	3717700.00	7.44671	484800.00
3717700.00	5.46715			
	483400.00	3717800.00	1.06327	483500.00
3717800.00	1.24566			
	483600.00	3717800.00	1.48382	484600.00
3717800.00	12.55373			
	484700.00	3717800.00	7.38917	485300.00
3717800.00	1.36103			
	483300.00	3717900.00	0.85248	483400.00
3717900.00	0.97210			
	483500.00	3717900.00	1.06455	484600.00
3717900.00	12.09926			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 17:09:15

PAGE 27

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING4 \*\*\*  
INCLUDING SOURCE(S): IDLING4 ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

		** CONC OF HRA	IN MICROGRAMS/M**3
**			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	7.64589	484800.00
3717900.00	5.17749		
485100.00	3717900.00	2.10473	483300.00
3718000.00	0.77631		
483400.00	3718000.00	0.89423	483500.00
3718000.00	1.05161		
483600.00	3718000.00	1.30624	484600.00
3718000.00	8.51192		
484700.00	3718000.00	6.44439	484800.00
3718000.00	4.80921		
483100.00	3718100.00	0.51552	483400.00
3718100.00	0.80459		
483600.00	3718100.00	1.24384	484600.00
3718100.00	5.76255		
483900.00	3718200.00	2.59265	484500.00
3718200.00	4.71123		
484600.00	3718200.00	4.14814	484700.00
3718200.00	3.66453		
484900.00	3718200.00	2.72861	485400.00
3718200.00	1.16044		
485600.00	3718200.00	0.87067	483100.00
3718300.00	0.29073		
483900.00	3718300.00	2.67642	484000.00
3718300.00	3.54208		
484200.00	3718300.00	4.66762	485300.00
3718300.00	1.27574		
485600.00	3718300.00	0.94068	483400.00
3718400.00	0.65995		
485200.00	3718400.00	1.34272	485200.00
3718500.00	1.19703		
484600.00	3718600.00	1.61797	484800.00
3718600.00	1.49343		
485200.00	3718600.00	1.07617	483700.00
3718700.00	1.45228		
483100.00	3718800.00	0.37386	484000.00
3718800.00	1.80470		
484200.00	3718800.00	1.63975	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	0.77449			
483100.00		3718900.00	0.40341	483200.00
3718900.00	0.43566			
483100.00		3719000.00	0.40771	483200.00
3719000.00	0.47982			
483300.00		3719000.00	0.52960	483400.00
3719000.00	0.59398			
483500.00		3719000.00	0.68319	483100.00
3719100.00	0.40584			
483200.00		3719100.00	0.47577	483300.00
3719100.00	0.55869			
483400.00		3719100.00	0.62347	483500.00
3719100.00	0.69082			
483700.00		3719100.00	0.71563	484900.00
3719100.00	0.73352			
485000.00		3719100.00	0.70503	485100.00
3719100.00	0.66776			
485200.00		3719100.00	0.64451	485300.00
3719100.00	0.61912			
485400.00		3719100.00	0.57677	485500.00
3719100.00	0.55363			
485600.00		3719100.00	0.53296	485700.00
3719100.00	0.52123			
484200.00		3719200.00	0.92387	484500.00
3719200.00	0.75379			
484800.00		3719200.00	0.69383	484900.00
3719200.00	0.66500			
485000.00		3719200.00	0.63917	485100.00
3719200.00	0.60752			
485200.00		3719200.00	0.59681	485300.00
3719200.00	0.56725			
485400.00		3719200.00	0.53541	485500.00
3719200.00	0.51537			
485600.00		3719200.00	0.50412	485700.00
3719200.00	0.48927			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 28

\*\*\* MODELOPTs:      RegDFault      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5      \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING5      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

CostcoMurrieta\_Op\_HRA

\*\*\*

		** CONC OF HRA	IN MICROGRAMS/M**3
**			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.58369	483600.00
3716600.00	0.62974		
483700.00	3716600.00	0.69034	483800.00
3716600.00	0.75044		
483900.00	3716600.00	0.81712	484000.00
3716600.00	0.88099		
485000.00	3716600.00	1.09215	485100.00
3716600.00	1.23807		
483500.00	3716700.00	0.62531	483600.00
3716700.00	0.70521		
483700.00	3716700.00	0.77186	483800.00
3716700.00	0.85648		
483900.00	3716700.00	0.92420	484000.00
3716700.00	1.00327		
485200.00	3716700.00	1.11205	485400.00
3716700.00	0.95889		
485700.00	3716700.00	0.71661	483100.00
3716800.00	0.52591		
483200.00	3716800.00	0.54099	483500.00
3716800.00	0.70627		
483600.00	3716800.00	0.79306	483700.00
3716800.00	0.93767		
483800.00	3716800.00	1.01400	483900.00
3716800.00	1.07226		
484000.00	3716800.00	1.17193	483100.00
3716900.00	0.56653		
483200.00	3716900.00	0.60045	485600.00
3716900.00	0.81369		
483200.00	3717000.00	0.64542	483300.00
3717000.00	0.71866		
485400.00	3717100.00	1.04232	485500.00
3717100.00	0.91412		
485600.00	3717100.00	0.78579	485700.00
3717100.00	0.70521		
483100.00	3717200.00	0.65991	483200.00
3717300.00	0.75853		
483300.00	3717300.00	0.86841	483400.00
3717300.00	0.97593		
483500.00	3717300.00	1.07498	483800.00

CostcoMurrieta\_Op\_HRA

3717300.00	1.70132			
483900.00	3717300.00	2.10575		484000.00
3717300.00	2.70691			
484600.00	3717300.00	4.93789		484700.00
3717300.00	3.96438			
483100.00	3717400.00	0.68398		483200.00
3717400.00	0.77709			
483300.00	3717400.00	0.88424		483400.00
3717400.00	1.00349			
483500.00	3717400.00	1.14726		483800.00
3717400.00	1.89345			
483900.00	3717400.00	2.53810		484000.00
3717400.00	3.05386			
484600.00	3717400.00	6.67362		484700.00
3717400.00	5.10440			
484800.00	3717400.00	3.74261		483100.00
3717500.00	0.70875			
483300.00	3717500.00	0.91967		483400.00
3717500.00	1.07112			
483500.00	3717500.00	1.24082		483600.00
3717500.00	1.43150			
484000.00	3717500.00	3.53249		484600.00
3717500.00	8.11206			
484700.00	3717500.00	5.96396		483600.00
3717600.00	1.56089			
484600.00	3717600.00	8.58711		484700.00
3717600.00	5.92225			
484800.00	3717600.00	3.99811		484600.00
3717700.00	8.11443			
484700.00	3717700.00	5.50805		484800.00
3717700.00	4.23002			
483400.00	3717800.00	1.16335		483500.00
3717800.00	1.37308			
483600.00	3717800.00	1.65281		484600.00
3717800.00	8.69259			
484700.00	3717800.00	5.54073		485300.00
3717800.00	1.20985			
483300.00	3717900.00	1.00525		483400.00
3717900.00	1.17179			
483500.00	3717900.00	1.27370		484600.00
3717900.00	8.39801			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

\*\*\* 17:09:15

PAGE 29

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

CostcoMurrieta\_Op\_HRA

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.66234	484800.00
3717900.00	4.04463		
485100.00	3717900.00	1.80939	483300.00
3718000.00	0.90610		
483400.00	3718000.00	1.05489	483500.00
3718000.00	1.25714		
483600.00	3718000.00	1.60864	484600.00
3718000.00	6.55800		
484700.00	3718000.00	4.99019	484800.00
3718000.00	3.81814		
483100.00	3718100.00	0.58469	483400.00
3718100.00	0.94547		
483600.00	3718100.00	1.51832	484600.00
3718100.00	4.77193		
483900.00	3718200.00	3.30592	484500.00
3718200.00	3.96340		
484600.00	3718200.00	3.56123	484700.00
3718200.00	3.14306		
484900.00	3718200.00	2.33838	485400.00
3718200.00	1.04167		
485600.00	3718200.00	0.79419	483100.00
3718300.00	0.32044		
483900.00	3718300.00	3.21819	484000.00
3718300.00	3.93445		
484200.00	3718300.00	4.31831	485300.00
3718300.00	1.14261		
485600.00	3718300.00	0.85647	483400.00
3718400.00	0.79670		
485200.00	3718400.00	1.20762	485200.00
3718500.00	1.08886		
484600.00	3718600.00	1.56608	484800.00
3718600.00	1.37270		
485200.00	3718600.00	0.98822	483700.00

CostcoMurrieta\_Op\_HRA

3718700.00	1.64194			
483100.00		3718800.00	0.43428	484000.00
3718800.00	1.72455			
484200.00		3718800.00	1.48086	485400.00
3718800.00	0.72221			
483100.00		3718900.00	0.46801	483200.00
3718900.00	0.50319			
483100.00		3719000.00	0.46786	483200.00
3719000.00	0.54887			
483300.00		3719000.00	0.59671	483400.00
3719000.00	0.65617			
483500.00		3719000.00	0.73908	483100.00
3719100.00	0.45850			
483200.00		3719100.00	0.53343	483300.00
3719100.00	0.61928			
483400.00		3719100.00	0.67790	483500.00
3719100.00	0.73581			
483700.00		3719100.00	0.71824	484900.00
3719100.00	0.69399			
485000.00		3719100.00	0.66747	485100.00
3719100.00	0.63175			
485200.00		3719100.00	0.61003	485300.00
3719100.00	0.58610			
485400.00		3719100.00	0.54580	485500.00
3719100.00	0.52399			
485600.00		3719100.00	0.50451	485700.00
3719100.00	0.49373			
484200.00		3719200.00	0.85294	484500.00
3719200.00	0.74605			
484800.00		3719200.00	0.65970	484900.00
3719200.00	0.63175			
485000.00		3719200.00	0.60739	485100.00
3719200.00	0.57685			
485200.00		3719200.00	0.56768	485300.00
3719200.00	0.53901			
485400.00		3719200.00	0.50848	485500.00
3719200.00	0.48954			
485600.00		3719200.00	0.47916	485700.00
3719200.00	0.46540			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 30

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION

CostcoMurrieta\_Op\_HRA

VALUES FOR SOURCE GROUP: IDLING6 \*\*\*

INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.56214	483600.00
3716600.00	0.60504		
483700.00	3716600.00	0.66097	483800.00
3716600.00	0.71615		
483900.00	3716600.00	0.77690	484000.00
3716600.00	0.83472		
485000.00	3716600.00	1.03242	485100.00
3716600.00	1.17328		
483500.00	3716700.00	0.60192	483600.00
3716700.00	0.67561		
483700.00	3716700.00	0.73693	483800.00
3716700.00	0.81407		
483900.00	3716700.00	0.87552	484000.00
3716700.00	0.94660		
485200.00	3716700.00	1.05939	485400.00
3716700.00	0.92379		
485700.00	3716700.00	0.69989	483100.00
3716800.00	0.51002		
483200.00	3716800.00	0.52372	483500.00
3716800.00	0.67778		
483600.00	3716800.00	0.75774	483700.00
3716800.00	0.89097		
483800.00	3716800.00	0.95912	483900.00
3716800.00	1.01081		
484000.00	3716800.00	1.09950	483100.00
3716900.00	0.54996		
483200.00	3716900.00	0.58098	485600.00
3716900.00	0.79596		
483200.00	3717000.00	0.62501	483300.00
3717000.00	0.69367		
485400.00	3717100.00	1.01914	485500.00
3717100.00	0.89707		
485600.00	3717100.00	0.77401	485700.00
3717100.00	0.69560		
483100.00	3717200.00	0.64351	483200.00



CostcoMurrieta\_Op\_HRA

3717300.00	0.73859			
483300.00	3717300.00	0.84327		483400.00
3717300.00	0.94302			
483500.00	3717300.00	1.03308		483800.00
3717300.00	1.59956			
483900.00	3717300.00	1.95518		484000.00
3717300.00	2.47509			
484600.00	3717300.00	4.30759		484700.00
3717300.00	3.57201			
483100.00	3717400.00	0.66914		483200.00
3717400.00	0.75840			
483300.00	3717400.00	0.86026		483400.00
3717400.00	0.97227			
483500.00	3717400.00	1.10617		483800.00
3717400.00	1.78425			
483900.00	3717400.00	2.35575		484000.00
3717400.00	2.78844			
484600.00	3717400.00	5.76823		484700.00
3717400.00	4.60136			
484800.00	3717400.00	3.49485		483100.00
3717500.00	0.69557			
483300.00	3717500.00	0.89819		483400.00
3717500.00	1.04278			
483500.00	3717500.00	1.20220		483600.00
3717500.00	1.37891			
484000.00	3717500.00	3.23388		484600.00
3717500.00	7.06644			
484700.00	3717500.00	5.67220		483600.00
3717600.00	1.51486			
484600.00	3717600.00	7.85648		484700.00
3717600.00	5.63088			
484800.00	3717600.00	3.87669		484600.00
3717700.00	7.90752			
484700.00	3717700.00	5.34165		484800.00
3717700.00	4.09183			
483400.00	3717800.00	1.15468		483500.00
3717800.00	1.36075			
483600.00	3717800.00	1.63491		484600.00
3717800.00	8.10957			
484700.00	3717800.00	5.27278		485300.00
3717800.00	1.18576			
483300.00	3717900.00	1.00461		483400.00
3717900.00	1.17224			
483500.00	3717900.00	1.37825		484600.00
3717900.00	8.40043			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

07/10/18

CostcoMurrieta\_Op\_HRA  
17:09:15

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PAGE 31

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING6 \*\*\*  
INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.52156	484800.00
3717900.00	3.92127		
485100.00	3717900.00	1.76478	483300.00
3718000.00	0.96941		
483400.00	3718000.00	1.13185	483500.00
3718000.00	1.35708		
483600.00	3718000.00	1.66766	484600.00
3718000.00	7.21095		
484700.00	3718000.00	5.18880	484800.00
3718000.00	3.84877		
483100.00	3718100.00	0.61371	483400.00
3718100.00	0.99871		
483600.00	3718100.00	1.62010	484600.00
3718100.00	5.36772		
483900.00	3718200.00	3.37513	484500.00
3718200.00	4.44247		
484600.00	3718200.00	3.96951	484700.00
3718200.00	3.43898		
484900.00	3718200.00	2.44475	485400.00
3718200.00	1.03740		
485600.00	3718200.00	0.78789	483100.00
3718300.00	0.32460		
483900.00	3718300.00	3.31907	484000.00
3718300.00	4.21305		
484200.00	3718300.00	4.97560	485300.00
3718300.00	1.15461		
485600.00	3718300.00	0.85414	483400.00
3718400.00	0.79293		
485200.00	3718400.00	1.24185	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	1.12712			
484600.00		3718600.00	1.67992	484800.00
3718600.00	1.46191			
485200.00		3718600.00	1.02636	483700.00
3718700.00	1.71411			
483100.00		3718800.00	0.42809	484000.00
3718800.00	1.88016			
484200.00		3718800.00	1.60782	485400.00
3718800.00	0.74508			
483100.00		3718900.00	0.46295	483200.00
3718900.00	0.49670			
483100.00		3719000.00	0.46386	483200.00
3719000.00	0.54777			
483300.00		3719000.00	0.59801	483400.00
3719000.00	0.66341			
483500.00		3719000.00	0.75706	483100.00
3719100.00	0.45548			
483200.00		3719100.00	0.53451	483300.00
3719100.00	0.62758			
483400.00		3719100.00	0.69339	483500.00
3719100.00	0.76033			
483700.00		3719100.00	0.75198	484900.00
3719100.00	0.72293			
485000.00		3719100.00	0.69434	485100.00
3719100.00	0.65527			
485200.00		3719100.00	0.63200	485300.00
3719100.00	0.60618			
485400.00		3719100.00	0.56267	485500.00
3719100.00	0.53912			
485600.00		3719100.00	0.51802	485700.00
3719100.00	0.50627			
484200.00		3719200.00	0.90577	484500.00
3719200.00	0.78470			
484800.00		3719200.00	0.68760	484900.00
3719200.00	0.65697			
485000.00		3719200.00	0.63060	485100.00
3719200.00	0.59724			
485200.00		3719200.00	0.58816	485300.00
3719200.00	0.55685			
485400.00		3719200.00	0.52388	485500.00
3719200.00	0.50357			
485600.00		3719200.00	0.49249	485700.00
3719200.00	0.47780			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*

07/10/18

\*\*\* 17:09:15

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ISLAND \*\*\*

INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.75285	483600.00
3716600.00	0.79183		
483700.00	3716600.00	0.83751	483800.00
3716600.00	0.87609		
483900.00	3716600.00	0.91221	484000.00
3716600.00	0.93822		
485000.00	3716600.00	0.81259	485100.00
3716600.00	0.83372		
483500.00	3716700.00	0.82445	483600.00
3716700.00	0.89384		
483700.00	3716700.00	0.94668	483800.00
3716700.00	1.00386		
483900.00	3716700.00	1.04156	484000.00
3716700.00	1.07616		
485200.00	3716700.00	0.82326	485400.00
3716700.00	0.72987		
485700.00	3716700.00	0.59125	483100.00
3716800.00	0.71512		
483200.00	3716800.00	0.75033	483500.00
3716800.00	0.93376		
483600.00	3716800.00	1.01129	483700.00
3716800.00	1.11291		
483800.00	3716800.00	1.17073	483900.00
3716800.00	1.20971		
484000.00	3716800.00	1.25674	483100.00
3716900.00	0.77415		
483200.00	3716900.00	0.82804	485600.00
3716900.00	0.70496		
483200.00	3717000.00	0.89975	483300.00
3717000.00	0.98852		
485400.00	3717100.00	0.93765	485500.00

CostcoMurrieta\_Op\_HRA

3717100.00	0.84936			
485600.00	3717100.00	0.76239		485700.00
3717100.00	0.69862			
483100.00	3717200.00	0.94637		483200.00
3717300.00	1.11745			
483300.00	3717300.00	1.26967		483400.00
3717300.00	1.43334			
483500.00	3717300.00	1.60601		483800.00
3717300.00	2.42026			
483900.00	3717300.00	2.80932		484000.00
3717300.00	3.24615			
484600.00	3717300.00	3.16174		484700.00
3717300.00	2.73653			
483100.00	3717400.00	1.03708		483200.00
3717400.00	1.17811			
483300.00	3717400.00	1.34468		483400.00
3717400.00	1.53913			
483500.00	3717400.00	1.77433		483800.00
3717400.00	2.87076			
483900.00	3717400.00	3.52879		484000.00
3717400.00	4.07074			
484600.00	3717400.00	4.06578		484700.00
3717400.00	3.42341			
484800.00	3717400.00	2.83100		483100.00
3717500.00	1.08825			
483300.00	3717500.00	1.43120		483400.00
3717500.00	1.67299			
483500.00	3717500.00	1.96327		483600.00
3717500.00	2.31470			
484000.00	3717500.00	5.30031		484600.00
3717500.00	5.18120			
484700.00	3717500.00	4.24881		483600.00
3717600.00	2.59153			
484600.00	3717600.00	6.53394		484700.00
3717600.00	4.95679			
484800.00	3717600.00	3.74566		484600.00
3717700.00	8.03255			
484700.00	3717700.00	5.63425		484800.00
3717700.00	4.24722			
483400.00	3717800.00	1.93855		483500.00
3717800.00	2.35849			
483600.00	3717800.00	2.94814		484600.00
3717800.00	9.58430			
484700.00	3717800.00	6.18778		485300.00
3717800.00	1.43265			
483300.00	3717900.00	1.64490		483400.00
3717900.00	1.96739			
483500.00	3717900.00	2.41895		484600.00

CostcoMurrieta\_Op\_HRA

3717900.00 10.22577

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 17:09:15

PAGE 33

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: ISLAND \*\*\*

INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	6.49350	484800.00
3717900.00	4.55519		
485100.00	3717900.00	2.09733	483300.00
3718000.00	1.63868		
483400.00	3718000.00	1.95461	483500.00
3718000.00	2.37960		
483600.00	3718000.00	2.96132	484600.00
3718000.00	9.82108		
484700.00	3718000.00	6.36783	484800.00
3718000.00	4.51250		
483100.00	3718100.00	1.19460	483400.00
3718100.00	1.90407		
483600.00	3718100.00	2.82038	484600.00
3718100.00	8.32666		
483900.00	3718200.00	5.42327	484500.00
3718200.00	8.07054		
484600.00	3718200.00	6.41603	484700.00
3718200.00	4.98510		
484900.00	3718200.00	3.06065	485400.00
3718200.00	1.21545		
485600.00	3718200.00	0.92826	483100.00
3718300.00	0.57970		
483900.00	3718300.00	4.40599	484000.00
3718300.00	5.35162		
484200.00	3718300.00	6.89823	485300.00

CostcoMurrieta\_Op\_HRA

3718300.00	1.37138			
485600.00	3718300.00	0.95442		483400.00
3718400.00	1.41935			
485200.00	3718400.00	1.52756		485200.00
3718500.00	1.42187			
484600.00	3718600.00	2.42897		484800.00
3718600.00	2.02578			
485200.00	3718600.00	1.31127		483700.00
3718700.00	2.28533			
483100.00	3718800.00	0.59850		484000.00
3718800.00	1.79587			
484200.00	3718800.00	1.88050		485400.00
3718800.00	0.92450			
483100.00	3718900.00	0.64016		483200.00
3718900.00	0.68920			
483100.00	3719000.00	0.63689		483200.00
3719000.00	0.77920			
483300.00	3719000.00	0.87899		483400.00
3719000.00	1.01628			
483500.00	3719000.00	1.17450		483100.00
3719100.00	0.62397			
483200.00	3719100.00	0.76517		483300.00
3719100.00	0.93187			
483400.00	3719100.00	1.04153		483500.00
3719100.00	1.13916			
483700.00	3719100.00	1.19030		484900.00
3719100.00	0.96467			
485000.00	3719100.00	0.91555		485100.00
3719100.00	0.86079			
485200.00	3719100.00	0.81595		485300.00
3719100.00	0.77121			
485400.00	3719100.00	0.71848		485500.00
3719100.00	0.67830			
485600.00	3719100.00	0.64093		485700.00
3719100.00	0.60971			
484200.00	3719200.00	1.03101		484500.00
3719200.00	1.00128			
484800.00	3719200.00	0.91086		484900.00
3719200.00	0.86944			
485000.00	3719200.00	0.82839		485100.00
3719200.00	0.78302			
485200.00	3719200.00	0.75142		485300.00
3719200.00	0.70879			
485400.00	3719200.00	0.66650		485500.00
3719200.00	0.63226			
485600.00	3719200.00	0.60397		485700.00
3719200.00	0.57478			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*

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\*\*\* AERMET - VERSION 16216 \*\*\*

\*\*\* 17:09:15

PAGE 34

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

INCLUDING SOURCE(S): L0000058 , L0000059  
 , L0000060 , L0000061 , L0000062 ,  
 L0000063 , L0000064 , L0000065 , L0000066 , L0000067  
 , L0000068 , L0000069 , L0000070 ,  
 L0000071 , L0000072 , L0000073 , L0000074 , L0000075  
 , L0000076 , L0000077 , L0000078 ,  
 L0000079 , L0000080 , L0000081 , L0000082 , L0000083  
 , L0000084 , L0000085 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.87737	483600.00
3716600.00	0.92473		
483700.00	3716600.00	0.97959	483800.00
3716600.00	1.02438		
483900.00	3716600.00	1.06458	484000.00
3716600.00	1.09070		
485000.00	3716600.00	0.85518	485100.00
3716600.00	0.85886		
483500.00	3716700.00	0.97156	483600.00
3716700.00	1.05839		
483700.00	3716700.00	1.12350	483800.00
3716700.00	1.19235		
483900.00	3716700.00	1.23471	484000.00
3716700.00	1.27060		
485200.00	3716700.00	0.84180	485400.00
3716700.00	0.73343		
485700.00	3716700.00	0.58751	483100.00
3716800.00	0.82933		
483200.00	3716800.00	0.87744	483500.00
3716800.00	1.11603		



CostcoMurrieta\_Op\_HRA

483600.00	3716800.00	1.21571	483700.00
3716800.00	1.34160		
483800.00	3716800.00	1.41502	483900.00
3716800.00	1.46139		
484000.00	3716800.00	1.51229	483100.00
3716900.00	0.90259		
483200.00	3716900.00	0.97562	485600.00
3716900.00	0.69711		
483200.00	3717000.00	1.06794	483300.00
3717000.00	1.18666		
485400.00	3717100.00	0.92259	485500.00
3717100.00	0.83374		
485600.00	3717100.00	0.74788	485700.00
3717100.00	0.68439		
483100.00	3717200.00	1.12223	483200.00
3717300.00	1.35373		
483300.00	3717300.00	1.56543	483400.00
3717300.00	1.80803		
483500.00	3717300.00	2.08046	483800.00
3717300.00	3.44944		
483900.00	3717300.00	4.12564	484000.00
3717300.00	4.83538		
484600.00	3717300.00	3.54142	484700.00
3717300.00	2.91478		
483100.00	3717400.00	1.24133	483200.00
3717400.00	1.43460		
483300.00	3717400.00	1.67198	483400.00
3717400.00	1.96341		
483500.00	3717400.00	2.33454	483800.00
3717400.00	4.33300		
483900.00	3717400.00	5.65893	484000.00
3717400.00	6.80678		
484600.00	3717400.00	4.44854	484700.00
3717400.00	3.53044		
484800.00	3717400.00	2.82274	483100.00
3717500.00	1.30272		
483300.00	3717500.00	1.78581	483400.00
3717500.00	2.14681		
483500.00	3717500.00	2.61263	483600.00
3717500.00	3.22670		
484000.00	3717500.00	10.86070	484600.00
3717500.00	5.48429		
484700.00	3717500.00	4.15919	483600.00
3717600.00	3.65279		
484600.00	3717600.00	6.51199	484700.00
3717600.00	4.67770		
484800.00	3717600.00	3.48722	484600.00
3717700.00	7.31228		

CostcoMurrieta\_Op\_HRA

484700.00	3717700.00	5.04526	484800.00
3717700.00	3.77910		
483400.00	3717800.00	2.43766	483500.00
3717800.00	3.07924		
483600.00	3717800.00	4.05289	484600.00
3717800.00	7.85914		
484700.00	3717800.00	5.24106	485300.00
3717800.00	1.32399		
483300.00	3717900.00	1.97719	483400.00
3717900.00	2.42151		
483500.00	3717900.00	3.04803	484600.00
3717900.00	7.67911		

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
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PAGE 35

\*\*\* MODELOPTs:    RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

INCLUDING SOURCE(S):    L0000058    ,    L0000059  
 , L0000060    ,    L0000061    ,    L0000062    ,  
                                  L0000063    ,    L0000064    ,    L0000065    ,    L0000066    ,    L0000067  
 , L0000068    ,    L0000069    ,    L0000070    ,  
                                  L0000071    ,    L0000072    ,    L0000073    ,    L0000074    ,    L0000075  
 , L0000076    ,    L0000077    ,    L0000078    ,  
                                  L0000079    ,    L0000080    ,    L0000081    ,    L0000082    ,    L0000083  
 , L0000084    ,    L0000085    ,    . . .    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA            IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	5.21273	484800.00
3717900.00	3.81272		
485100.00	3717900.00	1.88073	483300.00
3718000.00	1.91612		
483400.00	3718000.00	2.33011	483500.00
3718000.00	2.90811		
483600.00	3718000.00	3.75495	484600.00

CostcoMurrieta\_Op\_HRA

3718000.00	6.89840			
	484700.00	3718000.00	4.87207	484800.00
3718000.00	3.65272			
	483100.00	3718100.00	1.19409	483400.00
3718100.00	2.15190			
	483600.00	3718100.00	3.40500	484600.00
3718100.00	5.78510			
	483900.00	3718200.00	6.14906	484500.00
3718200.00	5.84567			
	484600.00	3718200.00	4.67428	484700.00
3718200.00	3.72887			
	484900.00	3718200.00	2.46782	485400.00
3718200.00	1.10275			
	485600.00	3718200.00	0.85978	483100.00
3718300.00	0.55912			
	483900.00	3718300.00	4.74269	484000.00
3718300.00	5.26447			
	484200.00	3718300.00	5.86121	485300.00
3718300.00	1.21273			
	485600.00	3718300.00	0.87191	483400.00
3718400.00	1.58223			
	485200.00	3718400.00	1.31294	485200.00
3718500.00	1.22162			
	484600.00	3718600.00	2.06986	484800.00
3718600.00	1.72935			
	485200.00	3718600.00	1.13390	483700.00
3718700.00	2.29136			
	483100.00	3718800.00	0.70889	484000.00
3718800.00	1.75907			
	484200.00	3718800.00	1.66235	485400.00
3718800.00	0.82086			
	483100.00	3718900.00	0.74574	483200.00
3718900.00	0.81590			
	483100.00	3719000.00	0.72953	483200.00
3719000.00	0.85481			
	483300.00	3719000.00	0.93478	483400.00
3719000.00	1.02742			
	483500.00	3719000.00	1.12826	483100.00
3719100.00	0.70190			
	483200.00	3719100.00	0.81120	483300.00
3719100.00	0.92688			
	483400.00	3719100.00	1.00126	483500.00
3719100.00	1.06024			
	483700.00	3719100.00	0.97450	484900.00
3719100.00	0.87868			
	485000.00	3719100.00	0.83508	485100.00
3719100.00	0.78722			
	485200.00	3719100.00	0.74583	485300.00

CostcoMurrieta\_Op\_HRA

3719100.00	0.70447			
	485400.00	3719100.00	0.65739	485500.00
3719100.00	0.62000			
	485600.00	3719100.00	0.58534	485700.00
3719100.00	0.55591			
	484200.00	3719200.00	0.93568	484500.00
3719200.00	0.91862			
	484800.00	3719200.00	0.83258	484900.00
3719200.00	0.79653			
	485000.00	3719200.00	0.76034	485100.00
3719200.00	0.72084			
	485200.00	3719200.00	0.69042	485300.00
3719200.00	0.65234			
	485400.00	3719200.00	0.61418	485500.00
3719200.00	0.58208			
	485600.00	3719200.00	0.55471	485700.00
3719200.00	0.52706			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 36

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1      \*\*\*

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 HRA      IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	1.17031	483600.00
3716600.00	1.25020		

CostcoMurrieta\_Op\_HRA

483700.00	3716600.00	1.34167	483800.00
3716600.00	1.41654		
483900.00	3716600.00	1.48163	484000.00
3716600.00	1.52051		
485000.00	3716600.00	1.01932	485100.00
3716600.00	0.99614		
483500.00	3716700.00	1.31750	483600.00
3716700.00	1.46446		
483700.00	3716700.00	1.57948	483800.00
3716700.00	1.69957		
483900.00	3716700.00	1.77344	484000.00
3716700.00	1.83039		
485200.00	3716700.00	0.96085	485400.00
3716700.00	0.80864		
485700.00	3716700.00	0.62559	483100.00
3716800.00	1.05412		
483200.00	3716800.00	1.13750	483500.00
3716800.00	1.54600		
483600.00	3716800.00	1.72423	483700.00
3716800.00	1.94476		
483800.00	3716800.00	2.08860	483900.00
3716800.00	2.18121		
484000.00	3716800.00	2.26872	483100.00
3716900.00	1.14948		
483200.00	3716900.00	1.27260	485600.00
3716900.00	0.73733		
483200.00	3717000.00	1.39706	483300.00
3717000.00	1.59729		
485400.00	3717100.00	0.97444	485500.00
3717100.00	0.87132		
485600.00	3717100.00	0.77582	485700.00
3717100.00	0.70496		
483100.00	3717200.00	1.41554	483200.00
3717300.00	1.74276		
483300.00	3717300.00	2.08951	483400.00
3717300.00	2.53233		
483500.00	3717300.00	3.09324	483800.00
3717300.00	6.66964		
483900.00	3717300.00	8.83546	484000.00
3717300.00	11.12409		
484600.00	3717300.00	4.78838	484700.00
3717300.00	3.62492		
483100.00	3717400.00	1.52795	483200.00
3717400.00	1.81718		
483300.00	3717400.00	2.19768	483400.00
3717400.00	2.70922		
483500.00	3717400.00	3.43347	483800.00
3717400.00	9.06037		

CostcoMurrieta\_Op\_HRA

483900.00	3717400.00	14.18351	484000.00
3717400.00	19.41868		
484600.00	3717400.00	5.65281	484700.00
3717400.00	4.12533		
484800.00	3717400.00	3.12971	483100.00
3717500.00	1.56861		
483300.00	3717500.00	2.28274	483400.00
3717500.00	2.86944		
483500.00	3717500.00	3.72041	483600.00
3717500.00	5.03047		
484000.00	3717500.00	45.80703	484600.00
3717500.00	6.33316		
484700.00	3717500.00	4.34848	483600.00
3717600.00	5.30868		
484600.00	3717600.00	6.58197	484700.00
3717600.00	4.56496		
484800.00	3717600.00	3.37290	484600.00
3717700.00	6.26885		
484700.00	3717700.00	4.44098	484800.00
3717700.00	3.35861		
483400.00	3717800.00	2.72667	483500.00
3717800.00	3.47475		
483600.00	3717800.00	4.60338	484600.00
3717800.00	5.59365		
484700.00	3717800.00	4.12922	485300.00
3717800.00	1.22631		
483300.00	3717900.00	2.07563	483400.00
3717900.00	2.52252		
483500.00	3717900.00	3.02180	484600.00
3717900.00	4.70190		

\*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 37

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1      \*\*\*

INCLUDING SOURCE(S):      L000001      ,      L000002  
 ,      L000003      ,      L000004      ,      L000005      ,  
                                  L000006      ,      L000007      ,      L000008      ,      L000009      ,      L000010  
 ,      L000011      ,      L000012      ,      L000013      ,  
                                  L000014      ,      L000015      ,      L000016      ,      L000017      ,      L000018  
 ,      L000019      ,      L000020      ,      L000021      ,  
                                  L000022      ,      L000023      ,      L000024      ,      L000025      ,      L000026  
 ,      L000027      ,      L000028      ,      . . .      ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	3.69200	484800.00
3717900.00	2.94512		
485100.00	3717900.00	1.64653	483300.00
3718000.00	1.83654		
483400.00	3718000.00	2.20574	483500.00
3718000.00	2.69934		
483600.00	3718000.00	3.37568	484600.00
3718000.00	3.86348		
484700.00	3718000.00	3.19329	484800.00
3718000.00	2.64891		
483100.00	3718100.00	1.06785	483400.00
3718100.00	1.97682		
483600.00	3718100.00	2.88144	484600.00
3718100.00	3.16637		
483900.00	3718200.00	3.89074	484500.00
3718200.00	2.91766		
484600.00	3718200.00	2.61534	484700.00
3718200.00	2.31757		
484900.00	3718200.00	1.79441	485400.00
3718200.00	0.96307		
485600.00	3718200.00	0.77462	483100.00
3718300.00	0.61739		
483900.00	3718300.00	3.14548	484000.00
3718300.00	2.95046		
484200.00	3718300.00	2.74906	485300.00
3718300.00	1.01992		
485600.00	3718300.00	0.76946	483400.00
3718400.00	1.79056		
485200.00	3718400.00	1.05734	485200.00
3718500.00	0.97532		
484600.00	3718600.00	1.37340	484800.00
3718600.00	1.21611		
485200.00	3718600.00	0.90059	483700.00
3718700.00	1.62632		
483100.00	3718800.00	0.82588	484000.00
3718800.00	1.11909		
484200.00	3718800.00	1.06642	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	0.67639			
483100.00	3718900.00	0.82587		483200.00
3718900.00	0.87134			
483100.00	3719000.00	0.77647		483200.00
3719000.00	0.85219			
483300.00	3719000.00	0.87994		483400.00
3719000.00	0.90031			
483500.00	3719000.00	0.90730		483100.00
3719100.00	0.72086			
483200.00	3719100.00	0.77992		483300.00
3719100.00	0.83070			
483400.00	3719100.00	0.84095		483500.00
3719100.00	0.82756			
483700.00	3719100.00	0.65728		484900.00
3719100.00	0.68917			
485000.00	3719100.00	0.66168		485100.00
3719100.00	0.63201			
485200.00	3719100.00	0.60484		485300.00
3719100.00	0.57752			
485400.00	3719100.00	0.54688		485500.00
3719100.00	0.52123			
485600.00	3719100.00	0.49700		485700.00
3719100.00	0.47563			
484200.00	3719200.00	0.66976		484500.00
3719200.00	0.70957			
484800.00	3719200.00	0.65478		484900.00
3719200.00	0.63238			
485000.00	3719200.00	0.60920		485100.00
3719200.00	0.58419			
485200.00	3719200.00	0.56280		485300.00
3719200.00	0.53803			
485400.00	3719200.00	0.51271		485500.00
3719200.00	0.49042			
485600.00	3719200.00	0.47068		485700.00
3719200.00	0.45067			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 38

\*\*\* MODELOPTs:      RegDFault      CONC      ELEV      URBAN      ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3      \*\*\*  
                                  INCLUDING SOURCE(S):      L0000712      ,      L0000713  
 ,      L0000714      ,      L0000715      ,      L0000716      ,  
                                  L0000717      ,      L0000718      ,      L0000719      ,      L0000720      ,      L0000721



CostcoMurrieta\_Op\_HRA

, L0000722 , L0000723 , L0000724 ,  
 , L0000730 , L0000731 , L0000732 ,  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.69697	483600.00
3716600.00	0.73609		
483700.00	3716600.00	0.78250	483800.00
3716600.00	0.82426		
483900.00	3716600.00	0.86559	484000.00
3716600.00	0.89971		
485000.00	3716600.00	0.88132	485100.00
3716600.00	0.89979		
483500.00	3716700.00	0.75592	483600.00
3716700.00	0.82111		
483700.00	3716700.00	0.87432	483800.00
3716700.00	0.93324		
483900.00	3716700.00	0.97832	484000.00
3716700.00	1.02297		
485200.00	3716700.00	0.91084	485400.00
3716700.00	0.81300		
485700.00	3716700.00	0.66337	483100.00
3716800.00	0.64234		
483200.00	3716800.00	0.67680	483500.00
3716800.00	0.84402		
483600.00	3716800.00	0.91548	483700.00
3716800.00	1.00540		
483800.00	3716800.00	1.06858	483900.00
3716800.00	1.12020		
484000.00	3716800.00	1.17998	483100.00
3716900.00	0.68682		
483200.00	3716900.00	0.73592	485600.00
3716900.00	0.80986		
483200.00	3717000.00	0.78916	483300.00
3717000.00	0.86348		
485400.00	3717100.00	1.11361	485500.00
3717100.00	1.00597		

CostcoMurrieta\_Op\_HRA

485600.00	3717100.00	0.89930	485700.00
3717100.00	0.82023		
483100.00	3717200.00	0.81362	483200.00
3717300.00	0.94490		
483300.00	3717300.00	1.05985	483400.00
3717300.00	1.18678		
483500.00	3717300.00	1.32492	483800.00
3717300.00	1.96454		
483900.00	3717300.00	2.27883	484000.00
3717300.00	2.64625		
484600.00	3717300.00	3.65295	484700.00
3717300.00	3.30069		
483100.00	3717400.00	0.88134	483200.00
3717400.00	0.98825		
483300.00	3717400.00	1.11318	483400.00
3717400.00	1.25853		
483500.00	3717400.00	1.43261	483800.00
3717400.00	2.23487		
483900.00	3717400.00	2.69350	484000.00
3717400.00	3.15660		
484600.00	3717400.00	4.92735	484700.00
3717400.00	4.36618		
484800.00	3717400.00	3.70790	483100.00
3717500.00	0.91696		
483300.00	3717500.00	1.17052	483400.00
3717500.00	1.34230		
483500.00	3717500.00	1.54695	483600.00
3717500.00	1.79300		
484000.00	3717500.00	3.80717	484600.00
3717500.00	6.93210		
484700.00	3717500.00	5.90418	483600.00
3717600.00	1.94542		
484600.00	3717600.00	10.39579	484700.00
3717600.00	7.96648		
484800.00	3717600.00	5.86269	484600.00
3717700.00	16.87992		
484700.00	3717700.00	10.74632	484800.00
3717700.00	7.33451		
483400.00	3717800.00	1.50486	483500.00
3717800.00	1.77704		
483600.00	3717800.00	2.13871	484600.00
3717800.00	28.68079		
484700.00	3717800.00	13.73984	485300.00
3717800.00	1.93792		
483300.00	3717900.00	1.30584	483400.00
3717900.00	1.52232		
483500.00	3717900.00	1.78784	484600.00
3717900.00	35.29173		

CostcoMurrieta\_Op\_HRA

↑ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 39

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3 \*\*\*

INCLUDING SOURCE(S): L0000712 , L0000713  
 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 , L0000720 , L0000721  
 , L0000722 , L0000723 , L0000724 ,  
 L0000725 , L0000726 , L0000727 , L0000728 , L0000729  
 , L0000730 , L0000731 , L0000732 ,  
 L0000733 , L0000734 , L0000735 , L0000736 , L0000737  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	15.38388	484800.00
3717900.00	8.83622		
485100.00	3717900.00	3.10461	483300.00
3718000.00	1.27143		
483400.00	3718000.00	1.48467	483500.00
3718000.00	1.77006		
483600.00	3718000.00	2.15808	484600.00
3718000.00	27.10172		
484700.00	3718000.00	13.99447	484800.00
3718000.00	8.50738		
483100.00	3718100.00	0.85028	483400.00
3718100.00	1.35478		
483600.00	3718100.00	2.06916	484600.00
3718100.00	16.39778		
483900.00	3718200.00	3.62305	484500.00
3718200.00	12.03277		
484600.00	3718200.00	10.10377	484700.00
3718200.00	7.85471		
484900.00	3718200.00	4.58032	485400.00

CostcoMurrieta\_Op\_HRA

3718200.00	1.58941			
485600.00	3718200.00	1.17025		483100.00
3718300.00	0.41047			
483900.00	3718300.00	3.25671		484000.00
3718300.00	4.15736			
484200.00	3718300.00	6.31373		485300.00
3718300.00	1.79060			
485600.00	3718300.00	1.19006		483400.00
3718400.00	0.92879			
485200.00	3718400.00	1.95786		485200.00
3718500.00	1.76583			
484600.00	3718600.00	2.84952		484800.00
3718600.00	2.46674			
485200.00	3718600.00	1.58821		483700.00
3718700.00	1.71549			
483100.00	3718800.00	0.42778		484000.00
3718800.00	2.34526			
484200.00	3718800.00	2.03261		485400.00
3718800.00	1.07369			
483100.00	3718900.00	0.45113		483200.00
3718900.00	0.47915			
483100.00	3719000.00	0.44873		483200.00
3719000.00	0.53478			
483300.00	3719000.00	0.60364		483400.00
3719000.00	0.71160			
483500.00	3719000.00	0.86937		483100.00
3719100.00	0.44579			
483200.00	3719100.00	0.53697		483300.00
3719100.00	0.65567			
483400.00	3719100.00	0.76743		483500.00
3719100.00	0.89502			
483700.00	3719100.00	1.04988		484900.00
3719100.00	1.07851			
485000.00	3719100.00	1.03038		485100.00
3719100.00	0.97392			
485200.00	3719100.00	0.92398		485300.00
3719100.00	0.87268			
485400.00	3719100.00	0.81267		485500.00
3719100.00	0.76500			
485600.00	3719100.00	0.72044		485700.00
3719100.00	0.68244			
484200.00	3719200.00	1.08484		484500.00
3719200.00	1.05709			
484800.00	3719200.00	0.99621		484900.00
3719200.00	0.96057			
485000.00	3719200.00	0.92193		485100.00
3719200.00	0.87683			
485200.00	3719200.00	0.84166		485300.00

CostcoMurrieta\_Op\_HRA

3719200.00 0.79552  
 485400.00 3719200.00 0.74830 485500.00  
 3719200.00 0.70836  
 485600.00 3719200.00 0.67418 485700.00  
 3719200.00 0.63923

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 17:09:15

PAGE 40

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 \*\*\*  
 VALUES FOR SOURCE GROUP: VENT INCLUDING SOURCE(S): VENT ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	0.75292	483600.00
3716600.00	0.79169		
483700.00	3716600.00	0.83713	483800.00
3716600.00	0.87541		
483900.00	3716600.00	0.91122	484000.00
3716600.00	0.93707		
485000.00	3716600.00	0.81093	485100.00
3716600.00	0.83170		
483500.00	3716700.00	0.82443	483600.00
3716700.00	0.89364		
483700.00	3716700.00	0.94617	483800.00
3716700.00	1.00302		
483900.00	3716700.00	1.04028	484000.00
3716700.00	1.07458		
485200.00	3716700.00	0.81867	485400.00
3716700.00	0.72599		
485700.00	3716700.00	0.59012	483100.00
3716800.00	0.71523		
483200.00	3716800.00	0.75017	483500.00
3716800.00	0.93369		
483600.00	3716800.00	1.01110	483700.00

CostcoMurrieta\_Op\_HRA

3716800.00	1.11303			
483800.00	3716800.00	1.17008		483900.00
3716800.00	1.20814			
484000.00	3716800.00	1.25467		483100.00
3716900.00	0.77423			
483200.00	3716900.00	0.82783		485600.00
3716900.00	0.70419			
483200.00	3717000.00	0.89937		483300.00
3717000.00	0.98821			
485400.00	3717100.00	0.93611		485500.00
3717100.00	0.84903			
485600.00	3717100.00	0.76265		485700.00
3717100.00	0.69931			
483100.00	3717200.00	0.94663		483200.00
3717300.00	1.11729			
483300.00	3717300.00	1.26916		483400.00
3717300.00	1.43172			
483500.00	3717300.00	1.60274		483800.00
3717300.00	2.41422			
483900.00	3717300.00	2.80155		484000.00
3717300.00	3.23674			
484600.00	3717300.00	3.14409		484700.00
3717300.00	2.71396			
483100.00	3717400.00	1.03741		483200.00
3717400.00	1.17810			
483300.00	3717400.00	1.34397		483400.00
3717400.00	1.53713			
483500.00	3717400.00	1.77058		483800.00
3717400.00	2.86107			
483900.00	3717400.00	3.51872		484000.00
3717400.00	4.05332			
484600.00	3717400.00	4.03267		484700.00
3717400.00	3.38926			
484800.00	3717400.00	2.80486		483100.00
3717500.00	1.08889			
483300.00	3717500.00	1.43101		483400.00
3717500.00	1.67200			
483500.00	3717500.00	1.96033		483600.00
3717500.00	2.30846			
484000.00	3717500.00	5.27135		484600.00
3717500.00	5.12075			
484700.00	3717500.00	4.20816		483600.00
3717600.00	2.58685			
484600.00	3717600.00	6.44779		484700.00
3717600.00	4.91565			
484800.00	3717600.00	3.72853		484600.00
3717700.00	7.95508			
484700.00	3717700.00	5.60797		484800.00

CostcoMurrieta\_Op\_HRA

3717700.00	4.24211			
	483400.00	3717800.00	1.93902	483500.00
3717800.00	2.35768			
	483600.00	3717800.00	2.94498	484600.00
3717800.00	9.55050			
	484700.00	3717800.00	6.18557	485300.00
3717800.00	1.43738			
	483300.00	3717900.00	1.64668	483400.00
3717900.00	1.96887			
	483500.00	3717900.00	2.42080	484600.00
3717900.00	10.24644			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*    07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
                                  \*\*\*    17:09:15

PAGE 41

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT    \*\*\*  
                                  INCLUDING SOURCE(S):    VENT    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA    IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
484700.00	3717900.00	6.52053	484800.00
3717900.00	4.57827		
485100.00	3717900.00	2.10840	483300.00
3718000.00	1.64170		
483400.00	3718000.00	1.95766	483500.00
3718000.00	2.38237		
483600.00	3718000.00	2.96237	484600.00
3718000.00	9.73032		
484700.00	3718000.00	6.36030	484800.00
3718000.00	4.52717		
483100.00	3718100.00	1.19881	483400.00
3718100.00	1.90957		
483600.00	3718100.00	2.82561	484600.00
3718100.00	8.14457		
483900.00	3718200.00	5.42367	484500.00

CostcoMurrieta\_Op\_HRA

3718200.00	8.05123			
484600.00	3718200.00	6.32514		484700.00
3718200.00	4.88369			
484900.00	3718200.00	3.01955		485400.00
3718200.00	1.22083			
485600.00	3718200.00	0.93380		483100.00
3718300.00	0.55800			
483900.00	3718300.00	4.39043		484000.00
3718300.00	5.31525			
484200.00	3718300.00	6.90608		485300.00
3718300.00	1.36703			
485600.00	3718300.00	0.95812		483400.00
3718400.00	1.37912			
485200.00	3718400.00	1.50686		485200.00
3718500.00	1.39878			
484600.00	3718600.00	2.44568		484800.00
3718600.00	2.03432			
485200.00	3718600.00	1.29227		483700.00
3718700.00	2.34695			
483100.00	3718800.00	0.60980		484000.00
3718800.00	1.88169			
484200.00	3718800.00	1.89073		485400.00
3718800.00	0.91417			
483100.00	3718900.00	0.65190		483200.00
3718900.00	0.69776			
483100.00	3719000.00	0.64451		483200.00
3719000.00	0.77959			
483300.00	3719000.00	0.86551		483400.00
3719000.00	0.99038			
483500.00	3719000.00	1.14899		483100.00
3719100.00	0.62529			
483200.00	3719100.00	0.75504		483300.00
3719100.00	0.90934			
483400.00	3719100.00	1.01700		483500.00
3719100.00	1.12294			
483700.00	3719100.00	1.16318		484900.00
3719100.00	0.97121			
485000.00	3719100.00	0.92212		485100.00
3719100.00	0.86629			
485200.00	3719100.00	0.82003		485300.00
3719100.00	0.77336			
485400.00	3719100.00	0.71827		485500.00
3719100.00	0.67623			
485600.00	3719100.00	0.63735		485700.00
3719100.00	0.60517			
484200.00	3719200.00	1.03655		484500.00
3719200.00	1.00544			
484800.00	3719200.00	0.91592		484900.00



CostcoMurrieta\_Op\_HRA

3719200.00	0.87499			
485000.00	3719200.00	0.83421		485100.00
3719200.00	0.78837			
485200.00	3719200.00	0.75634		485300.00
3719200.00	0.71219			
485400.00	3719200.00	0.66813		485500.00
3719200.00	0.63230			
485600.00	3719200.00	0.60266		485700.00
3719200.00	0.57230			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*     \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*     07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*     \*\*\*  
    \*\*\*     17:09:15

PAGE 42

\*\*\* MODELOPTs:    RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA     IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
483500.00	3716600.00	7.59677	483600.00
3716600.00	8.09259		
483700.00	3716600.00	8.70161	483800.00
3716600.00	9.25914		
483900.00	3716600.00	9.82668	484000.00
3716600.00	10.30761		
485000.00	3716600.00	10.43351	485100.00
3716600.00	11.25490		
483500.00	3716700.00	8.27943	483600.00
3716700.00	9.14560		

CostcoMurrieta\_Op\_HRA

483700.00	3716700.00	9.84149	483800.00
3716700.00	10.64809		
483900.00	3716700.00	11.23817	484000.00
3716700.00	11.84956		
485200.00	3716700.00	10.58414	485400.00
3716700.00	9.25463		
485700.00	3716700.00	7.19798	483100.00
3716800.00	6.99082		
483200.00	3716800.00	7.31460	483500.00
3716800.00	9.40506		
483600.00	3716800.00	10.37436	483700.00
3716800.00	11.77341		
483800.00	3716800.00	12.56570	483900.00
3716800.00	13.13773		
484000.00	3716800.00	13.93444	483100.00
3716900.00	7.55899		
483200.00	3716900.00	8.09805	485600.00
3716900.00	8.37208		
483200.00	3717000.00	8.77377	483300.00
3717000.00	9.74749		
485400.00	3717100.00	10.94397	485500.00
3717100.00	9.74521		
485600.00	3717100.00	8.55572	485700.00
3717100.00	7.74779		
483100.00	3717200.00	9.08544	483200.00
3717300.00	10.69162		
483300.00	3717300.00	12.28681	483400.00
3717300.00	14.01707		
483500.00	3717300.00	15.87912	483800.00
3717300.00	26.42955		
483900.00	3717300.00	32.39133	484000.00
3717300.00	39.48918		
484600.00	3717300.00	43.14051	484700.00
3717300.00	36.21998		
483100.00	3717400.00	9.74137	483200.00
3717400.00	11.14480		
483300.00	3717400.00	12.82790	483400.00
3717400.00	14.83511		
483500.00	3717400.00	17.37666	483800.00
3717400.00	32.01879		
483900.00	3717400.00	43.45259	484000.00
3717400.00	53.87910		
484600.00	3717400.00	56.19659	484700.00
3717400.00	46.07547		
484800.00	3717400.00	36.21450	483100.00
3717500.00	10.14896		
483300.00	3717500.00	13.50279	483400.00
3717500.00	15.97012		

CostcoMurrieta\_Op\_HRA

483500.00	3717500.00	19.02988	483600.00
3717500.00	22.97730		
484000.00	3717500.00	90.21518	484600.00
3717500.00	70.85757		
484700.00	3717500.00	55.70521	483600.00
3717600.00	25.24378		
484600.00	3717600.00	85.42267	484700.00
3717600.00	62.26223		
484800.00	3717600.00	44.09852	484600.00
3717700.00	97.42871		
484700.00	3717700.00	65.29218	484800.00
3717700.00	48.33318		
483400.00	3717800.00	17.58782	483500.00
3717800.00	21.37762		
483600.00	3717800.00	26.74890	484600.00
3717800.00	114.84684		
484700.00	3717800.00	68.91362	485300.00
3717800.00	14.45299		
483300.00	3717900.00	14.64749	483400.00
3717900.00	17.39900		
483500.00	3717900.00	20.82098	484600.00
3717900.00	121.66907		

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*                    17:09:15

PAGE 43

\*\*\* MODELOPTs:    RegDEFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) 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 HRA      IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

Y-COORD (M)	CONC		
484700.00	3717900.00	71.95381	484800.00
3717900.00	48.90493		
485100.00	3717900.00	21.44614	483300.00
3718000.00	14.07438		
483400.00	3718000.00	16.68502	483500.00
3718000.00	20.21155		
483600.00	3718000.00	25.19809	484600.00
3718000.00	99.70056		
484700.00	3718000.00	65.96459	484800.00
3718000.00	47.08904		
483100.00	3718100.00	9.37411	483400.00
3718100.00	15.55163		
483600.00	3718100.00	23.77559	484600.00
3718100.00	73.51326		
483900.00	3718200.00	46.95842	484500.00
3718200.00	64.84248		
484600.00	3718200.00	54.19329	484700.00
3718200.00	44.26616		
484900.00	3718200.00	29.43290	485400.00
3718200.00	12.26785		
485600.00	3718200.00	9.35627	483100.00
3718300.00	4.77491		
483900.00	3718300.00	41.25795	484000.00
3718300.00	49.39777		
484200.00	3718300.00	58.40708	485300.00
3718300.00	13.63399		
485600.00	3718300.00	9.80645	483400.00
3718400.00	12.27021		
485200.00	3718400.00	14.76078	485200.00
3718500.00	13.51811		
484600.00	3718600.00	21.22249	484800.00
3718600.00	18.32538		
485200.00	3718600.00	12.37577	483700.00
3718700.00	20.98858		
483100.00	3718800.00	5.87006	484000.00
3718800.00	20.15410		
484200.00	3718800.00	18.37028	485400.00
3718800.00	8.87211		
483100.00	3718900.00	6.23403	483200.00
3718900.00	6.67940		
483100.00	3719000.00	6.15230	483200.00
3719000.00	7.25331		
483300.00	3719000.00	7.91390	483400.00
3719000.00	8.78069		
483500.00	3719000.00	9.94874	483100.00

CostcoMurrieta\_Op\_HRA

3719100.00	5.96248			
483200.00	3719100.00	6.99470		483300.00
3719100.00	8.19588			
483400.00	3719100.00	9.01310		483500.00
3719100.00	9.80033			
483700.00	3719100.00	9.61123		484900.00
3719100.00	8.95074			
485000.00	3719100.00	8.55709		485100.00
3719100.00	8.07606			
485200.00	3719100.00	7.72090		485300.00
3719100.00	7.34933			
485400.00	3719100.00	6.84221		485500.00
3719100.00	6.50250			
485600.00	3719100.00	6.19061		485700.00
3719100.00	5.96097			
484200.00	3719200.00	10.29814		484500.00
3719200.00	9.35262			
484800.00	3719200.00	8.46382		484900.00
3719200.00	8.10121			
485000.00	3719200.00	7.75996		485100.00
3719200.00	7.35753			
485200.00	3719200.00	7.14663		485300.00
3719200.00	6.76086			
485400.00	3719200.00	6.36474		485500.00
3719200.00	6.07447			
485600.00	3719200.00	5.86295		485700.00
3719200.00	5.62834			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*      07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*      17:09:15

PAGE 44

\*\*\* MODELOPTs:      RegDFault    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE    1ST HIGHEST    1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP:    IDLING1    \*\*\*  
                                  INCLUDING SOURCE(S):      IDLING1      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA      IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

483500.00	3716600.00	6.57487	(15091022)	483600.00
3716600.00	6.77100 (15062723)			
483700.00	3716600.00	7.09687	(14081506)	483800.00
3716600.00	7.28120 (15091920)			
483900.00	3716600.00	7.48748	(13110817)	484000.00
3716600.00	7.53213 (14080206)			
485000.00	3716600.00	6.19640	(13111217)	485100.00
3716600.00	7.10358 (14040820)			
483500.00	3716700.00	7.09044	(12082006)	483600.00
3716700.00	7.64784 (15091022)			
483700.00	3716700.00	7.92621	(16092720)	483800.00
3716700.00	8.25880 (13083005)			
483900.00	3716700.00	8.37698	(13110817)	484000.00
3716700.00	8.46121 (13081706)			
485200.00	3716700.00	6.39395	(16072906)	485400.00
3716700.00	5.93158 (12100120)			
485700.00	3716700.00	5.07302	(13082821)	483100.00
3716800.00	7.04045 (12092219)			
483200.00	3716800.00	6.92159	(12092219)	483500.00
3716800.00	8.16861 (12082006)			
483600.00	3716800.00	8.66868	(15091022)	483700.00
3716800.00	9.78450 (16092720)			
483800.00	3716800.00	9.86368	(13083005)	483900.00
3716800.00	9.64331 (15091920)			
484000.00	3716800.00	9.78449	(13081706)	483100.00
3716900.00	7.74052 (13090522)			
483200.00	3716900.00	7.89638	(12092219)	485600.00
3716900.00	5.74460 (16061920)			
483200.00	3717000.00	8.64116	(13090522)	483300.00
3717000.00	9.36496 (12092219)			
485400.00	3717100.00	6.95087	(16061920)	485500.00
3717100.00	6.45081 (14072322)			
485600.00	3717100.00	5.86910	(15093019)	485700.00
3717100.00	5.53640 (15090903)			
483100.00	3717200.00	9.52596	(15090820)	483200.00
3717300.00	10.86409 (15090820)			
483300.00	3717300.00	12.00003	(12081102)	483400.00
3717300.00	13.12906 (12081906)			
483500.00	3717300.00	13.64084	(13090522)	483800.00
3717300.00	17.73624 (12082006)			
483900.00	3717300.00	19.96628	(14072720)	484000.00
3717300.00	22.68844 (13090324)			
484600.00	3717300.00	17.72227	(12091320)	484700.00
3717300.00	15.15088 (16081420)			
483100.00	3717400.00	9.91422	(15102420)	483200.00
3717400.00	11.15664 (13082822)			
483300.00	3717400.00	12.49741	(15090820)	483400.00

CostcoMurrieta\_Op\_HRA

3717400.00	13.71008	(15090820)			
483500.00	3717400.00		15.02856	(12081906)	483800.00
3717400.00	20.75951	(15090902)			
483900.00	3717400.00		25.45204	(14091706)	484000.00
3717400.00	25.93730	(13090823)			
484600.00	3717400.00		21.43924	(16081420)	484700.00
3717400.00	18.38788	(12100120)			
484800.00	3717400.00		15.47969	(14100320)	483100.00
3717500.00	10.48255	(15061822)			
483300.00	3717500.00		13.18203	(15102420)	483400.00
3717500.00	15.19331	(13082904)			
483500.00	3717500.00		17.26213	(15090820)	483600.00
3717500.00	18.62656	(13083001)			
484000.00	3717500.00		31.71937	(12082823)	484600.00
3717500.00	23.98921	(12100120)			
484700.00	3717500.00		21.87345	(14100320)	483600.00
3717600.00	21.89440	(15090820)			
484600.00	3717600.00		26.06401	(16061920)	484700.00
3717600.00	22.39585	(14091619)			
484800.00	3717600.00		18.39652	(12081620)	484600.00
3717700.00	27.52686	(12081620)			
484700.00	3717700.00		23.04237	(15093018)	484800.00
3717700.00	20.76033	(16092819)			
483400.00	3717800.00		18.82530	(15090819)	483500.00
3717800.00	21.99218	(15090819)			
483600.00	3717800.00		25.94279	(15090819)	484600.00
3717800.00	30.60698	(16070620)			
484700.00	3717800.00		24.06710	(13070224)	485300.00
3717800.00	9.36290	(13091419)			
483300.00	3717900.00		16.47793	(12080706)	483400.00
3717900.00	19.27929	(12071301)			
483500.00	3717900.00		23.57750	(12071301)	484600.00
3717900.00	32.73426	(14091419)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 45

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING1 \*\*\*

INCLUDING SOURCE(S): IDLING1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

CostcoMurrieta\_Op\_HRA

\*\* CONC OF HRA

IN MICROGRAMS/M\*\*3

\*\*

Y-COORD (M)	X-COORD (M)	Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)
3717900.00	484700.00	3717900.00	25.84243	(14091419)	484800.00
		21.13183		(14091419)	
3718000.00	485100.00	3717900.00	12.44461	(14091419)	483300.00
		16.80548		(12093019)	
3718000.00	483400.00	3718000.00	19.59039	(13051221)	483500.00
		23.20673		(12051703)	
3718000.00	483600.00	3718000.00	27.44504	(12051703)	484600.00
		31.89375		(14102418)	
3718000.00	484700.00	3718000.00	25.10796	(14102418)	484800.00
		20.72889		(12092019)	
3718100.00	483100.00	3718100.00	17.44898	(15100921)	483400.00
		22.25003		(12072004)	
3718100.00	483600.00	3718100.00	27.30994	(12092202)	484600.00
		30.26487		(13082920)	
3718200.00	483900.00	3718200.00	51.61973	(16073020)	484500.00
		33.53085		(12081219)	
3718200.00	484600.00	3718200.00	27.28910	(13051320)	484700.00
		22.52839		(12083119)	
3718200.00	484900.00	3718200.00	16.27907	(12081119)	485400.00
		8.34300		(14080219)	
3718300.00	485600.00	3718200.00	6.86176	(14080219)	483100.00
		17.01628		(12092720)	
3718300.00	483900.00	3718300.00	43.85923	(12082919)	484000.00
		43.03734		(16062020)	
3718300.00	484200.00	3718300.00	43.46034	(13053120)	485300.00
		9.15579		(12081119)	
3718400.00	485600.00	3718300.00	7.41027	(15101418)	483400.00
		26.94488		(15101021)	
3718500.00	485200.00	3718400.00	9.71844	(14100618)	485200.00
		9.35070		(16081421)	
3718600.00	484600.00	3718600.00	17.49356	(13062720)	484800.00
		14.15467		(12080721)	
3718700.00	485200.00	3718600.00	8.96874	(13090521)	483700.00
		26.97484		(12081220)	
3718800.00	483100.00	3718800.00	14.31957	(12082002)	484000.00
		26.39494		(16072720)	
3718800.00	484200.00	3718800.00	20.19844	(14051620)	485400.00
		7.04316		(12080719)	
3718900.00	483100.00	3718900.00	13.76512	(12082921)	483200.00
		12.80562		(15091120)	
	483100.00	3719000.00	12.29109	(15091120)	483200.00



CostcoMurrieta\_Op\_HRA

3719000.00	12.75353	(13083124)			
483300.00	3719000.00		12.22093	(16072221)	483400.00
3719000.00	12.17073	(12081621)			
483500.00	3719000.00		12.64401	(14072721)	483100.00
3719100.00	10.67345	(13083124)			
483200.00	3719100.00		11.40827	(16072221)	483300.00
3719100.00	12.04804	(13090321)			
483400.00	3719100.00		12.06276	(15080521)	483500.00
3719100.00	12.32294	(14072423)			
483700.00	3719100.00		12.31819	(16062721)	484900.00
3719100.00	8.46263	(13062720)			
485000.00	3719100.00		7.98747	(12091322)	485100.00
3719100.00	7.32544	(13082223)			
485200.00	3719100.00		6.98620	(13081606)	485300.00
3719100.00	6.59860	(12080721)			
485400.00	3719100.00		5.96588	(12081003)	485500.00
3719100.00	5.65769	(13082222)			
485600.00	3719100.00		5.40740	(12081219)	485700.00
3719100.00	5.30562	(12081219)			
484200.00	3719200.00		12.44361	(13070921)	484500.00
3719200.00	9.42875	(12073021)			
484800.00	3719200.00		8.28547	(13061620)	484900.00
3719200.00	7.90037	(15081306)			
485000.00	3719200.00		7.48059	(13062720)	485100.00
3719200.00	6.91732	(13090220)			
485200.00	3719200.00		6.76361	(16080719)	485300.00
3719200.00	6.26440	(13081606)			
485400.00	3719200.00		5.77195	(13070920)	485500.00
3719200.00	5.46979	(12081003)			
485600.00	3719200.00		5.31596	(13082222)	485700.00
3719200.00	5.16022	(12081219)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
    \*\*\*                    17:09:15

PAGE 46

\*\*\* MODELOPTs:    RegDEFAULT CONC ELEV URBAN ADJ\_U\*

   \*\*\* THE    1ST HIGHEST    1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING2    \*\*\*  
    INCLUDING SOURCE(S):    IDLING2    ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA            IN MICROGRAMS/M\*\*3

\*\*

CostcoMurrieta\_Op\_HRA

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	6.01385	(12082006)	483600.00
3716600.00	6.21008 (13082905)			
483700.00	3716600.00	6.50866	(15091022)	483800.00
3716600.00	6.74284 (14072720)			
483900.00	3716600.00	6.94682	(12082823)	484000.00
3716600.00	7.13333 (13090324)			
485000.00	3716600.00	6.31569	(13082921)	485100.00
3716600.00	6.96551 (13081506)			
483500.00	3716700.00	6.46423	(15090902)	483600.00
3716700.00	6.90108 (12082006)			
483700.00	3716700.00	7.13929	(14091706)	483800.00
3716700.00	7.45751 (16092720)			
483900.00	3716700.00	7.71299	(12082823)	484000.00
3716700.00	7.90778 (15091920)			
485200.00	3716700.00	6.40318	(16061921)	485400.00
3716700.00	5.91363 (12091521)			
485700.00	3716700.00	5.07900	(15010717)	483100.00
3716800.00	5.96449 (13090522)			
483200.00	3716800.00	5.99883	(13090522)	483500.00
3716800.00	7.05874 (16072103)			
483600.00	3716800.00	7.54381	(12082006)	483700.00
3716800.00	8.34279 (12082006)			
483800.00	3716800.00	8.54751	(15091022)	483900.00
3716800.00	8.65471 (14081506)			
484000.00	3716800.00	8.88615	(15091920)	483100.00
3716900.00	6.51704 (12081906)			
483200.00	3716900.00	6.62019	(13090522)	485600.00
3716900.00	5.78311 (13082821)			
483200.00	3717000.00	7.20244	(12081906)	483300.00
3717000.00	7.66808 (13090522)			
485400.00	3717100.00	7.14397	(15080106)	485500.00
3717100.00	6.71874 (16061920)			
485600.00	3717100.00	6.10207	(16061920)	485700.00
3717100.00	5.72402 (16060221)			
483100.00	3717200.00	7.62592	(12080906)	483200.00
3717300.00	8.53458 (13082822)			
483300.00	3717300.00	9.51766	(12080906)	483400.00
3717300.00	10.23036 (12080906)			
483500.00	3717300.00	10.82228	(13083001)	483800.00
3717300.00	14.31685 (16092421)			
483900.00	3717300.00	16.15924	(15090902)	484000.00
3717300.00	17.94905 (14091706)			
484600.00	3717300.00	17.70331	(13082921)	484700.00

CostcoMurrieta\_Op\_HRA

3717300.00	16.04620	(12101718)			
483100.00	3717400.00		7.93379	(16080606)	483200.00
3717400.00	8.73748	(15102420)			
483300.00	3717400.00		9.63142	(13082022)	483400.00
3717400.00	10.57611	(13082822)			
483500.00	3717400.00		11.77450	(15090820)	483800.00
3717400.00	16.36397	(14100722)			
483900.00	3717400.00		18.83673	(12080202)	484000.00
3717400.00	20.66089	(16021620)			
484600.00	3717400.00		21.36645	(13090421)	484700.00
3717400.00	18.93612	(12091320)			
484800.00	3717400.00		16.57321	(12100120)	483100.00
3717500.00	8.20624	(14091505)			
483300.00	3717500.00		10.12261	(16080606)	483400.00
3717500.00	11.35285	(12093022)			
483500.00	3717500.00		12.62058	(13082822)	483600.00
3717500.00	14.17324	(15090820)			
484000.00	3717500.00		24.61468	(15090902)	484600.00
3717500.00	25.00865	(12091320)			
484700.00	3717500.00		22.56082	(12100120)	483600.00
3717600.00	15.44371	(12073023)			
484600.00	3717600.00		29.91539	(16081420)	484700.00
3717600.00	24.98046	(14100320)			
484800.00	3717600.00		21.00475	(16061920)	484600.00
3717700.00	35.93202	(16061920)			
484700.00	3717700.00		28.17471	(15062420)	484800.00
3717700.00	23.23924	(15091219)			
483400.00	3717800.00		13.10535	(15090819)	483500.00
3717800.00	15.03393	(15090819)			
483600.00	3717800.00		17.48588	(15090819)	484600.00
3717800.00	41.55505	(16081419)			
484700.00	3717800.00		30.88600	(16092819)	485300.00
3717800.00	10.58336	(13091419)			
483300.00	3717900.00		11.96217	(12080706)	483400.00
3717900.00	13.53704	(12080706)			
483500.00	3717900.00		15.79300	(12080706)	484600.00
3717900.00	45.22430	(12092318)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
                                  \*\*\*                      17:09:15

PAGE 47

\*\*\* MODELOPTs:    RegDFAULT    CONC    ELEV    URBAN    ADJ\_U\*

\*\*\* THE    1ST HIGHEST    1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP:    IDLING2    \*\*\*  
                                  INCLUDING SOURCE(S):    IDLING2    ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

** CONC OF HRA		IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	32.89094	(14091419)	484800.00
3717900.00	25.57033	(14091419)		
485100.00	3717900.00	14.30926	(14091419)	483300.00
3718000.00	12.21697	(12093019)		
483400.00	3718000.00	13.78020	(12093019)	483500.00
3718000.00	15.68771	(13051221)		
483600.00	3718000.00	17.82900	(13051221)	484600.00
3718000.00	43.27997	(16072019)		
484700.00	3718000.00	31.63065	(16100918)	484800.00
3718000.00	24.84777	(14102418)		
483100.00	3718100.00	10.26742	(15100921)	483400.00
3718100.00	13.92751	(12092820)		
483600.00	3718100.00	17.55437	(15100821)	484600.00
3718100.00	37.51234	(15081519)		
483900.00	3718200.00	28.24572	(12081121)	484500.00
3718200.00	38.06296	(12081719)		
484600.00	3718200.00	31.49517	(12080721)	484700.00
3718200.00	26.03159	(12080719)		
484900.00	3718200.00	18.04270	(12083119)	485400.00
3718200.00	9.02861	(15101418)		
485600.00	3718200.00	7.31678	(14080219)	483100.00
3718300.00	17.77405	(12101520)		
483900.00	3718300.00	25.26070	(13082120)	484000.00
3718300.00	28.00036	(12081120)		
484200.00	3718300.00	34.02204	(13082220)	485300.00
3718300.00	9.92590	(12081119)		
485600.00	3718300.00	7.57743	(12062921)	483400.00
3718400.00	18.24511	(15100920)		
485200.00	3718400.00	10.47599	(16081519)	485200.00
3718500.00	9.84737	(13051320)		
484600.00	3718600.00	16.51592	(12081722)	484800.00
3718600.00	13.93364	(13090220)		
485200.00	3718600.00	9.33090	(12081219)	483700.00
3718700.00	21.19250	(15081621)		
483100.00	3718800.00	15.15892	(12081705)	484000.00
3718800.00	16.07858	(15091320)		
484200.00	3718800.00	14.72467	(16072921)	485400.00

CostcoMurrieta\_Op\_HRA

3718800.00	7.14901	(12081219)			
483100.00	3718900.00	14.41108	(15081723)		483200.00
3718900.00	13.89560	(16073024)			
483100.00	3719000.00	13.22726	(16073024)		483200.00
3719000.00	13.96431	(12082921)			
483300.00	3719000.00	13.22670	(12081322)		483400.00
3719000.00	12.61911	(16072221)			
483500.00	3719000.00	13.25794	(13090321)		483100.00
3719100.00	11.62302	(12082921)			
483200.00	3719100.00	12.30633	(12081322)		483300.00
3719100.00	13.24510	(16091820)			
483400.00	3719100.00	13.29327	(15081621)		483500.00
3719100.00	13.51849	(16072722)			
483700.00	3719100.00	11.81896	(15091020)		484900.00
3719100.00	8.06188	(13063023)			
485000.00	3719100.00	7.76448	(15081306)		485100.00
3719100.00	7.12546	(13051122)			
485200.00	3719100.00	6.82739	(12080121)		485300.00
3719100.00	6.50962	(13081606)			
485400.00	3719100.00	5.93538	(13072621)		485500.00
3719100.00	5.64562	(13070920)			
485600.00	3719100.00	5.36029	(13083105)		485700.00
3719100.00	5.22205	(13082222)			
484200.00	3719200.00	9.38964	(12072021)		484500.00
3719200.00	8.74612	(12081221)			
484800.00	3719200.00	7.96392	(13062820)		484900.00
3719200.00	7.55979	(13083004)			
485000.00	3719200.00	7.21687	(15081306)		485100.00
3719200.00	6.68942	(15081306)			
485200.00	3719200.00	6.55764	(12091322)		485300.00
3719200.00	6.11299	(12080121)			
485400.00	3719200.00	5.72542	(13081606)		485500.00
3719200.00	5.40607	(13072621)			
485600.00	3719200.00	5.27926	(13070920)		485700.00
3719200.00	5.08474	(13083105)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 48

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3 \*\*\*  
 INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

CostcoMurrieta\_Op\_HRA

\*\*\*

		**		** CONC OF HRA	IN MICROGRAMS/M**3
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)		X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)			
483500.00	3716600.00	6.43213	(16092421)		483600.00
3716600.00	6.69988	(16072103)			
483700.00	3716600.00	7.13741	(12082006)		483800.00
3716600.00	7.45244	(12082006)			
483900.00	3716600.00	7.80669	(15091022)		484000.00
3716600.00	8.03332	(16092720)			
485000.00	3716600.00	7.79078	(13083006)		485100.00
3716600.00	9.27193	(13082921)			
483500.00	3716700.00	6.88362	(12092219)		483600.00
3716700.00	7.55956	(14091404)			
483700.00	3716700.00	7.92838	(15090902)		483800.00
3716700.00	8.60533	(12082006)			
483900.00	3716700.00	8.76423	(15091022)		484000.00
3716700.00	9.06564	(16092720)			
485200.00	3716700.00	8.44004	(13111217)		485400.00
3716700.00	7.76846	(16072906)			
485700.00	3716700.00	6.51805	(13082923)		483100.00
3716800.00	6.51326	(13083001)			
483200.00	3716800.00	6.54742	(12081906)		483500.00
3716800.00	7.86160	(12092219)			
483600.00	3716800.00	8.52117	(16080906)		483700.00
3716800.00	9.78131	(12080202)			
483800.00	3716800.00	10.21118	(15090902)		483900.00
3716800.00	10.18839	(12082006)			
484000.00	3716800.00	10.53898	(15091022)		483100.00
3716900.00	7.10186	(15090820)			
483200.00	3716900.00	7.21781	(12081102)		485600.00
3716900.00	7.60224	(13082821)			
483200.00	3717000.00	7.89544	(15090820)		483300.00
3717000.00	8.47321	(15090820)			
485400.00	3717100.00	9.57374	(16081722)		485500.00
3717100.00	8.92289	(16061920)			
485600.00	3717100.00	7.86431	(15062622)		485700.00
3717100.00	7.35330	(16060221)			
483100.00	3717200.00	8.13941	(12073023)		483200.00
3717300.00	9.07499	(15101005)			
483300.00	3717300.00	10.16989	(12073023)		483400.00
3717300.00	10.97117	(12073023)			
483500.00	3717300.00	11.72384	(13082904)		483800.00

CostcoMurrieta\_Op\_HRA

3717300.00	16.20936	(13082903)			
483900.00	3717300.00	18.88378	(12010519)	484000.00	
3717300.00	22.68979	(13100520)			
484600.00	3717300.00	29.97875	(15092021)	484700.00	
3717300.00	25.24209	(16092619)			
483100.00	3717400.00	8.36075	(12101420)	483200.00	
3717400.00	9.28907	(12071824)			
483300.00	3717400.00	10.22046	(12071824)	483400.00	
3717400.00	11.22394	(15101005)			
483500.00	3717400.00	12.45764	(12073023)	483800.00	
3717400.00	18.16084	(15090820)			
483900.00	3717400.00	22.42466	(15090820)	484000.00	
3717400.00	25.17673	(13082903)			
484600.00	3717400.00	44.09376	(12082819)	484700.00	
3717400.00	34.67311	(13090421)			
484800.00	3717400.00	27.79107	(12091320)	483100.00	
3717500.00	8.66190	(14082820)			
483300.00	3717500.00	10.71747	(12101420)	483400.00	
3717500.00	12.13131	(12101420)			
483500.00	3717500.00	13.51719	(12071824)	483600.00	
3717500.00	14.75810	(12071824)			
484000.00	3717500.00	29.05589	(15090820)	484600.00	
3717500.00	53.56572	(12091420)			
484700.00	3717500.00	53.71875	(16062820)	483600.00	
3717600.00	16.29252	(16092624)			
484600.00	3717600.00	66.80484	(13062619)	484700.00	
3717600.00	53.26464	(16081520)			
484800.00	3717600.00	38.48038	(16061920)	484600.00	
3717700.00	84.35087	(13091318)			
484700.00	3717700.00	58.38933	(14071819)	484800.00	
3717700.00	47.20116	(16092819)			
483400.00	3717800.00	13.10207	(12071301)	483500.00	
3717800.00	14.92598	(12071301)			
483600.00	3717800.00	17.23624	(12071301)	484600.00	
3717800.00	114.51201	(16021419)			
484700.00	3717800.00	63.98751	(12092318)	485300.00	
3717800.00	14.17001	(14091419)			
483300.00	3717900.00	13.58717	(12093019)	483400.00	
3717900.00	15.64304	(12093019)			
483500.00	3717900.00	19.92406	(12093019)	484600.00	
3717900.00	106.09171	(16092118)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD  
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\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 49

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

CostcoMurrieta\_Op\_HRA

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING3 \*\*\*

INCLUDING SOURCE(S): IDLING3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	64.56717	(12081619)	484800.00
3717900.00	43.97975	(13090619)		
485100.00	3717900.00	20.11610	(12092019)	483300.00
3718000.00	15.87294	(15100921)		
483400.00	3718000.00	17.60324	(15100921)	483500.00
3718000.00	19.46836	(12092820)		
483600.00	3718000.00	20.51074	(12072004)	484600.00
3718000.00	76.02605	(16102117)		
484700.00	3718000.00	53.33330	(15101018)	484800.00
3718000.00	40.57081	(16081519)		
483100.00	3718100.00	15.23027	(12092820)	483400.00
3718100.00	19.29697	(15100821)		
483600.00	3718100.00	21.38754	(12101520)	484600.00
3718100.00	53.01702	(16081019)		
483900.00	3718200.00	32.78098	(12081121)	484500.00
3718200.00	43.65536	(13080622)		
484600.00	3718200.00	40.85726	(13062820)	484700.00
3718200.00	34.91918	(13062720)		
484900.00	3718200.00	24.86706	(12081219)	485400.00
3718200.00	11.56684	(12081119)		
485600.00	3718200.00	9.17186	(12081119)	483100.00
3718300.00	12.66470	(12101520)		
483900.00	3718300.00	30.55011	(15083119)	484000.00
3718300.00	32.64495	(12081322)		
484200.00	3718300.00	38.88893	(13071820)	485300.00
3718300.00	12.29392	(16081421)		
485600.00	3718300.00	9.96285	(13082920)	483400.00
3718400.00	19.73620	(15100920)		
485200.00	3718400.00	13.20549	(12081219)	485200.00
3718500.00	11.90403	(13083105)		
484600.00	3718600.00	21.04562	(13053120)	484800.00
3718600.00	16.94002	(12081722)		
485200.00	3718600.00	11.23472	(12080721)	483700.00



CostcoMurrieta\_Op\_HRA

3718700.00	20.11279	(16091820)			
483100.00	3718800.00	11.11336	(12081705)		484000.00
3718800.00	21.96047	(16082920)			
484200.00	3718800.00	21.36990	(15081622)		485400.00
3718800.00	8.55169	(12080721)			
483100.00	3718900.00	10.74665	(15081723)		483200.00
3718900.00	10.14884	(13090903)			
483100.00	3719000.00	9.74182	(13090903)		483200.00
3719000.00	10.24720	(12082921)			
483300.00	3719000.00	9.93672	(15091120)		483400.00
3719000.00	9.93493	(13083124)			
483500.00	3719000.00	10.56249	(16072221)		483100.00
3719100.00	8.88876	(12082921)			
483200.00	3719100.00	9.26328	(15091120)		483300.00
3719100.00	9.69736	(13090103)			
483400.00	3719100.00	10.02718	(16072221)		483500.00
3719100.00	10.23395	(15081621)			
483700.00	3719100.00	10.60870	(12081220)		484900.00
3719100.00	9.22054	(13062820)			
485000.00	3719100.00	8.81927	(12081722)		485100.00
3719100.00	8.14806	(13061620)			
485200.00	3719100.00	7.91013	(15081306)		485300.00
3719100.00	7.54920	(13062720)			
485400.00	3719100.00	6.85848	(13090220)		485500.00
3719100.00	6.50230	(13082223)			
485600.00	3719100.00	6.24007	(13081606)		485700.00
3719100.00	6.11962	(12080721)			
484200.00	3719200.00	14.41989	(13062721)		484500.00
3719200.00	11.11305	(13070921)			
484800.00	3719200.00	8.65402	(12052219)		484900.00
3719200.00	8.40209	(13062820)			
485000.00	3719200.00	8.11384	(13062820)		485100.00
3719200.00	7.59921	(15021318)			
485200.00	3719200.00	7.45069	(15081306)		485300.00
3719200.00	7.05672	(15090619)			
485400.00	3719200.00	6.51981	(13062720)		485500.00
3719200.00	6.24941	(13090220)			
485600.00	3719200.00	6.08892	(16080719)		485700.00
3719200.00	5.87881	(12081323)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*

07/10/18

\*\*\* 17:09:15

PAGE 50

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

CostcoMurrieta\_Op\_HRA

VALUES FOR SOURCE GROUP: IDLING4 \*\*\*

INCLUDING SOURCE(S): IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

**		** CONC OF HRA		IN MICROGRAMS/M**3	
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)			
483500.00	3716600.00	6.65641	(14091404)	483600.00	3716600.00
3716600.00	6.92954	(16072103)			
483700.00	3716600.00	7.42808	(12082006)	483800.00	3716600.00
3716600.00	7.66789	(14082006)			
483900.00	3716600.00	8.05909	(16062824)	484000.00	3716600.00
3716600.00	8.33948	(14081506)			
485000.00	3716600.00	7.92195	(15081406)	485100.00	3716600.00
3716600.00	9.29047	(13090421)			
483500.00	3716700.00	7.11526	(16080906)	483600.00	3716700.00
3716700.00	7.84608	(14091404)			
483700.00	3716700.00	8.25311	(15090902)	483800.00	3716700.00
3716700.00	8.93778	(12082006)			
483900.00	3716700.00	9.14136	(15091022)	484000.00	3716700.00
3716700.00	9.43868	(16092720)			
485200.00	3716700.00	8.39098	(13111217)	485400.00	3716700.00
3716700.00	7.79912	(16081420)			
485700.00	3716700.00	6.48511	(13090523)	483100.00	3716700.00
3716800.00	6.73574	(13083001)			
483200.00	3716800.00	6.77399	(12081906)	483500.00	3716800.00
3716800.00	8.18153	(12092219)			
483600.00	3716800.00	8.87367	(16092421)	483700.00	3716800.00
3716800.00	10.19924	(12080202)			
483800.00	3716800.00	10.64604	(15090902)	483900.00	3716800.00
3716800.00	10.56367	(13082905)			
484000.00	3716800.00	10.96302	(15062723)	483100.00	3716800.00
3716900.00	7.36620	(15090820)			
483200.00	3716900.00	7.48910	(12081102)	485600.00	3716900.00
3716900.00	7.52245	(16081722)			
483200.00	3717000.00	8.20453	(15090820)	483300.00	3717000.00
3717000.00	8.83991	(15090820)			
485400.00	3717100.00	9.58942	(16061920)	485500.00	3717100.00
3717100.00	8.75914	(16061920)			
485600.00	3717100.00	7.77910	(16060221)	485700.00	3717100.00
3717100.00	7.25723	(15090903)			
483100.00	3717200.00	8.46332	(12073023)	483200.00	3717200.00

CostcoMurrieta\_Op\_HRA

3717300.00	9.43343	(15101005)			
483300.00	3717300.00		10.63242	(12073023)	483400.00
3717300.00	11.56311	(12073023)			
483500.00	3717300.00		12.31319	(13082904)	483800.00
3717300.00	17.29196	(13082903)			
483900.00	3717300.00		20.30906	(12010519)	484000.00
3717300.00	24.45603	(13100520)			
484600.00	3717300.00		30.88760	(16092620)	484700.00
3717300.00	25.74881	(13090421)			
483100.00	3717400.00		8.70320	(12101420)	483200.00
3717400.00	9.67544	(12071824)			
483300.00	3717400.00		10.73623	(12071824)	483400.00
3717400.00	11.76275	(14091505)			
483500.00	3717400.00		13.10064	(15101005)	483800.00
3717400.00	19.43382	(15090820)			
483900.00	3717400.00		24.36027	(15090820)	484000.00
3717400.00	27.42074	(13082903)			
484600.00	3717400.00		45.93399	(12091420)	484700.00
3717400.00	34.95319	(12091320)			
484800.00	3717400.00		27.98616	(12100120)	483100.00
3717500.00	9.01591	(14082820)			
483300.00	3717500.00		11.17979	(16092624)	483400.00
3717500.00	12.74524	(12101420)			
483500.00	3717500.00		14.25237	(12101420)	483600.00
3717500.00	15.73933	(12071824)			
484000.00	3717500.00		32.02404	(15090820)	484600.00
3717500.00	55.71900	(13062619)			
484700.00	3717500.00		53.65587	(13090420)	483600.00
3717600.00	17.15136	(16092624)			
484600.00	3717600.00		66.84698	(13082019)	484700.00
3717600.00	51.45262	(16061920)			
484800.00	3717600.00		36.91744	(12081620)	484600.00
3717700.00	78.60208	(13101817)			
484700.00	3717700.00		54.32372	(12070719)	484800.00
3717700.00	43.72592	(16070620)			
483400.00	3717800.00		13.66937	(12071301)	483500.00
3717800.00	15.65280	(12071301)			
483600.00	3717800.00		18.16744	(12071301)	484600.00
3717800.00	96.19733	(15103005)			
484700.00	3717800.00		55.80071	(12092318)	485300.00
3717800.00	13.52480	(13090320)			
483300.00	3717900.00		14.25587	(13051221)	483400.00
3717900.00	16.41048	(13051221)			
483500.00	3717900.00		20.79443	(13051221)	484600.00
3717900.00	86.16714	(14091518)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

CostcoMurrieta\_Op\_HRA  
17:09:15

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PAGE 51

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING4 \*\*\*

INCLUDING SOURCE(S): IDLING4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	55.62480	(14091218)	484800.00
3717900.00	39.43813	(13081220)		
485100.00	3717900.00	19.04891	(14102418)	483300.00
3718000.00	16.31508	(12092820)		
483400.00	3718000.00	18.14887	(12092820)	483500.00
3718000.00	20.21676	(13090101)		
483600.00	3718000.00	21.63812	(15100821)	484600.00
3718000.00	64.22155	(16102117)		
484700.00	3718000.00	46.83955	(12081219)	484800.00
3718000.00	36.62846	(16081519)		
483100.00	3718100.00	15.67594	(13090101)	483400.00
3718100.00	19.69292	(12090502)		
483600.00	3718100.00	22.32786	(13083023)	484600.00
3718100.00	46.92286	(15090619)		
483900.00	3718200.00	33.45663	(12081705)	484500.00
3718200.00	40.36519	(15031619)		
484600.00	3718200.00	37.01730	(12081722)	484700.00
3718200.00	31.81558	(13062720)		
484900.00	3718200.00	23.06421	(12081219)	485400.00
3718200.00	11.00787	(13082920)		
485600.00	3718200.00	8.87096	(12081119)	483100.00
3718300.00	12.93159	(12092720)		
483900.00	3718300.00	31.24092	(12082921)	484000.00
3718300.00	33.19634	(16072221)		
484200.00	3718300.00	38.77563	(16062020)	485300.00
3718300.00	11.70560	(16081421)		
485600.00	3718300.00	9.54169	(13082920)	483400.00
3718400.00	19.77110	(16093020)		
485200.00	3718400.00	12.56134	(12081219)	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	11.36470	(13083105)			
484600.00	3718600.00	20.24356	(15031619)		484800.00
3718600.00	15.94974	(15021318)			
485200.00	3718600.00	10.76348	(12080721)		483700.00
3718700.00	20.09988	(16072221)			
483100.00	3718800.00	11.19095	(12081705)		484000.00
3718800.00	21.69019	(15092619)			
484200.00	3718800.00	20.94657	(15082420)		485400.00
3718800.00	8.25157	(12080721)			
483100.00	3718900.00	10.77108	(12082002)		483200.00
3718900.00	10.16880	(16073024)			
483100.00	3719000.00	9.78523	(16073101)		483200.00
3719000.00	10.24200	(12080822)			
483300.00	3719000.00	9.95011	(12081322)		483400.00
3719000.00	10.08099	(16091820)			
483500.00	3719000.00	10.52308	(15081621)		483100.00
3719100.00	8.87669	(12080822)			
483200.00	3719100.00	9.28825	(12081322)		483300.00
3719100.00	9.81557	(16091820)			
483400.00	3719100.00	9.93253	(15062820)		483500.00
3719100.00	10.24219	(12081621)			
483700.00	3719100.00	10.40250	(16072821)		484900.00
3719100.00	8.92403	(13062820)			
485000.00	3719100.00	8.50121	(12081722)		485100.00
3719100.00	7.89145	(13063023)			
485200.00	3719100.00	7.65951	(15090619)		485300.00
3719100.00	7.29170	(13062720)			
485400.00	3719100.00	6.65612	(13090220)		485500.00
3719100.00	6.31540	(16080719)			
485600.00	3719100.00	6.04950	(13081606)		485700.00
3719100.00	5.94677	(12080721)			
484200.00	3719200.00	14.25025	(16072720)		484500.00
3719200.00	10.97194	(12081622)			
484800.00	3719200.00	8.42811	(12073021)		484900.00
3719200.00	8.20426	(13062820)			
485000.00	3719200.00	7.86381	(12081722)		485100.00
3719200.00	7.35160	(15021318)			
485200.00	3719200.00	7.25065	(15081306)		485300.00
3719200.00	6.84249	(13062720)			
485400.00	3719200.00	6.33079	(12091322)		485500.00
3719200.00	6.06667	(13090220)			
485600.00	3719200.00	5.91661	(16080719)		485700.00
3719200.00	5.70262	(12081323)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

\*\*\* 17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 52

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
483500.00	3716600.00	6.86723	(14091404)	483600.00
3716600.00	7.16103 (15090902)			
483700.00	3716600.00	7.67108	(12082006)	483800.00
3716600.00	7.97811 (15091022)			
483900.00	3716600.00	8.30928	(16092720)	484000.00
3716600.00	8.52690 (13083005)			
485000.00	3716600.00	7.68540	(13090501)	485100.00
3716600.00	9.10607 (12101718)			
483500.00	3716700.00	7.38153	(16092421)	483600.00
3716700.00	8.07570 (16072103)			
483700.00	3716700.00	8.58543	(12082006)	483800.00
3716700.00	9.05185 (13081802)			
483900.00	3716700.00	9.35655	(15062723)	484000.00
3716700.00	9.68331 (14081506)			
485200.00	3716700.00	8.14959	(16061921)	485400.00
3716700.00	7.47137 (12100120)			
485700.00	3716700.00	6.21569	(13082821)	483100.00
3716800.00	7.00530 (13083001)			
483200.00	3716800.00	7.02416	(12081906)	483500.00
3716800.00	8.48676 (12092219)			
483600.00	3716800.00	9.17323	(14091404)	483700.00
3716800.00	10.70021 (15090902)			
483800.00	3716800.00	11.03795	(12082006)	483900.00
3716800.00	10.96174 (15091022)			
484000.00	3716800.00	11.29766	(14081506)	483100.00
3716900.00	7.61649 (15090820)			
483200.00	3716900.00	7.81228	(13083001)	485600.00
3716900.00	7.21845 (16061920)			
483200.00	3717000.00	8.53311	(15090820)	483300.00
3717000.00	9.17660 (12081102)			
485400.00	3717100.00	8.96241	(16061920)	485500.00

CostcoMurrieta\_Op\_HRA

3717100.00	8.22367	(16060221)			
485600.00	3717100.00		7.34420	(15090903)	485700.00
3717100.00	6.85307	(13082021)			
483100.00	3717200.00		8.88691	(12073023)	483200.00
3717300.00	9.93920	(15101005)			
483300.00	3717300.00		11.27618	(12073023)	483400.00
3717300.00	12.21590	(15102420)			
483500.00	3717300.00		13.04238	(13082904)	483800.00
3717300.00	18.56227	(13082903)			
483900.00	3717300.00		22.02614	(14100722)	484000.00
3717300.00	26.85491	(12080202)			
484600.00	3717300.00		29.39996	(13082921)	484700.00
3717300.00	23.91588	(12091320)			
483100.00	3717400.00		9.10041	(12101420)	483200.00
3717400.00	10.16690	(12071824)			
483300.00	3717400.00		11.32659	(12071824)	483400.00
3717400.00	12.47358	(14091505)			
483500.00	3717400.00		13.91369	(12073023)	483800.00
3717400.00	20.95350	(15090820)			
483900.00	3717400.00		27.24308	(13082903)	484000.00
3717400.00	30.22642	(14100722)			
484600.00	3717400.00		38.90015	(12101718)	484700.00
3717400.00	31.67726	(16081420)			
484800.00	3717400.00		24.89576	(14100320)	483100.00
3717500.00	9.46841	(14082820)			
483300.00	3717500.00		11.81509	(16092624)	483400.00
3717500.00	13.57533	(12101420)			
483500.00	3717500.00		15.24289	(12101420)	483600.00
3717500.00	16.84167	(12071824)			
484000.00	3717500.00		34.70667	(15090820)	484600.00
3717500.00	47.01654	(16081420)			
484700.00	3717500.00		43.32022	(12091219)	483600.00
3717600.00	18.56857	(15090819)			
484600.00	3717600.00		53.54421	(13091318)	484700.00
3717600.00	41.89898	(12081620)			
484800.00	3717600.00		31.15539	(13082621)	484600.00
3717700.00	58.53411	(14063019)			
484700.00	3717700.00		42.43020	(12100119)	484800.00
3717700.00	35.98014	(13091419)			
483400.00	3717800.00		14.55075	(12071301)	483500.00
3717800.00	16.71287	(16041622)			
483600.00	3717800.00		19.51230	(15112319)	484600.00
3717800.00	65.25150	(12091318)			
484700.00	3717800.00		42.33571	(12090219)	485300.00
3717800.00	12.10059	(13090320)			
483300.00	3717900.00		12.82574	(13051221)	483400.00
3717900.00	14.60528	(15100921)			
483500.00	3717900.00		20.09184	(15100921)	484600.00

CostcoMurrieta\_Op\_HRA

3717900.00 58.92457 (14091518)

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\*

07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 53

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: IDLING5 \*\*\*

INCLUDING SOURCE(S): IDLING5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	41.81627	(13082920)	484800.00
3717900.00	31.91782	(13081220)		
485100.00	3717900.00	16.67453	(14102418)	483300.00
3718000.00	15.42885	(12102819)		
483400.00	3718000.00	17.41925	(15100821)	483500.00
3718000.00	19.54060	(15100821)		
483600.00	3718000.00	20.19271	(12092202)	484600.00
3718000.00	47.77608	(12080919)		
484700.00	3718000.00	37.21985	(12080719)	484800.00
3718000.00	30.02395	(16081519)		
483100.00	3718100.00	15.86264	(15100821)	483400.00
3718100.00	19.72202	(12101520)		
483600.00	3718100.00	21.54252	(13051321)	484600.00
3718100.00	38.59464	(12081719)		
483900.00	3718200.00	34.03214	(12082921)	484500.00
3718200.00	35.78590	(13062820)		
484600.00	3718200.00	31.55040	(15090619)	484700.00
3718200.00	27.00742	(16080719)		
484900.00	3718200.00	20.17038	(12081219)	485400.00
3718200.00	10.04461	(12081119)		
485600.00	3718200.00	8.18771	(12081119)	483100.00
3718300.00	13.72030	(13051321)		
483900.00	3718300.00	31.24954	(16072221)	484000.00
3718300.00	31.93994	(14070421)		
484200.00	3718300.00	35.68705	(13091619)	485300.00



CostcoMurrieta\_Op\_HRA

3718300.00	10.67458	(16081421)			
485600.00	3718300.00		8.78025	(13082920)	483400.00
3718400.00	20.65083	(15101021)			
485200.00	3718400.00		11.33303	(12081219)	485200.00
3718500.00	10.41944	(13082222)			
484600.00	3718600.00		16.76556	(12073021)	484800.00
3718600.00	14.49046	(15090619)			
485200.00	3718600.00		9.88985	(12080721)	483700.00
3718700.00	20.75543	(12081621)			
483100.00	3718800.00		11.66433	(12082002)	484000.00
3718800.00	21.66342	(13091520)			
484200.00	3718800.00		19.65257	(16072720)	485400.00
3718800.00	7.68715	(12080721)			
483100.00	3718900.00		11.28563	(16073024)	483200.00
3718900.00	10.64790	(12082921)			
483100.00	3719000.00		10.23919	(12082921)	483200.00
3719000.00	10.66527	(12081322)			
483300.00	3719000.00		10.27189	(16091820)	483400.00
3719000.00	10.26598	(15081621)			
483500.00	3719000.00		10.69322	(12081621)	483100.00
3719100.00	9.16642	(12081322)			
483200.00	3719100.00		9.52868	(16091820)	483300.00
3719100.00	10.11558	(16072221)			
483400.00	3719100.00		10.21217	(12081621)	483500.00
3719100.00	10.42389	(13091420)			
483700.00	3719100.00		10.52994	(15101120)	484900.00
3719100.00	8.39161	(12081722)			
485000.00	3719100.00		7.97665	(15021318)	485100.00
3719100.00	7.52202	(15081306)			
485200.00	3719100.00		7.22760	(13062720)	485300.00
3719100.00	6.86684	(12091322)			
485400.00	3719100.00		6.24099	(13090220)	485500.00
3719100.00	5.99299	(13081606)			
485600.00	3719100.00		5.69077	(13072621)	485700.00
3719100.00	5.62325	(12080721)			
484200.00	3719200.00		13.15053	(16060320)	484500.00
3719200.00	8.64300	(13080622)			
484800.00	3719200.00		8.04466	(12073021)	484900.00
3719200.00	7.82021	(13062820)			
485000.00	3719200.00		7.43528	(12081722)	485100.00
3719200.00	6.95615	(13063023)			
485200.00	3719200.00		6.91478	(15090619)	485300.00
3719200.00	6.48647	(13062720)			
485400.00	3719200.00		6.00694	(12091322)	485500.00
3719200.00	5.71607	(13082223)			
485600.00	3719200.00		5.61002	(13081606)	485700.00
3719200.00	5.39374	(12080721)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* \*\*\* C:\Lakes\AERMOD

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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 54

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING6 \*\*\*

INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	6.59011	(16072103)	483600.00
3716600.00	6.90626	(12082006)		
483700.00	3716600.00	7.26575	(12082006)	483800.00
3716600.00	7.59288	(15091022)		
483900.00	3716600.00	7.88411	(16092720)	484000.00
3716600.00	8.06588	(13083005)		
485000.00	3716600.00	7.34056	(15081406)	485100.00
3716600.00	8.63201	(13090421)		
483500.00	3716700.00	7.08556	(14091404)	483600.00
3716700.00	7.69055	(15090902)		
483700.00	3716700.00	8.21936	(12082006)	483800.00
3716700.00	8.65191	(15091022)		
483900.00	3716700.00	8.87665	(16092720)	484000.00
3716700.00	9.13254	(13083005)		
485200.00	3716700.00	7.76577	(16061921)	485400.00
3716700.00	7.14337	(16081420)		
485700.00	3716700.00	6.00673	(13082821)	483100.00
3716800.00	6.80765	(12081906)		
483200.00	3716800.00	6.73664	(12081906)	483500.00
3716800.00	8.04685	(16080906)		
483600.00	3716800.00	8.74249	(14091404)	483700.00
3716800.00	10.12175	(15090902)		
483800.00	3716800.00	10.33585	(12082006)	483900.00
3716800.00	10.27571	(15091022)		
484000.00	3716800.00	10.62219	(14081506)	483100.00
3716900.00	7.29166	(12081102)		
483200.00	3716900.00	7.56445	(12081906)	485600.00

CostcoMurrieta\_Op\_HRA

3716900.00	6.88517	(13062923)			
483200.00	3717000.00		8.13736	(12081102)	483300.00
3717000.00	8.89261	(13083001)			
485400.00	3717100.00		8.65079	(16061920)	485500.00
3717100.00	7.91212	(15062622)			
485600.00	3717100.00		7.10902	(16060221)	485700.00
3717100.00	6.65242	(15090903)			
483100.00	3717200.00		8.58635	(15102420)	483200.00
3717300.00	9.67568	(12073023)			
483300.00	3717300.00		10.81004	(15102420)	483400.00
3717300.00	11.86179	(13082904)			
483500.00	3717300.00		12.54742	(15090820)	483800.00
3717300.00	17.24546	(13090522)			
483900.00	3717300.00		20.13705	(12092219)	484000.00
3717300.00	24.55326	(15090902)			
484600.00	3717300.00		25.90387	(13082921)	484700.00
3717300.00	21.65377	(12101718)			
483100.00	3717400.00		8.83145	(12071824)	483200.00
3717400.00	9.81170	(14091505)			
483300.00	3717400.00		10.93413	(14091505)	483400.00
3717400.00	12.09403	(12073023)			
483500.00	3717400.00		13.30095	(15102420)	483800.00
3717400.00	19.19152	(13083001)			
483900.00	3717400.00		24.73201	(13082903)	484000.00
3717400.00	26.78810	(13110119)			
484600.00	3717400.00		33.93211	(13090421)	484700.00
3717400.00	28.00616	(14060820)			
484800.00	3717400.00		22.77964	(13082923)	483100.00
3717500.00	9.19891	(16092624)			
483300.00	3717500.00		11.51756	(12101420)	483400.00
3717500.00	13.10213	(12071824)			
483500.00	3717500.00		14.51338	(12071824)	483600.00
3717500.00	16.13872	(15101005)			
484000.00	3717500.00		31.52025	(13082903)	484600.00
3717500.00	40.50775	(12091320)			
484700.00	3717500.00		36.10725	(13082923)	483600.00
3717600.00	18.11631	(12101420)			
484600.00	3717600.00		46.11384	(16081520)	484700.00
3717600.00	37.90479	(16061920)			
484800.00	3717600.00		28.84591	(12081620)	484600.00
3717700.00	52.18041	(14071819)			
484700.00	3717700.00		39.05209	(16092819)	484800.00
3717700.00	33.46125	(16070620)			
483400.00	3717800.00		14.51498	(12071301)	483500.00
3717800.00	16.65700	(12071301)			
483600.00	3717800.00		19.41990	(12071301)	484600.00
3717800.00	61.15113	(12092318)			
484700.00	3717800.00		41.14237	(14091419)	485300.00

CostcoMurrieta\_Op\_HRA

3717800.00 12.03965 (14091419)  
 483300.00 3717900.00 12.86754 (12093019) 483400.00  
 3717900.00 14.65490 (12093019)  
 483500.00 3717900.00 17.64752 (13051221) 484600.00  
 3717900.00 59.50692 (12081619)

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 55

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: IDLING6 \*\*\*  
 INCLUDING SOURCE(S): IDLING6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
484700.00	3717900.00	41.05228	(13090619)	484800.00
3717900.00	31.61366	(14102418)		
485100.00	3717900.00	16.38087	(12092019)	483300.00
3718000.00	13.94214	(15100921)		
483400.00	3718000.00	15.58359	(12092820)	483500.00
3718000.00	17.54332	(12072004)		
483600.00	3718000.00	19.36411	(12072004)	484600.00
3718000.00	49.94995	(15101018)		
484700.00	3718000.00	37.81017	(16081519)	484800.00
3718000.00	30.31093	(13082920)		
483100.00	3718100.00	15.19037	(12102819)	483400.00
3718100.00	18.91428	(12090502)		
483600.00	3718100.00	19.76916	(12092619)	484600.00
3718100.00	40.44369	(12081323)		
483900.00	3718200.00	34.61122	(12082922)	484500.00
3718200.00	38.34775	(13062820)		
484600.00	3718200.00	33.52416	(13062720)	484700.00
3718200.00	28.10509	(12081323)		
484900.00	3718200.00	20.38095	(12080719)	485400.00
3718200.00	10.22192	(12081119)		
485600.00	3718200.00	8.00795	(12081119)	483100.00

CostcoMurrieta\_Op\_HRA

3718300.00	14.23038	(12092720)			
483900.00	3718300.00	31.52461	(12081322)		484000.00
3718300.00	32.44246	(12081120)			
484200.00	3718300.00	36.20546	(13091619)		485300.00
3718300.00	10.71161	(12083119)			
485600.00	3718300.00	8.87947	(12081119)		483400.00
3718400.00	21.24802	(12080624)			
485200.00	3718400.00	11.41668	(12080719)		485200.00
3718500.00	10.70387	(12081219)			
484600.00	3718600.00	17.73717	(13062820)		484800.00
3718600.00	15.26865	(15090619)			
485200.00	3718600.00	9.96580	(13083105)		483700.00
3718700.00	21.66873	(13090321)			
483100.00	3718800.00	12.08686	(12062922)		484000.00
3718800.00	22.57840	(13091520)			
484200.00	3718800.00	19.72272	(16072720)		485400.00
3718800.00	7.73166	(12081003)			
483100.00	3718900.00	11.69982	(13090903)		483200.00
3718900.00	11.02638	(12082921)			
483100.00	3719000.00	10.63588	(12082921)		483200.00
3719000.00	11.04662	(15091120)			
483300.00	3719000.00	10.50718	(13083124)		483400.00
3719000.00	10.65163	(16072221)			
483500.00	3719000.00	11.02049	(13090321)		483100.00
3719100.00	9.43272	(15091120)			
483200.00	3719100.00	9.78369	(13090103)		483300.00
3719100.00	10.55700	(16072221)			
483400.00	3719100.00	10.56854	(13090321)		483500.00
3719100.00	10.80669	(13091420)			
483700.00	3719100.00	10.89239	(15091020)		484900.00
3719100.00	8.64114	(12081722)			
485000.00	3719100.00	8.15144	(13061620)		485100.00
3719100.00	7.70396	(15081306)			
485200.00	3719100.00	7.36913	(13062720)		485300.00
3719100.00	6.99476	(13090220)			
485400.00	3719100.00	6.33018	(13081606)		485500.00
3719100.00	6.06088	(13081606)			
485600.00	3719100.00	5.77856	(12080721)		485700.00
3719100.00	5.64536	(12080721)			
484200.00	3719200.00	12.93088	(16060320)		484500.00
3719200.00	8.88217	(13080622)			
484800.00	3719200.00	8.35604	(13062820)		484900.00
3719200.00	7.99809	(13062820)			
485000.00	3719200.00	7.61140	(15021318)		485100.00
3719200.00	7.13896	(15081306)			
485200.00	3719200.00	7.06377	(15090619)		485300.00
3719200.00	6.56244	(13062720)			
485400.00	3719200.00	6.09784	(13090220)		485500.00

CostcoMurrieta\_Op\_HRA

3719200.00 5.80517 (13081606)  
 485600.00 3719200.00 5.66543 (13072621) 485700.00

3719200.00 5.50874 (12080721)

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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\*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 56

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ISLAND \*\*\*  
 INCLUDING SOURCE(S): ISLAND ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	5.11169	(12010718)	483600.00
3716600.00	5.50098	(14090307)		
483700.00	3716600.00	5.57448	(14111817)	483800.00
3716600.00	5.82577	(15112117)		
483900.00	3716600.00	5.95944	(14042905)	484000.00
3716600.00	6.23478	(12110517)		
485000.00	3716600.00	5.35818	(16021519)	485100.00
3716600.00	6.27758	(14041207)		
483500.00	3716700.00	5.38298	(12021603)	483600.00
3716700.00	6.35766	(14090307)		
483700.00	3716700.00	6.23328	(14111817)	483800.00
3716700.00	6.49691	(15112117)		
483900.00	3716700.00	6.80758	(14042905)	484000.00
3716700.00	6.98594	(12110517)		
485200.00	3716700.00	9.39176	(14041207)	485400.00
3716700.00	6.02350	(12122516)		
485700.00	3716700.00	4.41583	(14062519)	483100.00
3716800.00	5.31798	(12021517)		
483200.00	3716800.00	5.27124	(15073019)	483500.00
3716800.00	6.18079	(13011517)		
483600.00	3716800.00	6.63523	(12010718)	483700.00
3716800.00	7.75542	(15120217)		
483800.00	3716800.00	7.73992	(14111817)	483900.00

CostcoMurrieta\_Op\_HRA

3716800.00	7.81353	(14042905)			
484000.00	3716800.00		7.91308	(12110517)	483100.00
3716900.00	5.83834	(14022018)			
483200.00	3716900.00		5.96469	(12021517)	485600.00
3716900.00	4.88292	(13031818)			
483200.00	3717000.00		6.49581	(14022018)	483300.00
3717000.00	7.07867	(12021517)			
485400.00	3717100.00		6.09325	(12041701)	485500.00
3717100.00	5.74056	(12090719)			
485600.00	3717100.00		5.15012	(12090719)	485700.00
3717100.00	5.21129	(13020217)			
483100.00	3717200.00		7.01930	(15031219)	483200.00
3717300.00	8.81048	(15051418)			
483300.00	3717300.00		8.98052	(15051418)	483400.00
3717300.00	9.63891	(13112718)			
483500.00	3717300.00		10.15045	(13110618)	483800.00
3717300.00	14.36411	(12102617)			
483900.00	3717300.00		17.06390	(14090307)	484000.00
3717300.00	19.14818	(14090307)			
484600.00	3717300.00		20.26067	(14041207)	484700.00
3717300.00	34.28222	(14041207)			
483100.00	3717400.00		6.92309	(15051418)	483200.00
3717400.00	9.09194	(15051418)			
483300.00	3717400.00		11.21191	(15051418)	483400.00
3717400.00	12.66820	(15051418)			
483500.00	3717400.00		12.67174	(15051418)	483800.00
3717400.00	16.24607	(15073019)			
483900.00	3717400.00		20.28828	(12102617)	484000.00
3717400.00	29.60871	(14090307)			
484600.00	3717400.00		46.42268	(14041207)	484700.00
3717400.00	36.00106	(14041207)			
484800.00	3717400.00		28.98351	(12122516)	483100.00
3717500.00	7.49152	(12012702)			
483300.00	3717500.00		9.51151	(15051418)	483400.00
3717500.00	13.24081	(15051418)			
483500.00	3717500.00		17.06532	(15051418)	483600.00
3717500.00	19.54866	(15051418)			
484000.00	3717500.00		26.65639	(13011517)	484600.00
3717500.00	60.23882	(14041207)			
484700.00	3717500.00		42.61629	(12122516)	483600.00
3717600.00	20.86726	(15051418)			
484600.00	3717600.00		64.36639	(12122516)	484700.00
3717600.00	29.23108	(12122516)			
484800.00	3717600.00		29.41861	(13020217)	484600.00
3717700.00	62.04251	(13020217)			
484700.00	3717700.00		39.06454	(13020217)	484800.00
3717700.00	27.24947	(15011116)			
483400.00	3717800.00		11.90270	(14012317)	483500.00

CostcoMurrieta\_Op\_HRA

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3717800.00      13.55863 (14012317)
                483600.00  3717800.00      15.76074 (16082707)      484600.00
3717800.00      55.37503 (16010916)
                484700.00  3717800.00      38.34104 (16010916)      485300.00
3717800.00      8.80211 (12060420)
                483300.00  3717900.00      11.49352 (14012317)      483400.00
3717900.00      13.30222 (14012317)
                483500.00  3717900.00      15.98786 (14012317)      484600.00
3717900.00      51.75867 (14101217)

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^ *** AERMOD - VERSION 18081 ***   *** C:\Lakes\AERMOD
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*** AERMET - VERSION 16216 ***   ***
***                               ***   17:09:15

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PAGE 57

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ISLAND ***
INCLUDING SOURCE(S): ISLAND ,

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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

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\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
484700.00	3717900.00	34.51222	(14101217)	484800.00
3717900.00	24.76880	(14101217)		
485100.00	3717900.00	12.10072	(15121117)	483300.00
3718000.00	11.19158	(12011107)		
483400.00	3718000.00	12.76899	(12011107)	483500.00
3718000.00	14.66184	(12011107)		
483600.00	3718000.00	16.69440	(12011107)	484600.00
3718000.00	62.46158	(15091218)		
484700.00	3718000.00	47.07925	(16123016)	484800.00
3718000.00	33.43446	(16123016)		
483100.00	3718100.00	7.75646	(12011107)	483400.00
3718100.00	9.95660	(12042521)		
483600.00	3718100.00	16.60922	(12042521)	484600.00
3718100.00	46.91484	(16040918)		
483900.00	3718200.00	38.79145	(14120316)	484500.00
3718200.00	45.53838	(16010616)		
484600.00	3718200.00	58.09982	(15020517)	484700.00



CostcoMurrieta\_Op\_HRA

3718200.00	36.31657	(15020517)			
484900.00	3718200.00		17.29860	(12041318)	485400.00
3718200.00	8.65450	(16123016)			
485600.00	3718200.00		7.08947	(16123016)	483100.00
3718300.00	40.87231	(12101520)			
483900.00	3718300.00		35.73849	(14120316)	484000.00
3718300.00	41.57392	(13041407)			
484200.00	3718300.00		43.11804	(15083118)	485300.00
3718300.00	9.42204	(15091218)			
485600.00	3718300.00		6.54154	(15041418)	483400.00
3718400.00	27.23171	(12091418)			
485200.00	3718400.00		9.04739	(15102217)	485200.00
3718500.00	8.42869	(16090518)			
484600.00	3718600.00		18.97398	(15022217)	484800.00
3718600.00	12.34714	(15110218)			
485200.00	3718600.00		9.58833	(15020517)	483700.00
3718700.00	32.68114	(16073120)			
483100.00	3718800.00		33.85443	(12062922)	484000.00
3718800.00	20.82959	(12032521)			
484200.00	3718800.00		12.25356	(15083118)	485400.00
3718800.00	7.74067	(15020517)			
483100.00	3718900.00		32.41019	(13090903)	483200.00
3718900.00	32.51462	(16073101)			
483100.00	3719000.00		30.31191	(12082921)	483200.00
3719000.00	32.08148	(15091120)			
483300.00	3719000.00		31.74202	(13083124)	483400.00
3719000.00	33.02878	(15062820)			
483500.00	3719000.00		34.78553	(12081621)	483100.00
3719100.00	27.73953	(15091120)			
483200.00	3719100.00		28.67353	(13090103)	483300.00
3719100.00	31.05487	(16072221)			
483400.00	3719100.00		31.66973	(13090321)	483500.00
3719100.00	32.52929	(13091420)			
483700.00	3719100.00		38.01678	(16060321)	484900.00
3719100.00	7.16985	(15022217)			
485000.00	3719100.00		6.34362	(12052520)	485100.00
3719100.00	6.06652	(15110218)			
485200.00	3719100.00		5.73868	(16042724)	485300.00
3719100.00	5.43120	(12031621)			
485400.00	3719100.00		5.11540	(13040718)	485500.00
3719100.00	5.70801	(15020517)			
485600.00	3719100.00		6.27996	(15020517)	485700.00
3719100.00	5.53064	(15020517)			
484200.00	3719200.00		7.28292	(12032218)	484500.00
3719200.00	8.95584	(16012917)			
484800.00	3719200.00		6.71584	(16032823)	484900.00
3719200.00	6.49608	(15022217)			
485000.00	3719200.00		6.00650	(12052520)	485100.00

CostcoMurrieta\_Op\_HRA

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3719200.00      5.56844 (16052319)
      485200.00  3719200.00      5.58897 (15110218)      485300.00
3719200.00      5.09652 (16042724)
      485400.00  3719200.00      4.72453 (13040718)      485500.00
3719200.00      4.66497 (13040718)
      485600.00  3719200.00      4.91528 (15020517)      485700.00
3719200.00      5.48707 (15020517)

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^ *** AERMOD - VERSION 18081 *** *** C:\Lakes\AERMOD
View\CostcoMurrieta_Op_HRA\CostcoMurrieta_Op_HRA.isc ***      07/10/18
*** AERMET - VERSION 16216 *** ***
***      17:09:15

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PAGE 58

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*

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          INCLUDING SOURCE(S):      L0000058      , L0000059
, L0000060      , L0000061      , L0000062      ,
      L0000063      , L0000064      , L0000065      , L0000066      , L0000067
, L0000068      , L0000069      , L0000070      ,
      L0000071      , L0000072      , L0000073      , L0000074      , L0000075
, L0000076      , L0000077      , L0000078      ,
      L0000079      , L0000080      , L0000081      , L0000082      , L0000083
, L0000084      , L0000085      , . . .      ,

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\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

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\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

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          **
          X-COORD (M) Y-COORD (M)      CONC      (YYMMDDHH)      X-COORD (M)
Y-COORD (M)      CONC      (YYMMDDHH)
-----
          483500.00  3716600.00      3.73301 (15120217)      483600.00
3716600.00      3.86327 (15120217)
          483700.00  3716600.00      4.03610 (15112117)      483800.00
3716600.00      4.22714 (14042905)
          483900.00  3716600.00      4.36275 (12110517)      484000.00
3716600.00      4.41875 (13100424)
          485000.00  3716600.00      5.28461 (14041207)      485100.00
3716600.00      5.40419 (14041207)
          483500.00  3716700.00      4.02506 (12010718)      483600.00
3716700.00      4.42958 (15120217)
          483700.00  3716700.00      4.57599 (14111817)      483800.00
3716700.00      4.87824 (14042905)

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CostcoMurrieta\_Op\_HRA

483900.00	3716700.00	4.94150	(12110517)	484000.00
3716700.00	5.03043	(12121018)		
485200.00	3716700.00	4.57681	(14041207)	485400.00
3716700.00	3.96790	(12122516)		
485700.00	3716700.00	2.80089	(12041701)	483100.00
3716800.00	3.92120	(12021517)		
483200.00	3716800.00	3.86564	(15073019)	483500.00
3716800.00	4.57557	(13011517)		
483600.00	3716800.00	5.05765	(15120217)	483700.00
3716800.00	5.80170	(15120217)		
483800.00	3716800.00	5.90179	(15112117)	483900.00
3716800.00	5.79872	(14042905)		
484000.00	3716800.00	5.93781	(12110517)	483100.00
3716900.00	4.32062	(14022018)		
483200.00	3716900.00	4.43781	(12021517)	485600.00
3716900.00	3.25454	(12090719)		
483200.00	3717000.00	4.87205	(14022018)	483300.00
3717000.00	5.34211	(12021517)		
485400.00	3717100.00	3.98091	(12090719)	485500.00
3717100.00	3.66860	(13011817)		
485600.00	3717100.00	3.26235	(13011817)	485700.00
3717100.00	3.06668	(12051319)		
483100.00	3717200.00	5.37487	(15051418)	483200.00
3717300.00	6.79027	(15051418)		
483300.00	3717300.00	7.69537	(15051418)	483400.00
3717300.00	8.40286	(15051418)		
483500.00	3717300.00	8.66908	(15051418)	483800.00
3717300.00	11.67452	(12102617)		
483900.00	3717300.00	13.60037	(15120217)	484000.00
3717300.00	15.83351	(14042905)		
484600.00	3717300.00	21.38302	(14041207)	484700.00
3717300.00	16.75944	(12122516)		
483100.00	3717400.00	5.50587	(15051418)	483200.00
3717400.00	6.88566	(15051418)		
483300.00	3717400.00	8.47277	(15051418)	483400.00
3717400.00	10.17751	(15051418)		
483500.00	3717400.00	11.80308	(15051418)	483800.00
3717400.00	13.93878	(12102617)		
483900.00	3717400.00	17.95833	(12010718)	484000.00
3717400.00	19.29436	(14042905)		
484600.00	3717400.00	24.41664	(12122516)	484700.00
3717400.00	18.78381	(12122516)		
484800.00	3717400.00	12.99871	(12122516)	483100.00
3717500.00	5.57597	(12012702)		
483300.00	3717500.00	7.87598	(15051418)	483400.00
3717500.00	10.33323	(15051418)		
483500.00	3717500.00	13.34139	(15051418)	483600.00
3717500.00	16.73206	(15051418)		

CostcoMurrieta\_Op\_HRA

484000.00	3717500.00	30.10767	(12012316)	484600.00
3717500.00	26.85544	(12122516)		
484700.00	3717500.00	17.29160	(12122516)	483600.00
3717600.00	17.05238	(15051418)		
484600.00	3717600.00	24.04940	(12122516)	484700.00
3717600.00	14.93220	(12080219)		
484800.00	3717600.00	11.78857	(12102719)	484600.00
3717700.00	21.01234	(16010916)		
484700.00	3717700.00	15.49312	(16010916)	484800.00
3717700.00	12.99102	(12071220)		
483400.00	3717800.00	9.91262	(14012317)	483500.00
3717800.00	11.75716	(14012317)		
483600.00	3717800.00	14.28140	(14012317)	484600.00
3717800.00	22.59051	(16010916)		
484700.00	3717800.00	15.60426	(16010916)	485300.00
3717800.00	5.18627	(12110921)		
483300.00	3717900.00	8.23450	(12011107)	483400.00
3717900.00	9.63305	(12011107)		
483500.00	3717900.00	11.92973	(12011107)	484600.00
3717900.00	22.35287	(15091218)		

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 59

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAFFIC2 \*\*\*  
 INCLUDING SOURCE(S): L0000058 , L0000059  
 , L0000060 , L0000061 , L0000062 ,  
 L0000063 , L0000064 , L0000065 , L0000066 , L0000067  
 , L0000068 , L0000069 , L0000070 ,  
 L0000071 , L0000072 , L0000073 , L0000074 , L0000075  
 , L0000076 , L0000077 , L0000078 ,  
 L0000079 , L0000080 , L0000081 , L0000082 , L0000083  
 , L0000084 , L0000085 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

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

CostcoMurrieta\_Op\_HRA

484700.00	3717900.00	15.63461	(15091218)	484800.00
3717900.00	12.46526 (16033018)			
485100.00	3717900.00	7.05724	(16033018)	483300.00
3718000.00	7.97774 (12042521)			
483400.00	3718000.00	9.63731	(12042521)	483500.00
3718000.00	11.71093 (12042521)			
483600.00	3718000.00	13.43475	(12042521)	484600.00
3718000.00	25.31415 (15091218)			
484700.00	3718000.00	18.49581	(15091218)	484800.00
3718000.00	13.95098 (15091218)			
483100.00	3718100.00	11.27277	(12122119)	483400.00
3718100.00	11.65473 (12042521)			
483600.00	3718100.00	13.39329	(16121603)	484600.00
3718100.00	22.72623 (15020517)			
483900.00	3718200.00	23.67149	(13012318)	484500.00
3718200.00	24.27292 (15020517)			
484600.00	3718200.00	22.33922	(15020517)	484700.00
3718200.00	16.88173 (15020517)			
484900.00	3718200.00	9.33710	(15091218)	485400.00
3718200.00	4.61725 (15091218)			
485600.00	3718200.00	3.69237	(14040618)	483100.00
3718300.00	18.01401 (13082323)			
483900.00	3718300.00	22.89574	(16043005)	484000.00
3718300.00	19.20228 (12072219)			
484200.00	3718300.00	27.17500	(16012917)	485300.00
3718300.00	5.15645 (15091218)			
485600.00	3718300.00	3.96875	(13031418)	483400.00
3718400.00	22.66170 (12081705)			
485200.00	3718400.00	5.25677	(16090518)	485200.00
3718500.00	4.96929 (13033018)			
484600.00	3718600.00	9.35460	(15022217)	484800.00
3718600.00	6.99384 (16042724)			
485200.00	3718600.00	5.81171	(15020517)	483700.00
3718700.00	23.46451 (14081019)			
483100.00	3718800.00	15.90327	(15083119)	484000.00
3718800.00	19.85098 (13081620)			
484200.00	3718800.00	11.03098	(12032218)	485400.00
3718800.00	4.42602 (15020517)			
483100.00	3718900.00	15.44672	(12080822)	483200.00
3718900.00	14.77730 (12081322)			
483100.00	3719000.00	14.15544	(12081322)	483200.00
3719000.00	14.64936 (16091820)			
483300.00	3719000.00	14.39639	(15081621)	483400.00
3719000.00	14.63192 (16072722)			
483500.00	3719000.00	15.13413	(12081220)	483100.00
3719100.00	12.87558 (16091820)			
483200.00	3719100.00	13.40105	(15062820)	483300.00

CostcoMurrieta\_Op\_HRA

3719100.00	14.01867	(12081621)			
483400.00	3719100.00		14.15513	(15080521)	483500.00
3719100.00	14.45504	(14081019)			
483700.00	3719100.00		15.23227	(16072819)	484900.00
3719100.00	4.09197	(12052520)			
485000.00	3719100.00		3.90818	(14042523)	485100.00
3719100.00	3.67786	(15110218)			
485200.00	3719100.00		3.46970	(16042724)	485300.00
3719100.00	3.37005	(13040718)			
485400.00	3719100.00		3.23371	(15020517)	485500.00
3719100.00	3.43206	(15020517)			
485600.00	3719100.00		3.35782	(15020517)	485700.00
3719100.00	3.06477	(15020517)			
484200.00	3719200.00		7.12835	(12032218)	484500.00
3719200.00	5.07018	(16012917)			
484800.00	3719200.00		4.02526	(12121818)	484900.00
3719200.00	3.78657	(12052520)			
485000.00	3719200.00		3.61427	(12052520)	485100.00
3719200.00	3.42899	(15110218)			
485200.00	3719200.00		3.36089	(15110218)	485300.00
3719200.00	3.11506	(12031621)			
485400.00	3719200.00		2.96619	(13040718)	485500.00
3719200.00	2.84371	(13040718)			
485600.00	3719200.00		3.01061	(15020517)	485700.00
3719200.00	2.97281	(15020517)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\*      \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*      \*\*\*  
    \*\*\*                      17:09:15

PAGE 60

\*\*\* MODELOPTs:      RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL1 \*\*\*  
    INCLUDING SOURCE(S):      L000001      , L000002  
 , L000003      , L000004      , L000005      ,  
    L000006      , L000007      , L000008      , L000009      , L000010  
 , L000011      , L000012      , L000013      ,  
    L000014      , L000015      , L000016      , L000017      , L000018  
 , L000019      , L000020      , L000021      ,  
    L000022      , L000023      , L000024      , L000025      , L000026  
 , L000027      , L000028      , . . .      ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA                      IN MICROGRAMS/M\*\*3

CostcoMurrieta\_Op\_HRA

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
483500.00	3716600.00	4.77792	(12010718)	483600.00
3716600.00	5.06702	(15120217)		
483700.00	3716600.00	5.27702	(14111817)	483800.00
3716600.00	5.57636	(14042905)		
483900.00	3716600.00	5.78746	(12110517)	484000.00
3716600.00	5.83964	(13100424)		
485000.00	3716600.00	6.36466	(14041207)	485100.00
3716600.00	5.77807	(12122516)		
483500.00	3716700.00	5.22464	(13011517)	483600.00
3716700.00	5.88055	(15120217)		
483700.00	3716700.00	6.19258	(14111817)	483800.00
3716700.00	6.63704	(14042905)		
483900.00	3716700.00	6.76194	(12110517)	484000.00
3716700.00	6.86866	(13100424)		
485200.00	3716700.00	5.36004	(12122516)	485400.00
3716700.00	3.88685	(12041701)		
485700.00	3716700.00	3.18521	(13011817)	483100.00
3716800.00	5.01383	(14022018)		
483200.00	3716800.00	5.02943	(14022018)	483500.00
3716800.00	6.37872	(12102617)		
483600.00	3716800.00	6.88090	(12010718)	483700.00
3716800.00	8.29751	(15120217)		
483800.00	3716800.00	8.39968	(15112117)	483900.00
3716800.00	8.23128	(14042905)		
484000.00	3716800.00	8.41291	(13100424)	483100.00
3716900.00	5.55744	(13112718)		
483200.00	3716900.00	5.80111	(13110618)	485600.00
3716900.00	3.60972	(12051319)		
483200.00	3717000.00	6.58587	(15051418)	483300.00
3717000.00	7.20998	(13110618)		
485400.00	3717100.00	4.50365	(12080219)	485500.00
3717100.00	4.11390	(15012118)		
485600.00	3717100.00	3.65234	(13020417)	485700.00
3717100.00	3.42974	(13020417)		
483100.00	3717200.00	6.84502	(15051418)	483200.00
3717300.00	7.98163	(12012702)		
483300.00	3717300.00	10.37068	(15051418)	483400.00
3717300.00	14.18871	(15051418)		
483500.00	3717300.00	18.66475	(15051418)	483800.00
3717300.00	22.38901	(15051418)		
483900.00	3717300.00	25.73969	(12102617)	484000.00
3717300.00	31.63740	(14042905)		

CostcoMurrieta\_Op\_HRA

484600.00	3717300.00	24.31560	(12122516)	484700.00
3717300.00	17.43041	(13020217)		
483100.00	3717400.00	6.48408	(16082707)	483200.00
3717400.00	7.88036	(16082707)		
483300.00	3717400.00	9.63377	(16082707)	483400.00
3717400.00	11.80326	(16082707)		
483500.00	3717400.00	17.52078	(15051418)	483800.00
3717400.00	47.26566	(15051418)		
483900.00	3717400.00	48.15656	(15051418)	484000.00
3717400.00	44.28112	(16061906)		
484600.00	3717400.00	27.00324	(16020117)	484700.00
3717400.00	17.30117	(16020117)		
484800.00	3717400.00	13.00507	(13020417)	483100.00
3717500.00	7.29639	(14012317)		
483300.00	3717500.00	9.94500	(14012317)	483400.00
3717500.00	12.02986	(14012317)		
483500.00	3717500.00	16.29973	(16082707)	483600.00
3717500.00	24.05659	(16082707)		
484000.00	3717500.00	139.21642	(15051418)	484600.00
3717500.00	26.74765	(14112016)		
484700.00	3717500.00	27.03231	(12071220)	483600.00
3717600.00	21.25051	(14012317)		
484600.00	3717600.00	26.29019	(14101217)	484700.00
3717600.00	18.08058	(14033120)		
484800.00	3717600.00	13.71477	(15121117)	484600.00
3717700.00	30.44393	(15091218)		
484700.00	3717700.00	21.59128	(16123016)	484800.00
3717700.00	15.28358	(16123016)		
483400.00	3717800.00	11.73712	(12042521)	483500.00
3717800.00	14.72650	(12042521)		
483600.00	3717800.00	18.69140	(16090507)	484600.00
3717800.00	25.12357	(15091218)		
484700.00	3717800.00	20.56903	(15091218)	485300.00
3717800.00	5.32675	(14040618)		
483300.00	3717900.00	9.60597	(12042521)	483400.00
3717900.00	11.25208	(16121603)		
483500.00	3717900.00	19.65437	(16121603)	484600.00
3717900.00	24.32201	(15020517)		

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

07/10/18

PAGE 61

\*\*\* MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
VALUES FOR SOURCE GROUP: TRAVEL1 \*\*\*



CostcoMurrieta\_Op\_HRA

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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	14.18868	(15102217)	484800.00
3717900.00	13.17848	(15091218)		
485100.00	3717900.00	7.88521	(15091218)	483300.00
3718000.00	13.75041	(16121603)		
483400.00	3718000.00	15.28876	(16121602)	483500.00
3718000.00	17.70283	(16121602)		
483600.00	3718000.00	16.37368	(14120316)	484600.00
3718000.00	21.89887	(15020517)		
484700.00	3718000.00	17.50469	(15020517)	484800.00
3718000.00	11.11800	(15020517)		
483100.00	3718100.00	19.51131	(13070124)	483400.00
3718100.00	22.54617	(12102224)		
483600.00	3718100.00	17.80989	(12121303)	484600.00
3718100.00	15.62160	(15020517)		
483900.00	3718200.00	28.33731	(14073119)	484500.00
3718200.00	12.63535	(15022217)		
484600.00	3718200.00	10.44323	(15110218)	484700.00
3718200.00	11.94122	(15020517)		
484900.00	3718200.00	10.56192	(15020517)	485400.00
3718200.00	4.36401	(15032218)		
485600.00	3718200.00	3.59056	(15032618)	483100.00
3718300.00	22.01193	(14071706)		
483900.00	3718300.00	25.62748	(12081020)	484000.00
3718300.00	22.18259	(13082319)		
484200.00	3718300.00	18.26455	(12090319)	485300.00
3718300.00	4.58642	(16090518)		
485600.00	3718300.00	3.82497	(15032218)	483400.00
3718400.00	26.82811	(13083124)		
485200.00	3718400.00	5.67071	(15020517)	485200.00

CostcoMurrieta\_Op\_HRA

3718500.00	5.96023	(15020517)			
484600.00	3718600.00		6.38697	(15022217)	484800.00
3718600.00	5.63560	(15110218)			
485200.00	3718600.00		5.43938	(15020517)	483700.00
3718700.00	22.78415	(16062721)			
483100.00	3718800.00		16.43988	(16091820)	484000.00
3718800.00	20.24516	(14092520)			
484200.00	3718800.00		14.50727	(12082419)	485400.00
3718800.00	3.97774	(15020517)			
483100.00	3718900.00		15.56470	(15062820)	483200.00
3718900.00	15.04931	(12081621)			
483100.00	3719000.00		14.19436	(13090321)	483200.00
3719000.00	14.45012	(13091420)			
483300.00	3719000.00		14.36886	(12081220)	483400.00
3719000.00	14.51405	(15091020)			
483500.00	3719000.00		14.62911	(15092619)	483100.00
3719100.00	13.03733	(16072722)			
483200.00	3719100.00		13.32257	(14072721)	483300.00
3719100.00	13.59875	(16072821)			
483400.00	3719100.00		13.65763	(16060321)	483500.00
3719100.00	13.84974	(16072819)			
483700.00	3719100.00		14.33142	(15081622)	484900.00
3719100.00	3.45403	(12052520)			
485000.00	3719100.00		3.33935	(12052520)	485100.00
3719100.00	3.19287	(14042523)			
485200.00	3719100.00		3.09612	(15110218)	485300.00
3719100.00	2.93595	(16042724)			
485400.00	3719100.00		2.75985	(13040718)	485500.00
3719100.00	2.69345	(13040718)			
485600.00	3719100.00		2.58070	(13040718)	485700.00
3719100.00	2.65707	(15020517)			
484200.00	3719200.00		10.21903	(12082419)	484500.00
3719200.00	3.84239	(16012917)			
484800.00	3719200.00		3.37191	(12121818)	484900.00
3719200.00	3.24790	(12121818)			
485000.00	3719200.00		3.12854	(12052520)	485100.00
3719200.00	2.95750	(16052319)			
485200.00	3719200.00		2.94112	(15110218)	485300.00
3719200.00	2.79792	(15110218)			
485400.00	3719200.00		2.60894	(16042724)	485500.00
3719200.00	2.54842	(13040718)			
485600.00	3719200.00		2.52423	(13040718)	485700.00
3719200.00	2.43214	(13040718)			

▲ \*\*\* AERMOD - VERSION 18081 \*\*\*    \*\*\* C:\Lakes\AERMOD  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*

07/10/18

\*\*\* 17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 62

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: TRAVEL3 \*\*\*  
 INCLUDING SOURCE(S): L0000712 , L0000713  
 , L0000714 , L0000715 , L0000716 ,  
 L0000717 , L0000718 , L0000719 , L0000720 , L0000721  
 , L0000722 , L0000723 , L0000724 ,  
 L0000725 , L0000726 , L0000727 , L0000728 , L0000729  
 , L0000730 , L0000731 , L0000732 ,  
 L0000733 , L0000734 , L0000735 , L0000736 , L0000737  
 , L0000738 , L0000739 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
483500.00	3716600.00	3.16908 (13011517)		483600.00
3716600.00	3.29544 (12010718)			
483700.00	3716600.00	3.54930 (15120217)		483800.00
3716600.00	3.68724 (15120217)			
483900.00	3716600.00	3.80613 (15112117)		484000.00
3716600.00	3.98147 (14042905)			
485000.00	3716600.00	3.86520 (12071223)		485100.00
3716600.00	4.49653 (12081702)			
483500.00	3716700.00	3.47502 (12102617)		483600.00
3716700.00	3.70458 (13011517)			
483700.00	3716700.00	3.94483 (12010718)		483800.00
3716700.00	4.25105 (15120217)			
483900.00	3716700.00	4.31444 (14111817)		484000.00
3716700.00	4.47314 (15112117)			
485200.00	3716700.00	5.84028 (14041207)		485400.00
3716700.00	5.88030 (14041207)			
485700.00	3716700.00	3.92372 (13020517)		483100.00
3716800.00	3.30141 (14022018)			
483200.00	3716800.00	3.28768 (12021517)		483500.00
3716800.00	3.99402 (12102617)			
483600.00	3716800.00	4.26994 (12102617)		483700.00
3716800.00	4.74273 (13011517)			
483800.00	3716800.00	5.00772 (15120217)		483900.00
3716800.00	5.01783 (15120217)			

CostcoMurrieta\_Op\_HRA

484000.00	3716800.00	5.17284	(15112117)	483100.00
3716900.00	3.53179	(13110618)		
483200.00	3716900.00	3.67593	(14022018)	485600.00
3716900.00	4.65963	(12122516)		
483200.00	3717000.00	3.92191	(13110618)	483300.00
3717000.00	4.28981	(14022018)		
485400.00	3717100.00	6.67128	(12122516)	485500.00
3717100.00	4.95356	(12122516)		
485600.00	3717100.00	3.94668	(12090719)	485700.00
3717100.00	3.72930	(12090719)		
483100.00	3717200.00	4.10165	(15031219)	483200.00
3717300.00	4.84630	(15051418)		
483300.00	3717300.00	5.50907	(15051418)	483400.00
3717300.00	6.07360	(15051418)		
483500.00	3717300.00	6.40394	(15051418)	483800.00
3717300.00	8.32876	(12021517)		
483900.00	3717300.00	9.73590	(12102617)	484000.00
3717300.00	11.17464	(12102617)		
484600.00	3717300.00	20.64372	(13041207)	484700.00
3717300.00	14.72881	(13041207)		
483100.00	3717400.00	4.26627	(12012702)	483200.00
3717400.00	4.69812	(15051418)		
483300.00	3717400.00	5.73539	(15051418)	483400.00
3717400.00	6.86106	(15051418)		
483500.00	3717400.00	7.96433	(15051418)	483800.00
3717400.00	9.29498	(14022018)		
483900.00	3717400.00	11.46782	(12021517)	484000.00
3717400.00	12.93259	(12102617)		
484600.00	3717400.00	28.24337	(13041207)	484700.00
3717400.00	26.56830	(14041207)		
484800.00	3717400.00	31.80791	(14041207)	483100.00
3717500.00	4.43234	(12012702)		
483300.00	3717500.00	5.52942	(12012702)	483400.00
3717500.00	6.56167	(15051418)		
483500.00	3717500.00	8.33822	(15051418)	483600.00
3717500.00	10.34027	(15051418)		
484000.00	3717500.00	14.86460	(12021517)	484600.00
3717500.00	35.07040	(13041207)		
484700.00	3717500.00	50.17853	(14041207)	483600.00
3717600.00	9.70909	(15051418)		
484600.00	3717600.00	75.56352	(14041207)	484700.00
3717600.00	64.51040	(14041207)		
484800.00	3717600.00	41.59037	(12122516)	484600.00
3717700.00	139.91680	(14041207)		
484700.00	3717700.00	71.57308	(12122516)	484800.00
3717700.00	37.87617	(13020217)		
483400.00	3717800.00	6.98658	(14012317)	483500.00
3717800.00	7.95473	(14012317)		



CostcoMurrieta\_Op\_HRA

3718100.00	11.57948	(12122119)			
483600.00	3718100.00		9.71227	(12042521)	484600.00
3718100.00	82.48978	(15020517)			
483900.00	3718200.00		24.39187	(16121602)	484500.00
3718200.00	85.27502	(16012917)			
484600.00	3718200.00		51.80995	(16010616)	484700.00
3718200.00	43.97641	(15020517)			
484900.00	3718200.00		21.10854	(15020517)	485400.00
3718200.00	7.48891	(15091218)			
485600.00	3718200.00		5.51803	(16123016)	483100.00
3718300.00	21.88708	(12090502)			
483900.00	3718300.00		23.49142	(12090822)	484000.00
3718300.00	24.23530	(14120316)			
484200.00	3718300.00		32.04292	(13041407)	485300.00
3718300.00	8.37366	(15091218)			
485600.00	3718300.00		5.52614	(15091218)	483400.00
3718400.00	22.85977	(12080724)			
485200.00	3718400.00		8.12267	(15020517)	485200.00
3718500.00	10.60539	(15020517)			
484600.00	3718600.00		20.09989	(16012917)	484800.00
3718600.00	13.12767	(15022217)			
485200.00	3718600.00		10.60102	(15020517)	483700.00
3718700.00	27.51422	(12081322)			
483100.00	3718800.00		19.00211	(12082403)	484000.00
3718800.00	24.65654	(13082520)			
484200.00	3718800.00		15.29784	(12072822)	485400.00
3718800.00	7.03156	(15020517)			
483100.00	3718900.00		18.54807	(12081705)	483200.00
3718900.00	18.40765	(15081723)			
483100.00	3719000.00		17.04463	(15081723)	483200.00
3719000.00	17.97963	(16073024)			
483300.00	3719000.00		18.47095	(12082921)	483400.00
3719000.00	19.43838	(12081322)			
483500.00	3719000.00		20.53687	(16091820)	483100.00
3719100.00	15.84340	(16073024)			
483200.00	3719100.00		16.78786	(12082921)	483300.00
3719100.00	17.67591	(12081322)			
483400.00	3719100.00		18.28202	(13083124)	483500.00
3719100.00	19.24745	(15062820)			
483700.00	3719100.00		22.39800	(14072721)	484900.00
3719100.00	5.12465	(16032823)			
485000.00	3719100.00		5.22185	(15022217)	485100.00
3719100.00	4.62632	(15022217)			
485200.00	3719100.00		4.33435	(14042523)	485300.00
3719100.00	4.13039	(15110218)			
485400.00	3719100.00		3.71159	(12031621)	485500.00
3719100.00	3.61860	(13040718)			
485600.00	3719100.00		4.08024	(15020517)	485700.00

CostcoMurrieta\_Op\_HRA

3719100.00	4.25106	(15020517)			
484200.00	3719200.00		9.46199	(14022806)	484500.00
3719200.00	5.28361	(12032218)			
484800.00	3719200.00		5.60137	(16012917)	484900.00
3719200.00	4.67605	(12040120)			
485000.00	3719200.00		4.48494	(15022217)	485100.00
3719200.00	4.32374	(15022217)			
485200.00	3719200.00		4.05834	(12052520)	485300.00
3719200.00	3.85139	(15110218)			
485400.00	3719200.00		3.54167	(15110218)	485500.00
3719200.00	3.36542	(13040718)			
485600.00	3719200.00		3.35758	(13040718)	485700.00
3719200.00	3.52589	(15020517)			

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 64

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT \*\*\*  
 INCLUDING SOURCE(S): VENT ,  
 \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS  
 \*\*\*

X-COORD (M)		Y-COORD (M)		CONC (YYMMDDHH)		X-COORD (M)	
Y-COORD (M)	CONC	CONC	(YYMMDDHH)	(YYMMDDHH)			
483500.00	3716600.00	3.69173	(12010718)			483600.00	
3716600.00	3.96905	(14090307)					
483700.00	3716600.00	4.02377	(14111817)			483800.00	
3716600.00	4.19541	(15112117)					
483900.00	3716600.00	4.33383	(14042905)			484000.00	
3716600.00	4.48692	(12110517)					
485000.00	3716600.00	3.85320	(16021519)			485100.00	
3716600.00	5.46906	(14041207)					
483500.00	3716700.00	3.90544	(12010718)			483600.00	
3716700.00	4.51771	(14090307)					
483700.00	3716700.00	4.49922	(15120217)			483800.00	
3716700.00	4.72010	(15112117)					
483900.00	3716700.00	4.90744	(14042905)			484000.00	

CostcoMurrieta\_Op\_HRA

3716700.00	5.04511	(12110517)			
485200.00	3716700.00		6.74190	(14041207)	485400.00
3716700.00	4.54134	(12122516)			
485700.00	3716700.00		3.33487	(13020517)	483100.00
3716800.00	3.80488	(12021517)			
483200.00	3716800.00		3.77763	(15073019)	483500.00
3716800.00	4.44990	(13011517)			
483600.00	3716800.00		4.82022	(12010718)	483700.00
3716800.00	5.56352	(15120217)			
483800.00	3716800.00		5.59056	(14111817)	483900.00
3716800.00	5.64156	(14042905)			
484000.00	3716800.00		5.77058	(12110517)	483100.00
3716900.00	4.17706	(14022018)			
483200.00	3716900.00		4.26874	(12021517)	485600.00
3716900.00	3.49911	(13031818)			
483200.00	3717000.00		4.65621	(14022018)	483300.00
3717000.00	5.06654	(12021517)			
485400.00	3717100.00		4.37818	(12041701)	485500.00
3717100.00	4.11939	(12090719)			
485600.00	3717100.00		3.76657	(13020217)	485700.00
3717100.00	3.69785	(13020217)			
483100.00	3717200.00		5.09391	(15051418)	483200.00
3717300.00	6.55240	(15051418)			
483300.00	3717300.00		7.09611	(15051418)	483400.00
3717300.00	7.21073	(15051418)			
483500.00	3717300.00		7.32195	(13110618)	483800.00
3717300.00	10.41423	(12102617)			
483900.00	3717300.00		13.38065	(14090307)	484000.00
3717300.00	15.18077	(14090307)			
484600.00	3717300.00		20.38439	(14041207)	484700.00
3717300.00	25.15433	(14041207)			
483100.00	3717400.00		5.57927	(15051418)	483200.00
3717400.00	6.90716	(15051418)			
483300.00	3717400.00		8.30952	(15051418)	483400.00
3717400.00	9.57677	(15051418)			
483500.00	3717400.00		10.36469	(15051418)	483800.00
3717400.00	11.81160	(15073019)			
483900.00	3717400.00		14.83473	(12102617)	484000.00
3717400.00	21.66329	(14090307)			
484600.00	3717400.00		36.00447	(14041207)	484700.00
3717400.00	28.79371	(14041207)			
484800.00	3717400.00		22.06992	(12122516)	483100.00
3717500.00	5.39433	(12012702)			
483300.00	3717500.00		7.90545	(15051418)	483400.00
3717500.00	10.25582	(15051418)			
483500.00	3717500.00		12.84023	(15051418)	483600.00
3717500.00	15.13042	(15051418)			
484000.00	3717500.00		23.10206	(14090307)	484600.00



CostcoMurrieta\_Op\_HRA

3717500.00	46.77501	(14041207)			
484700.00	3717500.00		33.22991	(12122516)	483600.00
3717600.00	16.61626	(15051418)			
484600.00	3717600.00		51.50554	(12122516)	484700.00
3717600.00	28.71242	(12122516)			
484800.00	3717600.00		21.43701	(13020217)	484600.00
3717700.00	47.12768	(13020217)			
484700.00	3717700.00		31.03040	(13020217)	484800.00
3717700.00	20.42164	(15011116)			
483400.00	3717800.00		9.01332	(14012317)	483500.00
3717800.00	10.40934	(14012317)			
483600.00	3717800.00		13.09795	(16082707)	484600.00
3717800.00	44.74298	(16010916)			
484700.00	3717800.00		29.48906	(16010916)	485300.00
3717800.00	6.38964	(12060420)			
483300.00	3717900.00		8.33273	(14012317)	483400.00
3717900.00	9.66020	(14012317)			
483500.00	3717900.00		11.64433	(14012317)	484600.00
3717900.00	43.11201	(14101217)			

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 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 65

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: VENT \*\*\*  
 INCLUDING SOURCE(S): VENT ,  
 \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS  
 \*\*\*

X-COORD (M)		Y-COORD (M)		CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	CONC	(YYMMDDHH)			
484700.00	3717900.00	28.00306	(14101217)			484800.00
3717900.00	19.75159	(14101217)				
485100.00	3717900.00	8.88789	(14101217)			483300.00
3718000.00	8.15024	(12011107)				
483400.00	3718000.00	9.37296	(12011107)			483500.00
3718000.00	10.89246	(12011107)				
483600.00	3718000.00	12.62784	(12011107)			484600.00

CostcoMurrieta\_Op\_HRA

3718000.00	52.96196	(15091218)			
484700.00	3718000.00		35.35921	(16123016)	484800.00
3718000.00	24.97867	(16123016)			
483100.00	3718100.00		6.08472	(12011107)	483400.00
3718100.00	8.47470	(12042521)			
483600.00	3718100.00		12.53567	(12042521)	484600.00
3718100.00	43.81833	(15020517)			
483900.00	3718200.00		32.08997	(14120316)	484500.00
3718200.00	40.39027	(16010616)			
484600.00	3718200.00		46.18951	(15020517)	484700.00
3718200.00	31.02029	(15020517)			
484900.00	3718200.00		14.66644	(15091218)	485400.00
3718200.00	6.34878	(16123016)			
485600.00	3718200.00		5.05245	(16123016)	483100.00
3718300.00	29.42584	(12101520)			
483900.00	3718300.00		27.53880	(14120316)	484000.00
3718300.00	31.12306	(13041407)			
484200.00	3718300.00		36.52821	(15083118)	485300.00
3718300.00	7.20283	(15091218)			
485600.00	3718300.00		4.69392	(12082719)	483400.00
3718400.00	22.77577	(12091418)			
485200.00	3718400.00		6.51713	(15102217)	485200.00
3718500.00	6.22389	(12071319)			
484600.00	3718600.00		14.66100	(15022217)	484800.00
3718600.00	9.04534	(15042018)			
485200.00	3718600.00		8.08087	(15020517)	483700.00
3718700.00	27.30706	(14070820)			
483100.00	3718800.00		24.28961	(12062922)	484000.00
3718800.00	19.48691	(12062821)			
484200.00	3718800.00		9.48517	(15083118)	485400.00
3718800.00	6.04393	(15020517)			
483100.00	3718900.00		23.25946	(13090903)	483200.00
3718900.00	23.06117	(16073101)			
483100.00	3719000.00		21.62251	(12082921)	483200.00
3719000.00	22.75867	(15091120)			
483300.00	3719000.00		22.45524	(13083124)	483400.00
3719000.00	23.40097	(15062820)			
483500.00	3719000.00		24.67554	(12081621)	483100.00
3719100.00	19.55402	(15091120)			
483200.00	3719100.00		20.35762	(13083124)	483300.00
3719100.00	21.97016	(16072221)			
483400.00	3719100.00		22.40525	(13090321)	483500.00
3719100.00	23.11669	(13091420)			
483700.00	3719100.00		26.90913	(16060321)	484900.00
3719100.00	5.33332	(15022217)			
485000.00	3719100.00		4.60545	(16052319)	485100.00
3719100.00	4.35673	(15110218)			
485200.00	3719100.00		4.11543	(16042724)	485300.00

CostcoMurrieta\_Op\_HRA

3719100.00	3.94061	(13040718)			
485400.00	3719100.00		3.84156	(15020517)	485500.00
3719100.00	4.43647	(15020517)			
485600.00	3719100.00		4.48448	(15020517)	485700.00
3719100.00	4.05493	(15020517)			
484200.00	3719200.00		5.54740	(12032218)	484500.00
3719200.00	6.68292	(16012917)			
484800.00	3719200.00		4.83585	(16032823)	484900.00
3719200.00	4.78053	(15022217)			
485000.00	3719200.00		4.31183	(12052520)	485100.00
3719200.00	4.00642	(14042523)			
485200.00	3719200.00		4.00369	(15110218)	485300.00
3719200.00	3.66222	(16042724)			
485400.00	3719200.00		3.44073	(13040718)	485500.00
3719200.00	3.32395	(15020517)			
485600.00	3719200.00		3.83906	(15020517)	485700.00
3719200.00	3.91864	(15020517)			

^ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 66

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* 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 HRA IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC (YYMMDDHH)		
483500.00	3716600.00	48.36429 (12021603)	483600.00
3716600.00	51.14353 (12010718)		

CostcoMurrieta\_Op\_HRA

483700.00	3716600.00	53.28824	(15120217)	483800.00
3716600.00	54.81369	(15112117)		
483900.00	3716600.00	59.23979	(12101817)	484000.00
3716600.00	59.43848	(12101817)		
485000.00	3716600.00	52.44176	(14100207)	485100.00
3716600.00	61.43362	(13062619)		
483500.00	3716700.00	52.09401	(13011517)	483600.00
3716700.00	57.08575	(12010718)		
483700.00	3716700.00	60.38722	(15120217)	483800.00
3716700.00	63.05980	(14111817)		
483900.00	3716700.00	66.00524	(12101817)	484000.00
3716700.00	68.08748	(12101817)		
485200.00	3716700.00	54.55468	(13050119)	485400.00
3716700.00	51.81378	(16102617)		
485700.00	3716700.00	43.81513	(14101917)	483100.00
3716800.00	50.75022	(14022018)		
483200.00	3716800.00	49.20268	(15073019)	483500.00
3716800.00	59.92701	(15041604)		
483600.00	3716800.00	63.89156	(13011517)	483700.00
3716800.00	75.51412	(12010718)		
483800.00	3716800.00	76.30233	(15120217)	483900.00
3716800.00	75.03848	(15112117)		
484000.00	3716800.00	79.77042	(12101817)	483100.00
3716900.00	55.11555	(14022018)		
483200.00	3716900.00	56.90720	(14022018)	485600.00
3716900.00	49.93420	(13091318)		
483200.00	3717000.00	61.45530	(13110618)	483300.00
3717000.00	67.76065	(14022018)		
485400.00	3717100.00	62.47011	(13091318)	485500.00
3717100.00	57.61481	(14102117)		
485600.00	3717100.00	51.46429	(13041218)	485700.00
3717100.00	48.47335	(13101817)		
483100.00	3717200.00	65.42111	(13010118)	483200.00
3717300.00	72.48578	(13010118)		
483300.00	3717300.00	83.51272	(13010118)	483400.00
3717300.00	92.51475	(15031219)		
483500.00	3717300.00	97.60663	(13112718)	483800.00
3717300.00	137.19675	(14030818)		
483900.00	3717300.00	159.92650	(15041604)	484000.00
3717300.00	189.11486	(12010718)		
484600.00	3717300.00	184.46418	(14100207)	484700.00
3717300.00	157.42418	(13062619)		
483100.00	3717400.00	67.74322	(12012702)	483200.00
3717400.00	75.15337	(12012702)		
483300.00	3717400.00	81.96389	(12012702)	483400.00
3717400.00	91.92062	(13010118)		
483500.00	3717400.00	104.51181	(15031219)	483800.00
3717400.00	159.42477	(14022018)		

CostcoMurrieta\_Op\_HRA

483900.00	3717400.00	205.14679	(14030818)	484000.00
3717400.00	219.33563	(13011517)		
484600.00	3717400.00	247.39951	(16021519)	484700.00
3717400.00	204.60252	(14072719)		
484800.00	3717400.00	170.02425	(13102117)	483100.00
3717500.00	69.24080	(12012702)		
483300.00	3717500.00	89.30624	(12012702)	483400.00
3717500.00	102.09079	(12012702)		
483500.00	3717500.00	113.19576	(12012702)	483600.00
3717500.00	125.91326	(13010118)		
484000.00	3717500.00	283.43624	(14030818)	484600.00
3717500.00	301.53018	(13062619)		
484700.00	3717500.00	284.24043	(13102117)	483600.00
3717600.00	143.38504	(12012702)		
484600.00	3717600.00	362.86583	(13102117)	484700.00
3717600.00	295.89510	(13091318)		
484800.00	3717600.00	224.59013	(13101817)	484600.00
3717700.00	429.41563	(13101817)		
484700.00	3717700.00	318.22454	(12070719)	484800.00
3717700.00	265.74012	(14090418)		
483400.00	3717800.00	113.19078	(14012317)	483500.00
3717800.00	130.37265	(14012317)		
483600.00	3717800.00	152.38836	(14012317)	484600.00
3717800.00	517.22645	(12071220)		
484700.00	3717800.00	332.94352	(12060420)	485300.00
3717800.00	86.82262	(12092318)		
483300.00	3717900.00	104.28887	(12011107)	483400.00
3717900.00	120.34907	(12011107)		
483500.00	3717900.00	150.75530	(12011107)	484600.00
3717900.00	473.32251	(13101917)		

\*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 67

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION  
 VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S): L000001 , L000002  
 , L000003 , L000004 , L000005 ,  
 L000006 , L000007 , L000008 , L000009 , L000010  
 , L000011 , L000012 , L000013 ,  
 L000014 , L000015 , L000016 , L000017 , L000018  
 , L000019 , L000020 , L000021 ,  
 L000022 , L000023 , L000024 , L000025 , L000026  
 , L000027 , L000028 , . . . ,

CostcoMurrieta\_Op\_HRA

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS

\*\*\*

** CONC OF HRA		IN MICROGRAMS/M**3		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
484700.00	3717900.00	331.42523	(12090618)	484800.00
3717900.00	249.35237	(12091318)		
485100.00	3717900.00	122.32831	(12091318)	483300.00
3718000.00	109.94139	(12011107)		
483400.00	3718000.00	123.61138	(12122119)	483500.00
3718000.00	141.88255	(12122119)		
483600.00	3718000.00	157.17359	(12122119)	484600.00
3718000.00	382.28902	(12042019)		
484700.00	3718000.00	291.44105	(14091218)	484800.00
3718000.00	231.70905	(13101917)		
483100.00	3718100.00	113.73913	(12072004)	483400.00
3718100.00	138.33281	(12122119)		
483600.00	3718100.00	168.40317	(12042521)	484600.00
3718100.00	304.84568	(16102117)		
483900.00	3718200.00	281.18700	(16121607)	484500.00
3718200.00	275.23551	(12121818)		
484600.00	3718200.00	243.68679	(15090318)	484700.00
3718200.00	209.41914	(12091018)		
484900.00	3718200.00	150.57249	(14091518)	485400.00
3718200.00	74.74742	(13101917)		
485600.00	3718200.00	59.66389	(13101917)	483100.00
3718300.00	191.82365	(12101520)		
483900.00	3718300.00	246.57735	(16073020)	484000.00
3718300.00	256.26458	(12052505)		
484200.00	3718300.00	281.27939	(14121121)	485300.00
3718300.00	78.84377	(16040218)		
485600.00	3718300.00	64.46572	(14040718)	483400.00
3718400.00	192.72351	(12022122)		
485200.00	3718400.00	83.54565	(15041118)	485200.00
3718500.00	78.19511	(15090418)		
484600.00	3718600.00	131.90033	(16032823)	484800.00
3718600.00	112.79414	(15090318)		
485200.00	3718600.00	74.38639	(12091018)	483700.00
3718700.00	208.98215	(14070820)		
483100.00	3718800.00	161.49172	(12062922)	484000.00
3718800.00	173.17180	(12081020)		
484200.00	3718800.00	140.46933	(12081919)	485400.00

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3718800.00	57.67942	(12091018)			
483100.00	3718900.00	155.43629	(13090903)		483200.00
3718900.00	148.92517	(16073101)			
483100.00	3719000.00	142.63219	(12082921)		483200.00
3719000.00	148.51966	(15091120)			
483300.00	3719000.00	142.56384	(13083124)		483400.00
3719000.00	144.01439	(16072221)			
483500.00	3719000.00	149.81603	(12081621)		483100.00
3719100.00	128.12858	(15091120)			
483200.00	3719100.00	132.52581	(13090103)		483300.00
3719100.00	141.88464	(16072221)			
483400.00	3719100.00	142.28243	(13090321)		483500.00
3719100.00	145.02303	(13091420)			
483700.00	3719100.00	150.47013	(15101120)		484900.00
3719100.00	62.48427	(12121818)			
485000.00	3719100.00	59.41376	(12052520)		485100.00
3719100.00	57.02409	(15090318)			
485200.00	3719100.00	53.99406	(15090318)		485300.00
3719100.00	50.42812	(16042724)			
485400.00	3719100.00	47.49437	(16102117)		485500.00
3719100.00	45.08001	(16102117)			
485600.00	3719100.00	42.21938	(12091018)		485700.00
3719100.00	42.11865	(12091018)			
484200.00	3719200.00	95.10050	(12081919)		484500.00
3719200.00	67.16216	(12010417)			
484800.00	3719200.00	60.90552	(16032823)		484900.00
3719200.00	58.43550	(15041318)			
485000.00	3719200.00	54.62384	(12052520)		485100.00
3719200.00	52.19316	(15090318)			
485200.00	3719200.00	52.54658	(15090318)		485300.00
3719200.00	47.76826	(16032822)			
485400.00	3719200.00	44.30072	(16102117)		485500.00
3719200.00	43.50811	(16102117)			
485600.00	3719200.00	42.34041	(16102117)		485700.00
3719200.00	40.16717	(12091018)			

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 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 68

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

CostcoMurrieta\_Op\_HRA

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GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR	(XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID			
IDLING1	1ST HIGHEST VALUE IS	7.25835 AT (	483900.00,	3718200.00,
607.10,	0.00) DC			474.32,
	2ND HIGHEST VALUE IS	6.89788 AT (	484000.00,	3718300.00,
607.10,	0.00) DC			472.61,
	3RD HIGHEST VALUE IS	6.12508 AT (	483900.00,	3718300.00,
607.10,	0.00) DC			475.92,
	4TH HIGHEST VALUE IS	5.40138 AT (	484200.00,	3718300.00,
607.10,	0.00) DC			470.68,
	5TH HIGHEST VALUE IS	4.39721 AT (	484500.00,	3718200.00,
607.10,	0.00) DC			463.25,
	6TH HIGHEST VALUE IS	4.02365 AT (	484000.00,	3717500.00,
607.10,	0.00) DC			459.98,
	7TH HIGHEST VALUE IS	3.94197 AT (	484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	8TH HIGHEST VALUE IS	3.87334 AT (	484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	9TH HIGHEST VALUE IS	3.84896 AT (	484600.00,	3718100.00,
607.10,	0.00) DC			461.98,
	10TH HIGHEST VALUE IS	3.84125 AT (	484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
IDLING2	1ST HIGHEST VALUE IS	5.93181 AT (	484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	2ND HIGHEST VALUE IS	5.88199 AT (	484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
	3RD HIGHEST VALUE IS	5.83862 AT (	484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	4TH HIGHEST VALUE IS	5.69923 AT (	484600.00,	3717700.00,
496.24,	0.00) DC			457.79,
	5TH HIGHEST VALUE IS	5.42288 AT (	484200.00,	3718300.00,
607.10,	0.00) DC			470.68,
	6TH HIGHEST VALUE IS	5.35153 AT (	484600.00,	3718100.00,
607.10,	0.00) DC			461.98,
	7TH HIGHEST VALUE IS	5.07305 AT (	484600.00,	3717600.00,
460.85,	0.00) DC			460.85,
	8TH HIGHEST VALUE IS	5.03643 AT (	484500.00,	3718200.00,
607.10,	0.00) DC			463.25,
	9TH HIGHEST VALUE IS	4.48408 AT (	484000.00,	3718300.00,
607.10,	0.00) DC			472.61,



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	10TH HIGHEST VALUE IS	4.31053 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
IDLING3	1ST HIGHEST VALUE IS	14.91446 AT (	484600.00,	3717900.00,	462.18,
	496.24, 0.00) DC				
	2ND HIGHEST VALUE IS	14.49933 AT (	484600.00,	3717800.00,	461.20,
	496.24, 0.00) DC				
	3RD HIGHEST VALUE IS	13.80087 AT (	484600.00,	3717700.00,	457.79,
	496.24, 0.00) DC				
	4TH HIGHEST VALUE IS	12.06402 AT (	484600.00,	3717600.00,	460.85,
	460.85, 0.00) DC				
	5TH HIGHEST VALUE IS	10.13091 AT (	484600.00,	3718000.00,	462.34,
	600.98, 0.00) DC				
	6TH HIGHEST VALUE IS	9.20610 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
	7TH HIGHEST VALUE IS	8.91394 AT (	484700.00,	3717900.00,	460.03,
	460.03, 0.00) DC				
	8TH HIGHEST VALUE IS	8.82926 AT (	484700.00,	3717600.00,	462.21,
	462.21, 0.00) DC				
	9TH HIGHEST VALUE IS	8.63423 AT (	484700.00,	3717700.00,	458.24,
	458.24, 0.00) DC				
	10TH HIGHEST VALUE IS	8.39504 AT (	484700.00,	3717800.00,	457.72,
	457.72, 0.00) DC				
IDLING4	1ST HIGHEST VALUE IS	12.55373 AT (	484600.00,	3717800.00,	461.20,
	496.24, 0.00) DC				
	2ND HIGHEST VALUE IS	12.09926 AT (	484600.00,	3717900.00,	462.18,
	496.24, 0.00) DC				
	3RD HIGHEST VALUE IS	11.70671 AT (	484600.00,	3717700.00,	457.79,
	496.24, 0.00) DC				
	4TH HIGHEST VALUE IS	11.59823 AT (	484600.00,	3717600.00,	460.85,
	460.85, 0.00) DC				
	5TH HIGHEST VALUE IS	9.45733 AT (	484600.00,	3717500.00,	464.71,
	470.55, 0.00) DC				
	6TH HIGHEST VALUE IS	8.51192 AT (	484600.00,	3718000.00,	462.34,
	600.98, 0.00) DC				
	7TH HIGHEST VALUE IS	7.96061 AT (	484700.00,	3717600.00,	462.21,
	462.21, 0.00) DC				
	8TH HIGHEST VALUE IS	7.64589 AT (	484700.00,	3717900.00,	460.03,
	460.03, 0.00) DC				
	9TH HIGHEST VALUE IS	7.44671 AT (	484700.00,	3717700.00,	458.24,
	458.24, 0.00) DC				
	10TH HIGHEST VALUE IS	7.38917 AT (	484700.00,	3717800.00,	457.72,
	457.72, 0.00) DC				

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07/10/18

\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*

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17:09:15

CostcoMurrieta\_Op\_HRA

PAGE 69

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

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GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
IDLING5	1ST HIGHEST VALUE IS	8.69259 AT (	484600.00, 3717800.00, 461.20,
496.24,	0.00) DC		
	2ND HIGHEST VALUE IS	8.58711 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	3RD HIGHEST VALUE IS	8.39801 AT (	484600.00, 3717900.00, 462.18,
496.24,	0.00) DC		
	4TH HIGHEST VALUE IS	8.11443 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		
	5TH HIGHEST VALUE IS	8.11206 AT (	484600.00, 3717500.00, 464.71,
470.55,	0.00) DC		
	6TH HIGHEST VALUE IS	6.67362 AT (	484600.00, 3717400.00, 466.14,
466.14,	0.00) DC		
	7TH HIGHEST VALUE IS	6.55800 AT (	484600.00, 3718000.00, 462.34,
600.98,	0.00) DC		
	8TH HIGHEST VALUE IS	5.96396 AT (	484700.00, 3717500.00, 468.73,
470.51,	0.00) DC		
	9TH HIGHEST VALUE IS	5.92225 AT (	484700.00, 3717600.00, 462.21,
462.21,	0.00) DC		
	10TH HIGHEST VALUE IS	5.66234 AT (	484700.00, 3717900.00, 460.03,
460.03,	0.00) DC		
IDLING6	1ST HIGHEST VALUE IS	8.40043 AT (	484600.00, 3717900.00, 462.18,
496.24,	0.00) DC		
	2ND HIGHEST VALUE IS	8.10957 AT (	484600.00, 3717800.00, 461.20,
496.24,	0.00) DC		
	3RD HIGHEST VALUE IS	7.90752 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		
	4TH HIGHEST VALUE IS	7.85648 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	5TH HIGHEST VALUE IS	7.21095 AT (	484600.00, 3718000.00, 462.34,

CostcoMurrieta\_Op\_HRA

600.98,	0.00) DC			
	6TH HIGHEST VALUE IS	7.06644	AT ( 484600.00,	3717500.00,
470.55,	0.00) DC			464.71,
	7TH HIGHEST VALUE IS	5.76823	AT ( 484600.00,	3717400.00,
466.14,	0.00) DC			466.14,
	8TH HIGHEST VALUE IS	5.67220	AT ( 484700.00,	3717500.00,
470.51,	0.00) DC			468.73,
	9TH HIGHEST VALUE IS	5.63088	AT ( 484700.00,	3717600.00,
462.21,	0.00) DC			462.21,
	10TH HIGHEST VALUE IS	5.52156	AT ( 484700.00,	3717900.00,
460.03,	0.00) DC			460.03,
ISLAND	1ST HIGHEST VALUE IS	10.22577	AT ( 484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	2ND HIGHEST VALUE IS	9.82108	AT ( 484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	3RD HIGHEST VALUE IS	9.58430	AT ( 484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
	4TH HIGHEST VALUE IS	8.32666	AT ( 484600.00,	3718100.00,
607.10,	0.00) DC			461.98,
	5TH HIGHEST VALUE IS	8.07054	AT ( 484500.00,	3718200.00,
607.10,	0.00) DC			463.25,
	6TH HIGHEST VALUE IS	8.03255	AT ( 484600.00,	3717700.00,
496.24,	0.00) DC			457.79,
	7TH HIGHEST VALUE IS	6.89823	AT ( 484200.00,	3718300.00,
607.10,	0.00) DC			470.68,
	8TH HIGHEST VALUE IS	6.53394	AT ( 484600.00,	3717600.00,
460.85,	0.00) DC			460.85,
	9TH HIGHEST VALUE IS	6.49350	AT ( 484700.00,	3717900.00,
460.03,	0.00) DC			460.03,
	10TH HIGHEST VALUE IS	6.41603	AT ( 484600.00,	3718200.00,
607.10,	0.00) DC			461.86,
TRAFFIC2	1ST HIGHEST VALUE IS	10.86070	AT ( 484000.00,	3717500.00,
607.10,	0.00) DC			459.98,
	2ND HIGHEST VALUE IS	7.85914	AT ( 484600.00,	3717800.00,
496.24,	0.00) DC			461.20,
	3RD HIGHEST VALUE IS	7.67911	AT ( 484600.00,	3717900.00,
496.24,	0.00) DC			462.18,
	4TH HIGHEST VALUE IS	7.31228	AT ( 484600.00,	3717700.00,
496.24,	0.00) DC			457.79,
	5TH HIGHEST VALUE IS	6.89840	AT ( 484600.00,	3718000.00,
600.98,	0.00) DC			462.34,
	6TH HIGHEST VALUE IS	6.80678	AT ( 484000.00,	3717400.00,
527.82,	0.00) DC			460.17,
	7TH HIGHEST VALUE IS	6.51199	AT ( 484600.00,	3717600.00,
460.85,	0.00) DC			460.85,
	8TH HIGHEST VALUE IS	6.14906	AT ( 483900.00,	3718200.00,
				474.32,

CostcoMurrieta\_Op\_HRA

607.10, 0.00) DC  
9TH HIGHEST VALUE IS 5.86121 AT ( 484200.00, 3718300.00, 470.68,  
607.10, 0.00) DC  
10TH HIGHEST VALUE IS 5.84567 AT ( 484500.00, 3718200.00, 463.25,  
607.10, 0.00) DC

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\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 70

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43848

HRS) RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
TRAVEL1	1ST HIGHEST VALUE IS	45.80703 AT (	484000.00, 3717500.00, 459.98,
607.10,	0.00) DC		
	2ND HIGHEST VALUE IS	19.41868 AT (	484000.00, 3717400.00, 460.17,
527.82,	0.00) DC		
	3RD HIGHEST VALUE IS	14.18351 AT (	483900.00, 3717400.00, 463.87,
527.82,	0.00) DC		
	4TH HIGHEST VALUE IS	11.12409 AT (	484000.00, 3717300.00, 463.70,
527.82,	0.00) DC		
	5TH HIGHEST VALUE IS	9.06037 AT (	483800.00, 3717400.00, 453.35,
607.10,	0.00) DC		
	6TH HIGHEST VALUE IS	8.83546 AT (	483900.00, 3717300.00, 456.93,
527.82,	0.00) DC		
	7TH HIGHEST VALUE IS	6.66964 AT (	483800.00, 3717300.00, 452.28,
606.63,	0.00) DC		
	8TH HIGHEST VALUE IS	6.58197 AT (	484600.00, 3717600.00, 460.85,
460.85,	0.00) DC		
	9TH HIGHEST VALUE IS	6.33316 AT (	484600.00, 3717500.00, 464.71,
470.55,	0.00) DC		
	10TH HIGHEST VALUE IS	6.26885 AT (	484600.00, 3717700.00, 457.79,
496.24,	0.00) DC		

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TRAVEL3	1ST HIGHEST VALUE IS	35.29173	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	28.68079	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	3RD HIGHEST VALUE IS	27.10172	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					
	4TH HIGHEST VALUE IS	16.87992	AT (	484600.00,	3717700.00,	457.79,
496.24,	0.00) DC					
	5TH HIGHEST VALUE IS	16.39778	AT (	484600.00,	3718100.00,	461.98,
607.10,	0.00) DC					
	6TH HIGHEST VALUE IS	15.38388	AT (	484700.00,	3717900.00,	460.03,
460.03,	0.00) DC					
	7TH HIGHEST VALUE IS	13.99447	AT (	484700.00,	3718000.00,	460.03,
460.03,	0.00) DC					
	8TH HIGHEST VALUE IS	13.73984	AT (	484700.00,	3717800.00,	457.72,
457.72,	0.00) DC					
	9TH HIGHEST VALUE IS	12.03277	AT (	484500.00,	3718200.00,	463.25,
607.10,	0.00) DC					
	10TH HIGHEST VALUE IS	10.74632	AT (	484700.00,	3717700.00,	458.24,
458.24,	0.00) DC					
VENT	1ST HIGHEST VALUE IS	10.24644	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	9.73032	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					
	3RD HIGHEST VALUE IS	9.55050	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	4TH HIGHEST VALUE IS	8.14457	AT (	484600.00,	3718100.00,	461.98,
607.10,	0.00) DC					
	5TH HIGHEST VALUE IS	8.05123	AT (	484500.00,	3718200.00,	463.25,
607.10,	0.00) DC					
	6TH HIGHEST VALUE IS	7.95508	AT (	484600.00,	3717700.00,	457.79,
496.24,	0.00) DC					
	7TH HIGHEST VALUE IS	6.90608	AT (	484200.00,	3718300.00,	470.68,
607.10,	0.00) DC					
	8TH HIGHEST VALUE IS	6.52053	AT (	484700.00,	3717900.00,	460.03,
460.03,	0.00) DC					
	9TH HIGHEST VALUE IS	6.44779	AT (	484600.00,	3717600.00,	460.85,
460.85,	0.00) DC					
	10TH HIGHEST VALUE IS	6.36030	AT (	484700.00,	3718000.00,	460.03,
460.03,	0.00) DC					
ALL	1ST HIGHEST VALUE IS	121.66907	AT (	484600.00,	3717900.00,	462.18,
496.24,	0.00) DC					
	2ND HIGHEST VALUE IS	114.84684	AT (	484600.00,	3717800.00,	461.20,
496.24,	0.00) DC					
	3RD HIGHEST VALUE IS	99.70056	AT (	484600.00,	3718000.00,	462.34,
600.98,	0.00) DC					

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4TH HIGHEST VALUE IS 97.42871 AT ( 484600.00, 3717700.00, 457.79,  
 496.24, 0.00) DC  
 5TH HIGHEST VALUE IS 90.21518 AT ( 484000.00, 3717500.00, 459.98,  
 607.10, 0.00) DC  
 6TH HIGHEST VALUE IS 85.42267 AT ( 484600.00, 3717600.00, 460.85,  
 460.85, 0.00) DC  
 7TH HIGHEST VALUE IS 73.51326 AT ( 484600.00, 3718100.00, 461.98,  
 607.10, 0.00) DC  
 8TH HIGHEST VALUE IS 71.95381 AT ( 484700.00, 3717900.00, 460.03,  
 460.03, 0.00) DC  
 9TH HIGHEST VALUE IS 70.85757 AT ( 484600.00, 3717500.00, 464.71,  
 470.55, 0.00) DC  
 10TH HIGHEST VALUE IS 68.91362 AT ( 484700.00, 3717800.00, 457.72,  
 457.72, 0.00) DC

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

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
 View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
 \*\*\* AERMET - VERSION 16216 \*\*\*  
 \*\*\* 17:09:15

PAGE 71

\*\*\* MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF HIGHEST 1-HR

RESULTS \*\*\*

\*\* CONC OF HRA IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	DATE	RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE GRID-ID	(YMMDDHH)		
IDLING1 HIGH 1ST HIGH VALUE IS	51.61973	ON 16073020:	AT ( 483900.00,	
3718200.00, 474.32, 607.10,	0.00) DC			
IDLING2 HIGH 1ST HIGH VALUE IS	45.22430	ON 12092318:	AT ( 484600.00,	
3717900.00, 462.18, 496.24,	0.00) DC			

CostcoMurrieta\_Op\_HRA

IDLING3 HIGH 1ST HIGH VALUE IS 114.51201 ON 16021419: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING4 HIGH 1ST HIGH VALUE IS 96.19733 ON 15103005: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING5 HIGH 1ST HIGH VALUE IS 65.25150 ON 12091318: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

IDLING6 HIGH 1ST HIGH VALUE IS 61.15113 ON 12092318: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

ISLAND HIGH 1ST HIGH VALUE IS 64.36639 ON 12122516: AT ( 484600.00,  
3717600.00, 460.85, 460.85, 0.00) DC

TRAFFIC2 HIGH 1ST HIGH VALUE IS 30.10767 ON 12012316: AT ( 484000.00,  
3717500.00, 459.98, 607.10, 0.00) DC

TRAVEL1 HIGH 1ST HIGH VALUE IS 139.21642 ON 15051418: AT ( 484000.00,  
3717500.00, 459.98, 607.10, 0.00) DC

TRAVEL3 HIGH 1ST HIGH VALUE IS 144.38611 ON 12122516: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

VENT HIGH 1ST HIGH VALUE IS 52.96196 ON 15091218: AT ( 484600.00,  
3718000.00, 462.34, 600.98, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 517.22645 ON 12071220: AT ( 484600.00,  
3717800.00, 461.20, 496.24, 0.00) DC

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

▲ \*\*\* AERMOD - VERSION 18081 \*\*\* C:\Lakes\AERMOD  
View\CostcoMurrieta\_Op\_HRA\CostcoMurrieta\_Op\_HRA.isc \*\*\* 07/10/18  
\*\*\* AERMET - VERSION 16216 \*\*\*  
\*\*\* 17:09:15

PAGE 72

\*\*\* MODELOPTs: RegDFault CONC ELEV URBAN ADJ\_U\*

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

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

A Total of 0 Fatal Error Message(s)

CostcoMurrieta\_Op\_HRA

A Total of 2 Warning Message(s)  
A Total of 1763 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 884 Calm Hours Identified  
  
A Total of 879 Missing Hours Identified ( 2.00 Percent)

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 680 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used  
0.50  
ME W187 680 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*









GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 14  
16 to 70 Years Bin: 0

\*\*\*\*\*

PATHWAYS ENABLED

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

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

\*\*\*\*\*

INHALATION

Victoria\_Op\_30yrCancerMitOutput

Daily breathing rate: LongTerm24HR

**\*\*Worker Adjustment Factors\*\***

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 not used.

\*\*\*\*\*

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Op\_Mit\hra\Victoria\_Op\_30yrCancerMitCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\swang\Documents\1. Projects\10029.5

Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Op\_Mit\hra\Victoria\_Op\_30yrCancerMitCancerRiskSumByRec.csv

HRA ran successfully





lyrCancerMitHRAInput.hra



GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: NCChronic  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

\*\*Exposure duration are only adjusted for cancer assessments\*\*

\*\*\*\*\*

PATHWAYS ENABLED

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

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

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

\*\*Fraction at time at home\*\*

NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

\*\*\*\*\*

Victoria\_Op\_ChronicMitOutput

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 not used.

\*\*\*\*\*

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\Users\swang\Documents\1. Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2  
Output\VictoriaGreens\_Op\_Mit\hra\Victoria\_Op\_ChronicMitNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\swang\Documents\1.

Projects\10029.5 Victoria Greens\HRA\HARP 2\HARP 2

Output\VictoriaGreens\_Op\_Mit\hra\Victoria\_Op\_ChronicMitNCChronicRiskSumByRec.csv

HRA ran successfully





## Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**Victoria Greens Construction HRA Unmitigated**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	87.79	1000sqft	2.02	87,788.00	0
Parking Lot	62.00	Space	0.56	24,800.00	0
Condo/Townhouse	176.00	Dwelling Unit	8.07	126,890.00	503

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	558.44	<b>CH4 Intensity (lb/MW hr)</b>	0.023	<b>N2O Intensity (lb/MW hr)</b>	0.005

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

Project Characteristics - Interpolated RPS 2022  
 Construction HRA Unmitigated Emissions Only.

Land Use - Data provided by applicant.

Demolition - Caltrans guidance specifies 0.25 feet asphalt parking thickness. Equivalent tonnage based on asphalt density of 145 lb/cubic feet  
[http://www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=144&Itemid=330](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330)

Trips and VMT - Based on applicant data. Conservatively assumed to operate for 0.19-miles on site (1,000 feet).

Grading - data provided by applicant.

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	75.00	8.07
tblGrading	MaterialExported	0.00	30,239.00
tblLandUse	LandUseSquareFeet	87,790.00	87,788.00
tblLandUse	LandUseSquareFeet	176,000.00	126,890.00
tblLandUse	LotAcreage	11.00	8.07
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	558.44
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripLength	6.90	0.19
tblTripsAndVMT	VendorTripNumber	37.00	27.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	174.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	35.00	0.00

**2.0 Emissions Summary**

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Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2019	8-31-2019	1.7997	1.7997
2	9-1-2019	11-30-2019	0.8179	0.8179
3	12-1-2019	2-29-2020	0.7704	0.7704
4	3-1-2020	5-31-2020	0.7553	0.7553
5	6-1-2020	8-31-2020	0.7558	0.7558
6	9-1-2020	9-30-2020	0.2464	0.2464
		Highest	1.7997	1.7997

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>1.4656</b>	<b>1.8457</b>	<b>7.2749</b>	<b>0.0195</b>	<b>1.2900</b>	<b>0.2031</b>	<b>1.4931</b>	<b>0.3458</b>	<b>0.2022</b>	<b>0.5480</b>	<b>38.7667</b>	<b>1,934.2407</b>	<b>1,973.0074</b>	<b>1.4925</b>	<b>0.0158</b>	<b>2,015.0186</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Energy	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	395.7930	395.7930	0.0125	5.1500e-003	397.6415
Mobile	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	58.1663	61.8043	0.3761	9.3400e-003	73.9900
<b>Total</b>	<b>1.4656</b>	<b>1.8457</b>	<b>7.2749</b>	<b>0.0195</b>	<b>1.2900</b>	<b>0.2031</b>	<b>1.4931</b>	<b>0.3458</b>	<b>0.2022</b>	<b>0.5480</b>	<b>38.7667</b>	<b>1,934.2407</b>	<b>1,973.0074</b>	<b>1.4925</b>	<b>0.0158</b>	<b>2,015.0186</b>

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

**3.0 Construction Detail**

**Construction Phase**

## Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/12/2019	5	10	
3	Grading	Grading	7/13/2019	8/23/2019	5	30	
4	Building Construction	Building Construction	8/24/2019	10/16/2020	5	300	
5	Paving	Paving	10/17/2020	11/13/2020	5	20	
6	Architectural Coating	Architectural Coating	11/14/2020	12/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 8.07**

**Acres of Paving: 2.58**

**Residential Indoor: 256,952; Residential Outdoor: 85,651; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,755 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	13.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	3,780.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	27.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	0.00	0.19	0.19	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3600e-003	0.0000	1.3600e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>	<b>1.3600e-003</b>	<b>0.0180</b>	<b>0.0193</b>	<b>2.1000e-004</b>	<b>0.0167</b>	<b>0.0169</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8672</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.5000e-004	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0685	0.0685	1.0000e-005	0.0000	0.0687
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0685</b>	<b>0.0685</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0687</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3600e-003	0.0000	1.3600e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>	<b>1.3600e-003</b>	<b>0.0180</b>	<b>0.0193</b>	<b>2.1000e-004</b>	<b>0.0167</b>	<b>0.0169</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8671</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.5000e-004	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0685	0.0685	1.0000e-005	0.0000	0.0687
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0685</b>	<b>0.0685</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0687</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>



Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0963	0.0000	0.0963	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0963</b>	<b>0.0357</b>	<b>0.1321</b>	<b>0.0504</b>	<b>0.0329</b>	<b>0.0833</b>	<b>0.0000</b>	<b>83.5520</b>	<b>83.5520</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2129</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9100e-003	0.1891	0.0294	2.0000e-004	3.5000e-004	1.6000e-004	5.0000e-004	1.0000e-004	1.5000e-004	2.5000e-004	0.0000	19.9033	19.9033	3.2900e-003	0.0000	19.9856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.1891</b>	<b>0.0294</b>	<b>2.0000e-004</b>	<b>3.5000e-004</b>	<b>1.6000e-004</b>	<b>5.0000e-004</b>	<b>1.0000e-004</b>	<b>1.5000e-004</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>19.9033</b>	<b>19.9033</b>	<b>3.2900e-003</b>	<b>0.0000</b>	<b>19.9856</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0963	0.0000	0.0963	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0963</b>	<b>0.0357</b>	<b>0.1321</b>	<b>0.0504</b>	<b>0.0329</b>	<b>0.0833</b>	<b>0.0000</b>	<b>83.5519</b>	<b>83.5519</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2128</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9100e-003	0.1891	0.0294	2.0000e-004	3.5000e-004	1.6000e-004	5.0000e-004	1.0000e-004	1.5000e-004	2.5000e-004	0.0000	19.9033	19.9033	3.2900e-003	0.0000	19.9856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.1891</b>	<b>0.0294</b>	<b>2.0000e-004</b>	<b>3.5000e-004</b>	<b>1.6000e-004</b>	<b>5.0000e-004</b>	<b>1.0000e-004</b>	<b>1.5000e-004</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>19.9033</b>	<b>19.9033</b>	<b>3.2900e-003</b>	<b>0.0000</b>	<b>19.9856</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9696	0.7895	1.2400e-003		0.0593	0.0593		0.0558	0.0558	0.0000	108.1479	108.1479	0.0264	0.0000	108.8066
<b>Total</b>	<b>0.1086</b>	<b>0.9696</b>	<b>0.7895</b>	<b>1.2400e-003</b>		<b>0.0593</b>	<b>0.0593</b>		<b>0.0558</b>	<b>0.0558</b>	<b>0.0000</b>	<b>108.1479</b>	<b>108.1479</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8066</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0779	0.0219	7.0000e-005	2.5000e-004	8.0000e-005	3.3000e-004	7.0000e-005	8.0000e-005	1.6000e-004	0.0000	7.2064	7.2064	1.1900e-003	0.0000	7.2361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1700e-003</b>	<b>0.0779</b>	<b>0.0219</b>	<b>7.0000e-005</b>	<b>2.5000e-004</b>	<b>8.0000e-005</b>	<b>3.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>7.2064</b>	<b>7.2064</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>7.2361</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9696	0.7895	1.2400e-003		0.0593	0.0593		0.0558	0.0558	0.0000	108.1478	108.1478	0.0264	0.0000	108.8065
<b>Total</b>	<b>0.1086</b>	<b>0.9696</b>	<b>0.7895</b>	<b>1.2400e-003</b>		<b>0.0593</b>	<b>0.0593</b>		<b>0.0558</b>	<b>0.0558</b>	<b>0.0000</b>	<b>108.1478</b>	<b>108.1478</b>	<b>0.0264</b>	<b>0.0000</b>	<b>108.8065</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0779	0.0219	7.0000e-005	2.5000e-004	8.0000e-005	3.3000e-004	7.0000e-005	8.0000e-005	1.6000e-004	0.0000	7.2064	7.2064	1.1900e-003	0.0000	7.2361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1700e-003</b>	<b>0.0779</b>	<b>0.0219</b>	<b>7.0000e-005</b>	<b>2.5000e-004</b>	<b>8.0000e-005</b>	<b>3.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>7.2064</b>	<b>7.2064</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>7.2361</b>

**3.5 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2205	1.9954	1.7522	2.8000e-003		0.1162	0.1162		0.1092	0.1092	0.0000	240.8744	240.8744	0.0588	0.0000	242.3435
<b>Total</b>	<b>0.2205</b>	<b>1.9954</b>	<b>1.7522</b>	<b>2.8000e-003</b>		<b>0.1162</b>	<b>0.1162</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>240.8744</b>	<b>240.8744</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3435</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3900e-003	0.1703	0.0455	1.7000e-004	5.6000e-004	1.3000e-004	6.9000e-004	1.7000e-004	1.2000e-004	2.9000e-004	0.0000	16.2943	16.2943	2.4800e-003	0.0000	16.3564
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.3900e-003</b>	<b>0.1703</b>	<b>0.0455</b>	<b>1.7000e-004</b>	<b>5.6000e-004</b>	<b>1.3000e-004</b>	<b>6.9000e-004</b>	<b>1.7000e-004</b>	<b>1.2000e-004</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>16.2943</b>	<b>16.2943</b>	<b>2.4800e-003</b>	<b>0.0000</b>	<b>16.3564</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2205	1.9954	1.7522	2.8000e-003		0.1162	0.1162		0.1092	0.1092	0.0000	240.8741	240.8741	0.0588	0.0000	242.3432
<b>Total</b>	<b>0.2205</b>	<b>1.9954</b>	<b>1.7522</b>	<b>2.8000e-003</b>		<b>0.1162</b>	<b>0.1162</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>240.8741</b>	<b>240.8741</b>	<b>0.0588</b>	<b>0.0000</b>	<b>242.3432</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.5 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3900e-003	0.1703	0.0455	1.7000e-004	5.6000e-004	1.3000e-004	6.9000e-004	1.7000e-004	1.2000e-004	2.9000e-004	0.0000	16.2943	16.2943	2.4800e-003	0.0000	16.3564
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.3900e-003</b>	<b>0.1703</b>	<b>0.0455</b>	<b>1.7000e-004</b>	<b>5.6000e-004</b>	<b>1.3000e-004</b>	<b>6.9000e-004</b>	<b>1.7000e-004</b>	<b>1.2000e-004</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>16.2943</b>	<b>16.2943</b>	<b>2.4800e-003</b>	<b>0.0000</b>	<b>16.3564</b>

**3.6 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0170</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0170</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>



Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.6 Paving - 2020**

**Mitigated Construction Off-Site**

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

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4151</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.4151</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410
Unmitigated	0.3097	1.6310	4.2742	0.0156	1.2900	0.0131	1.3031	0.3458	0.0122	0.3580	0.0000	1,441.3883	1,441.3883	0.0741	0.0000	1,443.2410

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,022.56	997.92	851.84	3,398,875	3,398,875
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,022.56	997.92	851.84	3,398,875	3,398,875

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Other Asphalt Surfaces	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224.3368	224.3368	9.2400e-003	2.0100e-003	225.1664
NaturalGas Mitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
NaturalGas Unmitigated	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.21297e+006	0.0173	0.1481	0.0630	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.4562	171.4562	3.2900e-003	3.1400e-003	172.4751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0173</b>	<b>0.1481</b>	<b>0.0630</b>	<b>9.4000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0120</b>	<b>0.0120</b>	<b>0.0000</b>	<b>171.4562</b>	<b>171.4562</b>	<b>3.2900e-003</b>	<b>3.1400e-003</b>	<b>172.4751</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	876962	222.1382	9.1500e-003	1.9900e-003	222.9596
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8680	2.1987	9.0000e-005	2.0000e-005	2.2068
<b>Total</b>		<b>224.3368</b>	<b>9.2400e-003</b>	<b>2.0100e-003</b>	<b>225.1664</b>

**6.0 Area Detail**

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313
Unmitigated	1.1386	0.0666	2.9377	2.9500e-003		0.1781	0.1781		0.1781	0.1781	18.6946	38.8931	57.5876	0.0586	1.2700e-003	59.4313



Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5765	0.0457	1.1188	2.8500e-003		0.1681	0.1681		0.1681	0.1681	18.6946	35.9245	54.6191	0.0558	1.2700e-003	56.3910
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>1.1386</b>	<b>0.0666</b>	<b>2.9377</b>	<b>2.9500e-003</b>		<b>0.1781</b>	<b>0.1781</b>		<b>0.1781</b>	<b>0.1781</b>	<b>18.6946</b>	<b>38.8931</b>	<b>57.5876</b>	<b>0.0586</b>	<b>1.2700e-003</b>	<b>59.4313</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5765	0.0457	1.1188	2.8500e-003		0.1681	0.1681		0.1681	0.1681	18.6946	35.9245	54.6191	0.0558	1.2700e-003	56.3910
Landscaping	0.0551	0.0210	1.8189	1.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	2.9685	2.9685	2.8700e-003	0.0000	3.0403
<b>Total</b>	<b>1.1386</b>	<b>0.0666</b>	<b>2.9377</b>	<b>2.9500e-003</b>		<b>0.1781</b>	<b>0.1781</b>		<b>0.1781</b>	<b>0.1781</b>	<b>18.6946</b>	<b>38.8931</b>	<b>57.5876</b>	<b>0.0586</b>	<b>1.2700e-003</b>	<b>59.4313</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	61.8043	0.3761	9.3400e-003	73.9900
Unmitigated	61.8043	0.3761	9.3400e-003	73.9900

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	11.4671 / 7.22926	61.8043	0.3761	9.3400e-003	73.9900
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>61.8043</b>	<b>0.3761</b>	<b>9.3400e-003</b>	<b>73.9900</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.4342	0.9712	0.0000	40.7149
Unmitigated	16.4342	0.9712	0.0000	40.7149

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	80.96	16.4342	0.9712	0.0000	40.7149
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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Victoria Greens Construction HRA Unmitigated - Los Angeles-South Coast County, Annual

**11.0 Vegetation**

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