

Attachment B

Supplemental Air Quality Memo

M E M O

Date: November 1, 2016

To: Michael Lisenbee
David J. Powers & Associates

From: Joshua Carman

RE: Topgolf Entertainment Complex and Hotel Air Quality Assessment

SUBJECT: Project Revisions Job# 16-046

Illingworth & Rodkin, Inc. prepared the AQ assessment for this project in April 2016.¹ This study addressed air quality and community risk impacts that would be attributable to implementation of the proposed project. Since then, the proposed project has been slightly modified to include the following uses: 71,456 square feet (sf) entered as “Racquet Club” for the entertainment complex, 9 acres entered as “Golf Course,” and 514 spaces entered as “Parking Lot” (4.5 acres) for the Topgolf entertainment complex project component on a 13.5-acre site; and 200 rooms (100,000 sf) entered as “Hotel,” 110,000 sf entered as “Strip Mall,” 415 spaces entered as “Enclosed Parking with Elevator” and 254 spaces entered as “Parking Lot” (4 acres) for the hotel/retail project component on a 19.7-acre site. The model defaults for schedule and equipment were used for the entertainment complex, which provides for a conservative assessment of project emissions. The anticipated construction phasing durations and equipment list for the hotel/retail component have not changed. However, the anticipated start date was adjusted to November 2017, since the entertainment complex is planned for construction before the hotel/retail component. Overall project construction is anticipated to be approximately 24 months, and was modeled as beginning in January 2017 and ending in December 2018. Construction was modeled as occurring up to seven days per week, consistent with the project description.

Construction Impacts

The CalEEMod was rerun with the updated project information, as described above. The project schedule assumes that the project would be built out over a period of approximately 24 months, or an estimated 520 construction workdays (based on an average of 260 workdays per year).² Average

¹ Illingworth & Rodkin, Inc. 2016. *Topgolf Entertainment Complex and Hotel Draft Air Quality Assessment – San Jose, California*. April 12.

² Though construction may occur up to seven days per week, 260 workdays per year was conservatively used to assess average daily construction emissions since it’s not known exactly how many weekends may include work.

daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 1 shows revised average daily construction emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project. As indicated in Table 1, predicted project NO_x emissions would exceed the BAAQMD significance thresholds. However, as shown in Table 1, implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a level of less than significant and would still be required of the project. Mitigation Measure AQ-2 should be revised to clarify that U.S. EPA Tier 4 engine standards for NO_x are needed in addition to Tier 4 standards for particulate matter. A summary of the suggested revision to the mitigation is given below. *Attachment A* includes the CalEEMod input and output values for construction emissions.

Table 1. Revised Construction Period Emissions

Scenario	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Topgolf Entertainment Complex construction emissions (tons)	3.75 tons	10.27 tons	0.52 tons	0.49 tons
Hotel/Retail construction emissions (tons)	2.75 tons	7.05 tons	0.33 tons	0.31 tons
Total construction emissions (tons)	6.50 tons	17.32 tons	0.85 tons	0.80 tons
Average daily emissions (pounds) ¹	25.0 lbs.	66.6 lbs.	3.3 lbs.	3.1 lbs.
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	Yes	No	No
With Tier 4 Construction Mitigation				
Topgolf Entertainment Complex construction emissions (tons)	3.07 tons	3.02 tons	0.07 tons	0.07 tons
Hotel/Retail construction emissions (tons)	2.30 tons	2.43 tons	0.04 tons	0.04 tons
Total construction emissions (tons)	5.37 tons	5.45 tons	0.11 tons	0.11 tons
Average daily emissions (pounds) ¹	20.7 lbs.	21.0 lbs.	0.4 lbs.	0.4 lbs.
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	No	No	No

Notes: ¹Assumes 520 workdays.

Construction Risk Impacts

Results of the April 2016 study found the incremental residential infant cancer risk at the MEI to be 47.9 in one million, which exceeds the BAAQMD significance threshold of 10 in one million. The ISCST3 model was rerun using revised CalEEMod construction emissions using the same parameters and methodology as described in the April 2016 study. Results of modeling indicated that the location of the maximally exposed individual (MEI) would not change, however the incremental residential infant cancer risk would increase to 63.4 in one million, which would exceed the BAAQMD significance threshold of 10 in one million. Annual PM_{2.5} concentration at the MEI would remain at 0.4 µg/m³, which would exceed the BAAQMD significance threshold of 0.3 µg/m³.

The maximum increased cancer risk for a school child exposure at the George Mayne Elementary

School would be 3.6 in one million, which is below the BAAQMD significance threshold. The maximum annual PM_{2.5} concentration at the George Mayne Elementary School would be 0.1 µg/m³. The project would continue have a significant impact with respect to community risk caused by construction activities at nearby residential receptors. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a level of less than significant. *Attachment A* includes the modeled unmitigated and mitigated cases and ISCST3 output files. With implementation of these recommended mitigation measures, mitigated cancer risk would be 4.7 in one million and annual PM_{2.5} concentration would be reduced to less than 0.1 µg/m³.

The April 2016 report addressed cumulative TAC impacts from project construction and N. Taylor Street/N. 1st Street. This was identified as the only source of TAC emissions that could adversely affect the project construction MEI. No stationary sources of TACs (e.g., emergency backup generators or gas stations) were identified using BAAQMD screening tools. However, the Midpoint at 237 project has been identified as a planned and approved project that should be included in the cumulative risk assessment. The Midpoint at 237 project would include development of four R&D buildings and two manufacturing buildings at the approved former Cisco Alviso site. A community risk assessment³ of the Midpoint project found that incremental residential cancer risk from operation of the project would be 1.4 in one million. Incremental cancer risk at the George Mayne Elementary School would 0.6 in one million. Annual PM_{2.5} concentrations for both residential and school receptors were found to be <0.01 µg/m³. We understand that construction of this project, including equipment-intensive activities such as grading are already underway or complete and that construction of the Midpoint project is not expected to contribute to cumulative risk for project receptors.

Table 2 summarizes cumulative risk computed at the construction MEI. Cumulative risk at the George Mayne Elementary School would be less than at the residential MEI (project construction MEI). As shown in Table 2, cumulative risk would be less than significant.

Table 2. Cumulative Risk at Project Construction MEI

Source	Maximum Cancer Risk (per million)	Maximum Annual PM _{2.5} Concentration (µg/m ³)	Maximum Hazard Index
Unmitigated Project Construction	63.4	0.4	0.04
N. Taylor Street/N. 1 st Street	5.0	0.1	<0.03
Midpoint at 237 Project Operation	1.4	<0.01	<0.01
Cumulative Total	69.8	<0.51	<0.08
BAAQMD Threshold – Cumulative Sources	>100	>0.8	>10.0
Significant?	No	No	No

³ Illingworth & Rodkin, Inc. 2014. *Midpoint at 237 Project – Construction and Operational Health Risk Assessment San Jose, California*. February 6.

Suggested Revision to Mitigation Measure AQ-2

Mitigation Measure AQ-2: Use of newer, retrofitted or alternatively powered construction equipment to minimize emissions. Such equipment selection would include the following:

All diesel-powered construction equipment larger than 50 horsepower and operating on site for more than two days continuously shall meet U.S. EPA NO_x and particulate matter emissions standards for Tier 4 engines or equivalent. *Note that the construction contractor could use other measures to minimize construction period DPM emissions to reduce the predicted cancer risk below the thresholds. Such measures may be the use of alternative powered equipment (e.g., LPG powered forklifts), alternative fuels (e.g., biofuels), added exhaust devices, or a combination of measures, provided that these measures are approved by the lead agency.*

Attachment A

Topgolf - Topgolf Complex Construction Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	514.00	Space	4.50	205,600.00	0
Golf Course	9.00	Acre	9.00	392,040.00	0
Racquet Club	71.46	1000sqft	0.00	71,456.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4	Operational Year	2014		

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MMWhr)	641.35	CH4 Intensity (lb/MMWhr)	0.029	N2O Intensity (lb/MMWhr)	0.006
---------------------------------	--------	---------------------------------	-------	---------------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From plan drawings and PD. Structure for hitting bays entered as "Racquet Club"

Construction Phase - Default w/ 7 days/week construction

Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Construction Off-road Equipment Mitigation - Tier 4 engines for equip > 50hp. BAAQMD BMPs.

tbiConstructionPhase	NumDays	30.00	42.00
tbiConstructionPhase	NumDays	20.00	28.00
tbiConstructionPhase	NumDays	10.00	14.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiLandUse	LandUseSquareFeet	71,460.00	71,456.00
tbiLandUse	LotAcreage	4.63	4.50
tbiLandUse	LotAcreage	1.64	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Year	tons/yr											MIT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.9499	7.6992	8.0390	0.0138	0.7763	0.3916	1.1680	0.2715	0.3655	0.6370	0.0000	1,173.9316	1,173.9316	0.1597	0.0000	1,177.2849
2018	2.7982	2.5737	3.1601	6.1500e-003	0.2346	0.1288	0.3634	0.0634	0.1208	0.1842	0.0000	505.3772	505.3772	0.0578	0.0000	506.5903
Total	3.7481	10.2729	11.1991	0.0200	1.0109	0.5205	1.5314	0.3349	0.4862	0.8211	0.0000	1,679.3088	1,679.3088	0.2174	0.0000	1,683.8751

Mitigated Construction

Year	ROG	NOx	CO	SO2	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																
2017	0.4320	2.1051	7.4809	0.0138	0.6066	0.0496	0.6562	0.1591	0.0478	0.2069	0.0000	1,173.9310	1,173.9310	0.1597	0.0000	1,177.2842
2018	2.6416	0.9194	3.2104	6.1500e-003	0.2346	0.0215	0.2561	0.0634	0.0206	0.0840	0.0000	505.3770	505.3770	0.0578	0.0000	506.5900
Total	3.0736	3.0244	10.6913	0.0200	0.8412	0.0711	0.9123	0.2225	0.0684	0.2909	0.0000	1,679.3080	1,679.3080	0.2174	0.0000	1,683.8743

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
18.00	70.56	4.53	0.00	16.79	86.34	40.43	33.56	85.93	64.57	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	1/1/2017	1/27/2017	7	27	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	7	14	
3	Grading	Grading	2/11/2017	3/24/2017	7	42	
4	Building Construction	Building Construction	3/25/2017	5/18/2018	7	420	
5	Paving	Paving	5/19/2018	6/15/2018	7	28	
6	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	7	28	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 105

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 704,496; Non-Residential Outdoor: 234,832 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	281.00	110.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	56.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

3.2 Demolition - 2017

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Biogenic CO2	Non-Biogenic CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Off-Road	0.0547	0.5764	0.4576	5.4000e-004	0.0287	0.0287	0.0287	0.0267	0.0267	0.0267	0.0000	49.4346	49.4346	0.0136	0.0000	49.7194
Total	0.0547	0.5764	0.4576	5.4000e-004	0.0287	0.0287	0.0287	0.0267	0.0267	0.0267	0.0000	49.4346	49.4346	0.0136	0.0000	49.7194

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Biogenic CO2	Non-Biogenic CO2	Total CO2	CH4	N2O	CO2e
	tons/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	6.7000e-004	9.5000e-004	9.2000e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5624	1.5624	8.0000e-005	0.0000	1.5641

Total	6.7000e-004	9.5000e-004	9.2000e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5624	1.5624	8.0000e-005	0.0000	1.5641
-------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Off-Road	6.4000e-003	0.0277	0.3217	5.4000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	0.0000	49.4345	49.4345	0.0136	0.0000	49.7193
Total	6.4000e-003	0.0277	0.3217	5.4000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	0.0000	49.4345	49.4345	0.0136	0.0000	49.7193
	MT/yr															

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/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	6.7000e-004	9.5000e-004	9.2000e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5624	1.5624	8.0000e-005	0.0000	1.5641
Total	6.7000e-004	9.5000e-004	9.2000e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5624	1.5624	8.0000e-005	0.0000	1.5641
	MT/yr															

3.3 Site Preparation - 2017 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															
MIT/yr																
Fugitive Dust					0.1265	0.0000	0.1265	0.0695	0.0000	0.0695	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0339	0.3623	0.2758	2.7000e-004	0.0193	0.0193	0.0193	0.0177	0.0177	0.0177	0.0000	25.4208	25.4208	7.7900e-003	0.0000	25.5843
Total	0.0339	0.3623	0.2758	2.7000e-004	0.1265	0.0193	0.1457	0.0695	0.0177	0.0873	0.0000	25.4208	25.4208	7.7900e-003	0.0000	25.5843

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															
MIT/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	4.2000e-004	5.9000e-004	5.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9722	0.9722	5.0000e-005	0.0000	0.9732
Total	4.2000e-004	5.9000e-004	5.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9722	0.9722	5.0000e-005	0.0000	0.9732

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															
MIT/yr																

Fugitive Dust					0.0569	0.0000	0.0569	0.0156	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3300e-003	0.0144	0.1487	2.7000e-004	4.4000e-004	4.4000e-004	4.4000e-004	4.4000e-004	4.4000e-004	0.0000	25.4207	7.7900e-003	0.0000	0.0000	25.5843	
Total	3.3300e-003	0.0144	0.1487	2.7000e-004	0.0569	4.4000e-004	0.0574	0.0156	4.4000e-004	0.0161	25.4207	7.7900e-003	0.0000	0.0000	25.5843	

Mitigated Construction Off-Site

Category	tons/yr															MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
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	4.2000e-004	5.9000e-004	5.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9722	5.0000e-005	0.0000	0.0000	0.9732				
Total	4.2000e-004	5.9000e-004	5.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9722	5.0000e-005	0.0000	0.0000	0.9732				

3.4 Grading - 2017

Unmitigated Construction On-Site

Category	tons/yr															MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Fugitive Dust					0.1821	0.0000	0.1821	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
Off-Road	0.1281	1.4614	0.9829	1.3000e-003	0.0697	0.0697	0.0697	0.0641	0.0641	0.0641	0.0000	120.2752	0.0369	0.0000	0.0000	121.0491				
Total	0.1281	1.4614	0.9829	1.3000e-003	0.1821	0.0697	0.2518	0.0755	0.0641	0.1396	0.0000	120.2752	0.0369	0.0000	0.0000	121.0491				

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	1.4000e-003	1.9700e-003	0.0191	4.0000e-005	3.8200e-003	3.0000e-005	3.8500e-003	1.0200e-003	3.0000e-005	1.0400e-003	0.0000	3.2406	3.2406	1.6000e-004	0.0000	3.2440
Total	1.4000e-003	1.9700e-003	0.0191	4.0000e-005	3.8200e-003	3.0000e-005	3.8500e-003	1.0200e-003	3.0000e-005	1.0400e-003	0.0000	3.2406	3.2406	1.6000e-004	0.0000	3.2440

3.5 Building Construction - 2017

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.4374	3.7232	2.5562	3.7800e-003	0.2512	0.2512	0.2359	0.2359	0.0000	337.6656	0.0831	0.0000	337.6656	0.0831	0.0000	339.4108
Total	0.4374	3.7232	2.5562	3.7800e-003	0.2512	0.2512	0.2359	0.2359	0.0000	337.6656	0.0831	0.0000	337.6656	0.0831	0.0000	339.4108

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.1613	1.3866	1.9323	3.6800e-003	0.1002	0.0201	0.1202	0.0287	0.0184	0.0472	0.0000	329.6581	329.6581	2.5600e-003	0.0000	329.7118
Worker	0.1320	0.1859	1.8003	4.1800e-003	0.3607	2.7500e-003	0.3635	0.0959	2.5400e-003	0.0985	0.0000	305.7023	305.7023	0.0155	0.0000	306.0282

Total	0.2934	1.5724	3.7326	7.8600e-003	0.4609	0.0228	0.4837	0.1247	0.0210	0.1456	0.0000	635.3603	635.3603	0.0181	0.0000	635.7399
-------	--------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	----------	----------	--------	--------	----------

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Off-Road	0.1105	0.4182	2.5136	3.7800e-003	0.0233	0.0233	0.0233	0.0233	0.0233	0.0233	0.0000	337.6651	337.6651	0.0831	0.0000	339.4104
Total	0.1105	0.4182	2.5136	3.7800e-003	0.0233	0.0233	0.0233	0.0233	0.0233	0.0233	0.0000	337.6651	337.6651	0.0831	0.0000	339.4104

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1613	1.3866	1.9323	3.6800e-003	0.1002	0.0201	0.1202	0.0287	0.0184	0.0472	0.0000	329.6581	329.6581	2.5600e-003	0.0000	329.7118
Worker	0.1320	0.1859	1.8003	4.1800e-003	0.3607	2.7500e-003	0.3635	0.0959	2.5400e-003	0.0985	0.0000	305.7023	305.7023	0.0155	0.0000	306.0282
Total	0.2934	1.5724	3.7326	7.8600e-003	0.4609	0.0228	0.4837	0.1247	0.0210	0.1456	0.0000	635.3603	635.3603	0.0181	0.0000	635.7399

3.5 Building Construction - 2018
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Off-Road	0.1841	1.6050	1.2098	1.8500e-003	0.1031	0.1031	0.1031	0.0969	0.0969	0.0969	0.0000	163.3711	163.3711	0.0400	0.0000	164.2107
Total	0.1841	1.6050	1.2098	1.8500e-003	0.1031	0.1031	0.1031	0.0969	0.0969	0.0969	0.0000	163.3711	163.3711	0.0400	0.0000	164.2107

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0715	0.6143	0.8906	1.8000e-003	0.0490	9.0900e-003	0.0581	0.0141	8.3600e-003	0.0224	0.0000	158.5027	158.5027	1.2300e-003	0.0000	158.5285
Worker	0.0580	0.0819	0.7903	2.0400e-003	0.1765	1.3000e-003	0.1778	0.0470	1.2100e-003	0.0482	0.0000	144.0289	144.0289	6.9800e-003	0.0000	144.1754
Total	0.1295	0.6961	1.6809	3.8400e-003	0.2255	0.0104	0.2359	0.0610	9.5700e-003	0.0706	0.0000	302.5315	302.5315	8.2100e-003	0.0000	302.7039

Mitigated Construction On-Site

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

Off-Road	0.0500	0.2006	1.2264	1.8500e-003	0.0104	0.0104	0.0104	0.0104	0.0000	163.3709	163.3709	0.0400	0.0000	164.2105
Total	0.0500	0.2006	1.2264	1.8500e-003	0.0104	0.0104	0.0104	0.0104	0.0000	163.3709	163.3709	0.0400	0.0000	164.2105

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0715	0.6143	0.8906	1.8000e-003	0.0490	9.0900e-003	0.0581	0.0141	8.3600e-003	0.0224	0.0000	158.5027	158.5027	1.2300e-003	0.0000	158.5285
Worker	0.0580	0.0819	0.7903	2.0400e-003	0.1765	1.3000e-003	0.1778	0.0470	1.2100e-003	0.0482	0.0000	144.0289	144.0289	6.9800e-003	0.0000	144.1754
Total	0.1295	0.6961	1.6809	3.8400e-003	0.2255	0.0104	0.2359	0.0610	9.5700e-003	0.0706	0.0000	302.5315	302.5315	8.2100e-003	0.0000	302.7039

3.6 Paving - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0226	0.2403	0.2029	3.1000e-004	0.0131	0.0131	0.0131	0.0121	0.0121	0.0121	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7027
Paving	5.9000e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0285	0.2403	0.2029	3.1000e-004	0.0131	0.0131	0.0131	0.0121	0.0121	0.0121	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7027

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	8.9000e-004	8.5600e-003	2.0000e-005	1.9100e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5600	1.5600	8.0000e-005	0.0000	1.5616
Total	6.3000e-004	8.9000e-004	8.5600e-003	2.0000e-005	1.9100e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5600	1.5600	8.0000e-005	0.0000	1.5616

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	3.8400e-003	0.0167	0.2370	3.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7026
Paving	5.9000e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.7400e-003	0.0167	0.2370	3.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	5.1000e-004	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7026

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	6.3000e-004	8.9000e-004	8.5600e-003	2.0000e-005	1.9100e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5600	1.5600	8.0000e-005	0.0000	1.5616
Total	6.3000e-004	8.9000e-004	8.5600e-003	2.0000e-005	1.9100e-003	1.0000e-005	1.9300e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5600	1.5600	8.0000e-005	0.0000	1.5616

3.7 Architectural Coating - 2018 Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	2.4490				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0281	0.0260	4.0000e-005	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	0.0000	3.5746	3.5746	3.4000e-004	0.0000	3.5817
Total	2.4532	0.0281	0.0260	4.0000e-005	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	0.0000	3.5746	3.5746	3.4000e-004	0.0000	3.5817

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3500e-003	3.3100e-003	0.0320	8.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.8239	5.8239	2.8000e-004	0.0000	5.8298

Total	2.3500e-003	3.3100e-003	0.0320	8.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.8239	5.8239	2.8000e-004	0.0000	5.8298
-------	-------------	-------------	--------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Archit. Coating	2.4490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	1.8000e-003	0.0257	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.5746	3.5746	3.4000e-004	0.0000	3.5817
Total	2.4494	1.8000e-003	0.0257	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.5746	3.5746	3.4000e-004	0.0000	3.5817
	MT/yr															

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3500e-003	3.3100e-003	0.0320	8.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.8239	5.8239	2.8000e-004	0.0000	5.8298
Total	2.3500e-003	3.3100e-003	0.0320	8.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.8239	5.8239	2.8000e-004	0.0000	5.8298
	MT/yr															

Topgolf - Topgolf Complex Construction TAC Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	514.00	Space	0.00	205,600.00	0
Golf Course	13.50	Acre	13.50	588,060.00	0
Racquet Club	71.46	1000sqft	0.00	71,456.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4	Operational Year	2014		

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MMWhr)	641.35	CH4 Intensity (lb/MMWhr)	0.029	N2O Intensity (lb/MMWhr)	0.006
---------------------------------	--------	---------------------------------	-------	---------------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From plan drawings and PD. Structure for hitting bays entered as "Racquet Club"

Construction Phase - Default w/ 7 days/week construction

Architectural Coating -

Construction Off-road Equipment Mitigation - Tier 4 engines for equip > 50hp. BAAQMD BMPs.

Off-road Equipment -

Grading -

Demolition -

Trips and VMT - 0.5mi trip length

tbiConstructionPhase	NumDays	30.00	42.00
tbiConstructionPhase	NumDays	20.00	28.00
tbiConstructionPhase	NumDays	10.00	14.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiConstructionPhase	NumDaysWeek	5.00	7.00
tbiLandUse	LotAcreage	4.63	0.00
tbiLandUse	LotAcreage	1.64	0.00
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	HaulingTripLength	20.00	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	VendorTripLength	7.30	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50

2.0 Emissions Summary

2.1 Overall Construction Unmitigated Construction

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.9248	6.6427	6.8323	6.9200e-003	0.3375	0.3722	0.7097	0.1530	0.3476	0.5006	0.0000	616.7603	616.7603	0.1444	0.0000	619.7932
2018	3.8034	2.1113	2.6165	2.7100e-003	0.0145	0.1199	0.1344	3.9900e-003	0.1126	0.1166	0.0000	235.9856	235.9856	0.0507	0.0000	237.0492
Total	4.7282	8.7540	9.4488	9.6300e-003	0.3519	0.4921	0.8441	0.1570	0.4602	0.6172	0.0000	852.7459	852.7459	0.1951	0.0000	856.8424

Mitigated Construction

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.4068	1.0485	6.2741	6.9200e-003	0.1678	0.0302	0.1979	0.0406	0.0299	0.0705	0.0000	616.7597	616.7597	0.1444	0.0000	619.7926
2018	3.6468	0.4570	2.6669	2.7100e-003	0.0145	0.0126	0.0270	3.9900e-003	0.0125	0.0164	0.0000	235.9853	235.9853	0.0507	0.0000	237.0489
Total	4.0536	1.5055	8.9410	9.6300e-003	0.1822	0.0428	0.2250	0.0446	0.0424	0.0870	0.0000	852.7450	852.7450	0.1951	0.0000	856.8415

Percent Reduction	Percent Reduction											Percent Reduction				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	14.27	82.80	5.37	0.00	48.23	91.31	73.35	71.59	90.80	85.91	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	1/1/2017	1/27/2017	7	27	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	7	14	
3	Grading	Grading	2/11/2017	3/24/2017	7	42	
4	Building Construction	Building Construction	3/25/2017	5/18/2018	7	420	
5	Paving	Paving	5/19/2018	6/15/2018	7	28	
6	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	7	28	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 105

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 998,526; Non-Residential Outdoor: 332,842 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Building Construction	9	363.00	142.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

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

Off-Road	0.0547	0.5764	0.4576	5.4000e-004	0.0287	0.0287	0.0267	0.0267	0.0000	49.4346	49.4346	0.0136	0.0000	49.7194
Total	0.0547	0.5764	0.4576	5.4000e-004	0.0287	0.0287	0.0267	0.0267	0.0000	49.4346	49.4346	0.0136	0.0000	49.7194

Unmitigated Construction Off-Site

Category	tons/yr														MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
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	5.0000e-004	1.3000e-004	1.7600e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1015	0.1015	1.0000e-005	0.0000	0.1017			
Total	5.0000e-004	1.3000e-004	1.7600e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1015	0.1015	1.0000e-005	0.0000	0.1017			

Mitigated Construction On-Site

Category	tons/yr														MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Off-Road	6.4000e-003	0.0277	0.3217	5.4000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	0.0000	49.4345	49.4345	0.0136	0.0000	49.7193			
Total	6.4000e-003	0.0277	0.3217	5.4000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	8.5000e-004	0.0000	49.4345	49.4345	0.0136	0.0000	49.7193			

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	3.1000e-004	8.0000e-005	1.1000e-003	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0632	0.0632	1.0000e-005	0.0000	0.0633
Total	3.1000e-004	8.0000e-005	1.1000e-003	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0632	0.0632	1.0000e-005	0.0000	0.0633

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0569	0.0000	0.0569	0.0156	0.0000	0.0156	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3300e-003	0.0144	0.1487	2.7000e-004	4.4000e-004	4.4000e-004	4.4000e-004	4.4000e-004	4.4000e-004	4.4000e-004	0.0000	25.4207	25.4207	7.7900e-003	0.0000	25.5843
Total	3.3300e-003	0.0144	0.1487	2.7000e-004	0.0569	4.4000e-004	0.0574	0.0156	4.4000e-004	0.0161	0.0000	25.4207	25.4207	7.7900e-003	0.0000	25.5843

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	3.1000e-004	8.0000e-005	1.1000e-003	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0632	0.0632	1.0000e-005	0.0000	0.0633

Total	3.1000e-004	8.0000e-005	1.1000e-003	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	0.0632	0.0632	1.0000e-005	0.0000	0.0633
-------	-------------	-------------	-------------	--------	-------------	--------	-------------	-------------	--------	--------	--------	-------------	--------	--------

3.4 Grading - 2017

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Fugitive Dust					0.1821	0.0000	0.1821	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1281	1.4614	0.9829	1.3000e-003	0.0697	0.0697	0.0697	0.0641	0.0641	0.0641	0.0000	120.2752	120.2752	0.0369	0.0000	121.0491
Total	0.1281	1.4614	0.9829	1.3000e-003	0.1821	0.0697	0.2518	0.0755	0.0641	0.1396	0.0000	120.2752	120.2752	0.0369	0.0000	121.0491

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	2.7000e-004	3.6500e-003	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2105	0.2105	2.0000e-005	0.0000	0.2109
Total	1.0300e-003	2.7000e-004	3.6500e-003	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2105	0.2105	2.0000e-005	0.0000	0.2109

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					0.0820	0.0000	0.0820	0.0170	0.0000	0.0170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.0688	0.7304	1.3000e-003	2.1200e-003	2.1200e-003	2.1200e-003	2.1200e-003	2.1200e-003	2.1200e-003	0.0000	120.2751	120.2751	0.0369	0.0000	121.0490
Total	0.0159	0.0688	0.7304	1.3000e-003	0.0820	2.1200e-003	0.0841	0.0170	2.1200e-003	0.0191	0.0000	120.2751	120.2751	0.0369	0.0000	121.0490

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	1.0300e-003	2.7000e-004	3.6500e-003	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2105	0.2105	2.0000e-005	0.0000	0.2109
Total	1.0300e-003	2.7000e-004	3.6500e-003	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2105	0.2105	2.0000e-005	0.0000	0.2109

3.5 Building Construction - 2017

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	0.4374	3.7232	2.5562	3.7800e-003	0.2512	0.2512	0.2359	0.2359	0.0000	337.6656	337.6656	0.0831	0.0000	339.4108
Total	0.4374	3.7232	2.5562	3.7800e-003	0.2512	0.2512	0.2359	0.2359	0.0000	337.6656	337.6656	0.0831	0.0000	339.4108

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.1437	0.4857	2.1082	6.8000e-004	9.3200e-003	2.8900e-003	0.0122	2.7200e-003	2.6400e-003	5.3600e-003	0.0000	57.9337	57.9337	8.4000e-004	0.0000	57.9514
Worker	0.1252	0.0331	0.4452	3.5000e-004	0.0193	5.5000e-004	0.0198	5.1900e-003	5.0000e-004	5.6900e-003	0.0000	25.6553	25.6553	2.2400e-003	0.0000	25.7024
Total	0.2689	0.5189	2.5534	1.0300e-003	0.0286	3.4400e-003	0.0320	7.9100e-003	3.1400e-003	0.0111	0.0000	83.5890	83.5890	3.0800e-003	0.0000	83.6538

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1105	0.4182	2.5136	3.7800e-003	0.0233	0.0233	0.0233	0.0233	0.0233	0.0233	0.0000	337.6651	337.6651	0.0831	0.0000	339.4104
Total	0.1105	0.4182	2.5136	3.7800e-003	0.0233	0.0233	0.0233	0.0233	0.0233	0.0233	0.0000	337.6651	337.6651	0.0831	0.0000	339.4104

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
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	0.1437	0.4857	2.1082	6.8000e-004	9.3200e-003	2.8900e-003	0.0122	2.7200e-003	2.6400e-003	5.3600e-003	0.0000	57.9337	57.9337	8.4000e-004	0.0000	57.9514
Worker	0.1252	0.0331	0.4452	3.5000e-004	0.0193	5.5000e-004	0.0198	5.1900e-003	5.0000e-004	5.6900e-003	0.0000	25.6553	25.6553	2.2400e-003	0.0000	25.7024
Total	0.2689	0.5189	2.5534	1.0300e-003	0.0286	3.4400e-003	0.0320	7.9100e-003	3.1400e-003	0.0111	0.0000	83.5890	83.5890	3.0800e-003	0.0000	83.6538
MT/yr																

3.5 Building Construction - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Off-Road	0.1841	1.6050	1.2098	1.8500e-003		0.1031	0.1031		0.0969	0.0969	0.0000	163.3711	163.3711	0.0400	0.0000	164.2107
Total	0.1841	1.6050	1.2098	1.8500e-003		0.1031	0.1031		0.0969	0.0969	0.0000	163.3711	163.3711	0.0400	0.0000	164.2107
MT/yr																

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0619	0.2228	0.9719	3.3000e-004	4.5600e-003	1.2900e-003	5.8500e-003	1.3300e-003	1.1800e-003	2.5100e-003	0.0000	27.8395	27.8395	4.2000e-004	0.0000	27.8482
Worker	0.0567	0.0145	0.1963	1.7000e-004	9.4300e-003	2.7000e-004	9.7000e-003	2.5400e-003	2.5000e-004	2.7900e-003	0.0000	12.0896	12.0896	9.8000e-004	0.0000	12.1103
Total	0.1186	0.2372	1.1682	5.0000e-004	0.0140	1.5600e-003	0.0156	3.8700e-003	1.4300e-003	5.3000e-003	0.0000	39.9290	39.9290	1.4000e-003	0.0000	39.9585

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0500	0.2006	1.2264	1.8500e-003	0.0104	0.0104	0.0104	0.0104	0.0104	0.0104	0.0000	163.3709	163.3709	0.0400	0.0000	164.2105
Total	0.0500	0.2006	1.2264	1.8500e-003	0.0104	0.0104	0.0104	0.0104	0.0104	0.0104	0.0000	163.3709	163.3709	0.0400	0.0000	164.2105

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0619	0.2228	0.9719	3.3000e-004	4.5600e-003	1.2900e-003	5.8500e-003	1.3300e-003	1.1800e-003	2.5100e-003	0.0000	27.8395	27.8395	4.2000e-004	0.0000	27.8482
Worker	0.0567	0.0145	0.1963	1.7000e-004	9.4300e-003	2.7000e-004	9.7000e-003	2.5400e-003	2.5000e-004	2.7900e-003	0.0000	12.0896	12.0896	9.8000e-004	0.0000	12.1103

Total	0.1186	0.2372	1.1682	5.0000e-004	0.0140	1.5600e-003	0.0156	3.8700e-003	1.4300e-003	5.3000e-003	0.0000	39.9290	39.9290	1.4000e-003	0.0000	39.9585
-------	--------	--------	--------	-------------	--------	-------------	--------	-------------	-------------	-------------	--------	---------	---------	-------------	--------	---------

3.6 Paving - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0226	0.2403	0.2029	3.1000e-004	0.0131	0.0131	0.0131	0.0121	0.0121	0.0121	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7027
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2403	0.2029	3.1000e-004	0.0131	0.0131	0.0131	0.0121	0.0121	0.0121	0.0000	28.5162	28.5162	8.8800e-003	0.0000	28.7027

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	INBio- CO2	Total CO2	CH4	N2O	CO2e
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	4.8000e-004	1.2000e-004	1.6500e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1014	0.1014	1.0000e-005	0.0000	0.1015
Total	4.8000e-004	1.2000e-004	1.6500e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1014	0.1014	1.0000e-005	0.0000	0.1015

Mitigated Construction On-Site

Archit. Coating	3.4711					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0281	4.0000e-005	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003
Total	3.4753	0.0281	4.0000e-005	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003	2.1100e-003

Unmitigated Construction Off-Site

Category	tons/yr																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
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	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	0.0000
Worker	2.3100e-003	5.9000e-004	8.0100e-003	1.0000e-005	3.8000e-004	1.0000e-005	4.0000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4933	0.4933	4.0000e-005	0.0000	0.0000	0.4941
Total	2.3100e-003	5.9000e-004	8.0100e-003	1.0000e-005	3.8000e-004	1.0000e-005	4.0000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4933	0.4933	4.0000e-005	0.0000	0.0000	0.4941

Mitigated Construction On-Site

Category	tons/yr																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Archit. Coating	3.4711					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	1.8000e-003	0.0257	4.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	3.5746	3.5746	3.4000e-004	0.0000	0.0000	3.5817
Total	3.4716	1.8000e-003	0.0257	4.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	3.5746	3.5746	3.4000e-004	0.0000	0.0000	3.5817

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3100e-003	5.9000e-004	8.0100e-003	1.0000e-005	3.8000e-004	1.0000e-005	4.0000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4933	0.4933	4.0000e-005	0.0000	0.4941
Total	2.3100e-003	5.9000e-004	8.0100e-003	1.0000e-005	3.8000e-004	1.0000e-005	4.0000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4933	0.4933	4.0000e-005	0.0000	0.4941

Topgolf - Retail/Hotel Construction Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	415.00	Space	0.00	166,000.00	0
Parking Lot	254.00	Space	4.00	101,600.00	0
Hotel	200.00	Room	15.70	100,000.00	0
Strip Mall	110.00	1000sqft	0.00	110,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2014

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MMWhr)	641.35	CH4 Intensity (lb/MMWhr)	0.029	N2O Intensity (lb/MMWhr)	0.006
--------------------------	--------	--------------------------	-------	--------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From plan drawings and PD

Construction Phase - Anticipated phasing schedule provided by applicant. 7 day/week construction

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Trips and VMT - Paving: 25,000cy asphalt @ 16cy/truck = 3,126 trips. Vendor trip length for asphalt.

Demolition - 20,000 tons demo

Grading - 50,000cy import

Architectural Coating -

Construction Off-road Equipment Mitigation - Tier 4 engines for equip > 50hp. BAAQMD BMPs.

Table Name	Column Name	Default Value	New Value
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstructionPhase	PhaseEndDate	12/8/2017	12/6/2017
tblConstructionPhase	PhaseEndDate	2/13/2018	2/9/2018
tblConstructionPhase	PhaseStartDate	5/16/2018	10/21/2018
tblConstructionPhase	PhaseStartDate	2/10/2018	2/7/2018
tblConstructionPhase	PhaseStartDate	9/19/2018	3/7/2018
tblConstructionPhase	PhaseStartDate	11/23/2017	11/21/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	1/7/2018
tblGrading	MaterialImported	0.00	50,000.00
tblLandUse	LandUseSquareFeet	290,400.00	100,000.00
tblLandUse	LotAcreage	3.73	0.00
tblLandUse	LotAcreage	2.29	4.00
tblLandUse	LotAcreage	6.67	15.70
tblLandUse	LotAcreage	2.53	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	5.00

tbIOffRoadEquipment	UsageHours	8.00	4.00
tbIOffRoadEquipment	UsageHours	8.00	2.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	5.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	7.00	5.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbTripsAndVMT	HaulingTripLength	20.00	7.30
tbTripsAndVMT	HaulingTripNumber	0.00	3,126.00

2.0 Emissions Summary

2.1 Overall Construction Unmitigated Construction

Year	tons/yr											MIT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.1422	1.7108	1.3111	3.1500e-003	0.4514	0.0547	0.5061	0.1308	0.0504	0.1813	0.0000	284.9349	284.9349	0.0210	0.0000	285.3755
2018	2.6094	5.3427	5.8673	0.0108	0.4257	0.2775	0.7033	0.1328	0.2607	0.3935	0.0000	916.2471	916.2471	0.1225	0.0000	918.8190
Total	2.7516	7.0535	7.1784	0.0140	0.8771	0.3322	1.2093	0.2637	0.3111	0.5748	0.0000	1,201.1820	1,201.1820	0.1435	0.0000	1,204.1945

Mitigated Construction

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.0728	0.9122	1.1097	3.1500e-003	0.2412	0.0122	0.2534	0.0439	0.0113	0.0552	0.0000	284.9349	284.9349	0.0210	0.0000	285.3754
2018	2.2315	1.5175	6.0849	0.0108	0.3692	0.0255	0.3947	0.0971	0.0241	0.1212	0.0000	916.2465	916.2465	0.1225	0.0000	918.8184
Total	2.3043	2.4297	7.1945	0.0140	0.6104	0.0377	0.6480	0.1410	0.0354	0.1764	0.0000	1,201.1814	1,201.1814	0.1435	0.0000	1,204.1939

Percent Reduction	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
16.25	65.55	-0.23	0.00	0.00	30.41	88.65	46.41	46.54	88.61	69.31	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	11/7/2017	11/22/2017	7	16	
2	Site Preparation	Site Preparation	11/21/2017	12/6/2017	7	16	
3	Grading	Grading	12/7/2017	1/10/2018	7	35	
4	Trenching	Trenching	1/7/2018	2/9/2018	7	34	
5	Building Construction	Building Construction	2/7/2018	9/18/2018	7	224	
6	Paving	Paving	3/7/2018	5/15/2018	7	70	
7	Architectural Coating	Architectural Coating	10/21/2018	12/28/2018	7	69	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 39.38

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 568,572; Non-Residential Outdoor: 189,524 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	6.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	1	6.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Rubber Tired Dozers	2	5.00	255	0.40
Site Preparation	Scrapers	1	5.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Excavators	1	5.00	162	0.38
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Scrapers	1	6.00	361	0.48
Grading	Sweepers/Scrubbers	1	6.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trenching	Rollers	1	6.00	80	0.38
Trenching	Skid Steer Loaders	1	6.00	64	0.37
Trenching	Sweepers/Scrubbers	2	6.00	64	0.46
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	2	4.00	80	0.20
Building Construction	Generator Sets	0	2.00	84	0.74
Building Construction	Other Construction Equipment	2	6.00	171	0.42
Building Construction	Other General Industrial Equipment	2	6.00	87	0.34
Building Construction	Other Material Handling Equipment	1	6.00	167	0.40
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	5.00	97	0.37
Building Construction	Weiders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	4.00	62	0.31
Architectural Coating	Air Compressors	1	5.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	1,978.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	6,250.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	190.00	78.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	3,126.00	12.40	7.30	7.30	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	38.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

3.2 Demolition - 2017

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Biogenic CO2	N2O	CH4	Total CO2	CO2e
	tons/yr														
Fugitive Dust					0.2140	0.0000	0.2140	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000
	MT/yr														

Off-Road	0.0144	0.1413	0.1109	1.3000e-004	8.2600e-003	8.2600e-003	7.7500e-003	7.7500e-003	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040
Total	0.0144	0.1413	0.1109	1.3000e-004	8.2600e-003	0.2223	0.0324	7.7500e-003	0.0402	11.6439	11.6439	2.8600e-003	0.0000	11.7040

Unmitigated Construction Off-Site

Category	tons/yr													MT/yr			
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0193	0.2645	0.2153	7.4000e-004	0.0167	3.3900e-003	0.0201	4.5900e-003	3.1200e-003	7.7100e-003	0.0000	66.6029	66.6029	4.8000e-004	0.0000	66.6131	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.7000e-004	3.8000e-004	3.6300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6173	0.6173	3.0000e-005	0.0000	0.6179	
Total	0.0195	0.2649	0.2190	7.5000e-004	0.0174	3.4000e-003	0.0208	4.7800e-003	3.1300e-003	7.9100e-003	0.0000	67.2202	67.2202	5.1000e-004	0.0000	67.2310	

Mitigated Construction On-Site

Category	tons/yr													MT/yr			
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					0.0963	0.0000	0.0963	7.2900e-003	0.0000	7.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.4800e-003	6.4100e-003	0.0750	1.3000e-004		2.0000e-004	2.0000e-004	2.0000e-004	2.0000e-004	2.0000e-004	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040	
Total	1.4800e-003	6.4100e-003	0.0750	1.3000e-004	0.0963	2.0000e-004	0.0965	7.2900e-003	2.0000e-004	7.4900e-003	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040	

Mitigated Construction Off-Site

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	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	0.0000	0.0000	0.0000
Worker	3.5000e-004	4.9000e-004	4.7300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	0.8024	0.8024	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.8033
Total	3.5000e-004	4.9000e-004	4.7300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	0.8024	0.8024	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.8033

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Fugitive Dust					0.0295	0.0000	0.0295	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4500e-003	0.0106	0.1013	2.0000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	18.6300	18.6300	5.7100e-003	0.0000	18.7498
Total	2.4500e-003	0.0106	0.1013	2.0000e-004	0.0295	3.3000e-004	0.0298	7.5800e-003	3.3000e-004	7.9100e-003	0.0000	18.6300	18.6300	5.7100e-003	0.0000	18.7498

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	4.9000e-004	4.7300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8024	0.8024	4.0000e-005	0.0000	0.8033
Total	3.5000e-004	4.9000e-004	4.7300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8024	0.8024	4.0000e-005	0.0000	0.8033

3.4 Grading - 2017

Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1028	0.0000	0.1028	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0416	0.4563	0.3029	3.8000e-004	0.0232	0.0232	0.0232	0.0213	0.0213	0.0213	0.0000	34.8710	34.8710	0.0107	0.0000	35.0954
Total	0.0416	0.4563	0.3029	3.8000e-004	0.1028	0.0232	0.1259	0.0461	0.0213	0.0675	0.0000	34.8710	34.8710	0.0107	0.0000	35.0954

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0435	0.5970	0.4860	1.6700e-003	0.0491	7.6500e-003	0.0567	0.0131	7.0300e-003	0.0202	0.0000	150.3207	150.3207	1.0900e-003	0.0000	150.3437
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	6.2000e-004	8.8000e-004	8.5200e-003	2.0000e-005	1.7100e-003	1.0000e-005	1.7200e-003	4.5000e-004	1.0000e-005	4.7000e-004	0.0000	1.4467	1.4467	7.0000e-005	0.0000	1.4482
Total	0.0441	0.5978	0.4945	1.6900e-003	0.0508	7.6600e-003	0.0584	0.0136	7.0400e-003	0.0207	0.0000	151.7674	151.7674	1.1600e-003	0.0000	151.7919

Mitigated Construction On-Site

Off-Road	0.0145	0.1572	0.1103	1.5000e-004	7.8500e-003	7.8500e-003	7.2300e-003	7.2300e-003	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8145
Total	0.0145	0.1572	0.1103	1.5000e-004	7.8500e-003	7.8500e-003	7.2300e-003	7.2300e-003	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8145

Unmitigated Construction Off-Site

Category	tons/yr															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0164	0.2170	0.1867	6.7000e-004	0.0434	3.0300e-003	0.0465	0.0111	2.7800e-003	0.0139	0.0000	59.0950	59.0950	4.4000e-004	0.0000	59.1042
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.0600e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5571	0.5571	3.0000e-005	0.0000	0.5577
Total	0.0166	0.2173	0.1898	6.8000e-004	0.0441	3.0400e-003	0.0471	0.0113	2.7800e-003	0.0141	0.0000	59.6521	59.6521	4.7000e-004	0.0000	59.6619

Mitigated Construction On-Site

Category	tons/yr															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0462	0.0000	0.0462	0.0104	0.0000	0.0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0128	0.0861	1.5000e-004		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8144
Total	1.9600e-003	0.0128	0.0861	1.5000e-004	0.0462	2.5000e-004	0.0465	0.0104	2.5000e-004	0.0106	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8144

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0164	0.2170	0.1867	6.7000e-004	0.0434	3.0300e-003	0.0465	0.0111	2.7800e-003	0.0139	0.0000	59.0950	59.0950	4.4000e-004	0.0000	59.1042
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.0600e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5571	0.5571	3.0000e-005	0.0000	0.5577
Total	0.0166	0.2173	0.1898	6.8000e-004	0.0441	3.0400e-003	0.0471	0.0113	2.7800e-003	0.0141	0.0000	59.6521	59.6521	4.7000e-004	0.0000	59.6619

3.5 Trenching - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Off-Road	0.0192	0.1821	0.1531	2.0000e-004	0.0134	0.0134	0.0134	0.0123	0.0123	0.0123	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6933
Total	0.0192	0.1821	0.1531	2.0000e-004	0.0134	0.0134	0.0134	0.0123	0.0123	0.0123	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6933

Unmitigated Construction Off-Site

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

3.6 Building Construction - 2018
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Off-Road	0.3503	3.2556	2.6679	4.0200e-003	0.2067	0.2067	0.2067	0.1951	0.1951	0.1951	0.0000	359.0308	359.0308	0.0819	0.0000	360.7514
Total	0.3503	3.2556	2.6679	4.0200e-003	0.2067	0.2067	0.2067	0.1951	0.1951	0.1951	0.0000	359.0308	359.0308	0.0819	0.0000	360.7514

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0823	0.7070	1.0251	2.0700e-003	0.0564	0.0105	0.0669	0.0162	9.6200e-003	0.0258	0.0000	182.4347	182.4347	1.4100e-003	0.0000	182.4644
Worker	0.0637	0.0899	0.8674	2.2400e-003	0.1938	1.4300e-003	0.1952	0.0515	1.3200e-003	0.0529	0.0000	158.0759	158.0759	7.6600e-003	0.0000	158.2368
Total	0.1459	0.7969	1.8925	4.3100e-003	0.2502	0.0119	0.2621	0.0677	0.0109	0.0786	0.0000	340.5106	340.5106	9.0700e-003	0.0000	340.7012

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	MT/yr															
Off-Road	0.0461	0.1999	2.8444	4.0200e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	0.0000	359.0303	359.0303	0.0819	0.0000	360.7510
Total	0.0461	0.1999	2.8444	4.0200e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	0.0000	359.0303	359.0303	0.0819	0.0000	360.7510

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	0.0823	0.7070	1.0251	2.0700e-003	0.0564	0.0105	0.0669	0.0162	9.6200e-003	0.0258	0.0000	182.4347	182.4347	1.4100e-003	0.0000	182.4644
Worker	0.0637	0.0899	0.8674	2.2400e-003	0.1938	1.4300e-003	0.1952	0.0515	1.3200e-003	0.0529	0.0000	158.0759	158.0759	7.6600e-003	0.0000	158.2368
Total	0.1459	0.7969	1.8925	4.3100e-003	0.2502	0.0119	0.2621	0.0677	0.0109	0.0786	0.0000	340.5106	340.5106	9.0700e-003	0.0000	340.7012

3.7 Paving - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	MT/yr															
Off-Road	0.0478	0.4969	0.4337	6.6000e-004		0.0279	0.0279		0.0258	0.0258	0.0000	60.0014	60.0014	0.0184	0.0000	60.3867

Topgolf - Retail/Hotel Construction Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	415.00	Space	0.00	166,000.00	0
Hotel	200.00	Room	19.70	100,000.00	0
Strip Mall	110.00	1000sqft	0.00	110,000.00	0
Parking Lot	254.00	Space	0.00	101,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2014

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MMWhr)	641.35	CH4 Intensity (lb/MMWhr)	0.029	N2O Intensity (lb/MMWhr)	0.006
--------------------------	--------	--------------------------	-------	--------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From plan drawings and PD

Construction Phase - Anticipated phasing schedule provided by applicant. 7 day/week construction

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Off-road Equipment - Proposed equipment list provided by applicant

Trips and VMT - Paving: 25,000cy asphalt @ 16cy/truck = 3,126 trips. 0.5mi trip lengths

Demolition - 20,000 tons demo

Grading - 50,000cy import

Architectural Coating -

Construction Off-road Equipment Mitigation - Tier 4 engines for equip > 50hp. BAAQMD BMPs.

Table Name	Column Name	Default Value	New Value
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tbiConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final
tbiConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstructionPhase	PhaseEndDate	12/8/2017	12/6/2017
tblConstructionPhase	PhaseEndDate	2/13/2018	2/9/2018
tblConstructionPhase	PhaseStartDate	5/16/2018	10/21/2018
tblConstructionPhase	PhaseStartDate	2/10/2018	2/7/2018
tblConstructionPhase	PhaseStartDate	9/19/2018	3/7/2018
tblConstructionPhase	PhaseStartDate	11/23/2017	11/21/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	1/7/2018
tblGrading	MaterialImported	0.00	50,000.00
tblLandUse	LandUseSquareFeet	290,400.00	100,000.00
tblLandUse	LotAcreage	3.73	0.00
tblLandUse	LotAcreage	6.67	19.70
tblLandUse	LotAcreage	2.53	0.00
tblLandUse	LotAcreage	2.29	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	5.00

tbIOffRoadEquipment	UsageHours	8.00	4.00
tbIOffRoadEquipment	UsageHours	8.00	2.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	5.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	7.00	5.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbIOffRoadEquipment	UsageHours	8.00	6.00
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripLength	20.00	0.50
tbTripsAndVMT	Hauling TripNumber	0.00	3,126.00
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Vendor TripLength	7.30	0.50
tbTripsAndVMT	Worker TripLength	12.40	0.50
tbTripsAndVMT	Worker TripLength	12.40	0.50
tbTripsAndVMT	Worker TripLength	12.40	0.50
tbTripsAndVMT	Worker TripLength	12.40	0.50
tbTripsAndVMT	Worker TripLength	12.40	0.50

tbTripsAndVMT	WorkerTripLength	12.40	0.50
tbTripsAndVMT	WorkerTripLength	12.40	0.50

2.0 Emissions Summary

2.1 Overall Construction Unmitigated Construction

Year	tons/yr										MIT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.1076	0.9342	1.0927	8.3000e-004	0.3841	0.0440	0.4282	0.1127	0.0407	0.1534	0.0000	75.6711	75.6711	0.0195	0.0000	76.0799
2018	2.5448	4.4358	4.8466	5.7000e-003	0.1174	0.2622	0.3797	0.0502	0.2466	0.2967	0.0000	505.1441	505.1441	0.1133	0.0000	507.5232
Total	2.6524	5.3700	5.9393	6.5300e-003	0.5016	0.3063	0.8078	0.1629	0.2872	0.4501	0.0000	580.8151	580.8151	0.1328	0.0000	583.6030

Mitigated Construction

Year	tons/yr										MIT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2017	0.0382	0.1357	0.8913	8.3000e-004	0.1739	1.5700e-003	0.1754	0.0258	1.5400e-003	0.0273	0.0000	75.6710	75.6710	0.0195	0.0000	76.0798
2018	2.1669	0.6106	5.0641	5.7000e-003	0.0609	0.0102	0.0711	0.0144	0.0100	0.0244	0.0000	505.1435	505.1435	0.1133	0.0000	507.5226
Total	2.2051	0.7463	5.9554	6.5300e-003	0.2348	0.0117	0.2465	0.0402	0.0116	0.0517	0.0000	580.8145	580.8145	0.1328	0.0000	583.6024

Percent Reduction	16.86	86.10	-0.27	0.00	53.19	96.17	69.48	75.34	95.98	88.51	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	11/7/2017	11/22/2017	7	16	
2	Site Preparation	Site Preparation	11/21/2017	12/6/2017	7	16	
3	Grading	Grading	12/7/2017	1/10/2018	7	35	
4	Trenching	Trenching	1/7/2018	2/9/2018	7	34	
5	Building Construction	Building Construction	2/7/2018	9/18/2018	7	224	
6	Paving	Paving	3/7/2018	5/15/2018	7	70	
7	Architectural Coating	Architectural Coating	10/21/2018	12/28/2018	7	69	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 39.38

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 568,572; Non-Residential Outdoor: 189,524 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	6.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	1	6.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Rubber Tired Dozers	2	5.00	255	0.40
Site Preparation	Scrapers	1	5.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Excavators	1	5.00	162	0.38

Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Scrapers	1	6.00	361	0.48
Grading	Sweepers/Scrubbers	1	6.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trenching	Rollers	1	6.00	80	0.38
Trenching	Skid Steer Loaders	1	6.00	64	0.37
Trenching	Sweepers/Scrubbers	2	6.00	64	0.46
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	2	4.00	89	0.20
Building Construction	Generator Sets	0	2.00	84	0.74
Building Construction	Other Construction Equipment	2	6.00	171	0.42
Building Construction	Other General Industrial Equipment	2	6.00	87	0.34
Building Construction	Other Material Handling Equipment	1	6.00	167	0.40
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	5.00	97	0.37
Building Construction	Weiders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	4.00	62	0.31
Architectural Coating	Air Compressors	1	5.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	1,978.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT

Site Preparation	5	13.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	6,250.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Building Construction	11	190.00	78.00	0.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	3,126.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	38.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

3.2 Demolition - 2017

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Fugitive Dust					0.2140	0.0000	0.2140	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1413	0.1109	1.3000e-004	8.2600e-003	8.2600e-003	8.2600e-003	7.7500e-003	7.7500e-003	7.7500e-003	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040
Total	0.0144	0.1413	0.1109	1.3000e-004	0.2140	8.2600e-003	0.2223	0.0324	7.7500e-003	0.0402	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	8.7500e-003	0.0265	0.1525	4.0000e-005	4.4000e-004	1.3000e-004	5.7000e-004	1.2000e-004	1.2000e-004	2.4000e-004	0.0000	3.1747	3.1747	6.0000e-005	0.0000	3.1760
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	5.0000e-005	7.0000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0401	0.0401	0.0000	0.0000	0.0402
Total	8.9500e-003	0.0266	0.1532	4.0000e-005	4.7000e-004	1.3000e-004	6.0000e-004	1.3000e-004	1.2000e-004	2.5000e-004	0.0000	3.2148	3.2148	6.0000e-005	0.0000	3.2161

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Fugitive Dust					0.0963	0.0000	0.0963	7.2900e-003	0.0000	7.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4800e-003	6.4100e-003	0.0750	1.3000e-004	2.0000e-004	2.0000e-004	2.0000e-004	2.0000e-004	2.0000e-004	2.0000e-004	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040
Total	1.4800e-003	6.4100e-003	0.0750	1.3000e-004	0.0963	2.0000e-004	0.0965	7.2900e-003	2.0000e-004	7.4900e-003	0.0000	11.6439	11.6439	2.8600e-003	0.0000	11.7040

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	8.7500e-003	0.0265	0.1525	4.0000e-005	4.4000e-004	1.3000e-004	5.7000e-004	1.2000e-004	1.2000e-004	2.4000e-004	0.0000	3.1747	3.1747	6.0000e-005	0.0000	3.1760

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1028	0.0000	0.1028	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0416	0.4563	0.3029	3.8000e-004		0.0232	0.0232		0.0213	0.0213	0.0000	34.8710	0.0107	0.0000	0.0000	35.0954
Total	0.0416	0.4563	0.3029	3.8000e-004	0.1028	0.0232	0.1259	0.0461	0.0213	0.0675	0.0000	34.8710	0.0107	0.0000	0.0000	35.0954

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0187	0.0599	0.3442	9.0000e-005	1.2700e-003	3.0000e-004	1.5700e-003	3.5000e-004	2.7000e-004	6.2000e-004	0.0000	7.1652	1.4000e-004	0.0000	0.0000	7.1681
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	4.6000e-004	1.2000e-004	1.6300e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0940	1.0000e-005	0.0000	0.0000	0.0942
Total	0.0202	0.0600	0.3458	9.0000e-005	1.3400e-003	3.0000e-004	1.6400e-003	3.7000e-004	2.7000e-004	6.4000e-004	0.0000	7.2592	1.5000e-004	0.0000	0.0000	7.2622

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0462	0.0000	0.0462	0.0104	0.0000	0.0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-003	0.0320	0.2151	3.8000e-004		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	34.8710	0.0107	0.0000	0.0000	35.0954

Total	4.8900e-003	0.0320	0.2151	3.8000e-004	0.0462	6.1000e-004	0.0469	0.0104	6.1000e-004	0.0110	0.0000	34.8710	34.8710	0.0107	0.0000	35.0954
-------	-------------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--------	---------	---------	--------	--------	---------

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0197	0.0599	0.3442	9.0000e-005	1.2700e-003	3.0000e-004	1.5700e-003	3.5000e-004	2.7000e-004	6.2000e-004	0.0000	7.1652	7.1652	1.4000e-004	0.0000	7.1681
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	4.6000e-004	1.2000e-004	1.6300e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0940	0.0940	1.0000e-005	0.0000	0.0942
Total	0.0202	0.0600	0.3458	9.0000e-005	1.3400e-003	3.0000e-004	1.6400e-003	3.7000e-004	2.7000e-004	6.4000e-004	0.0000	7.2592	7.2592	1.5000e-004	0.0000	7.2622

3.4 Grading - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1028	0.0000	0.1028	0.0461	0.0000	0.0461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.1572	0.1103	1.5000e-004		7.8500e-003	7.8500e-003		7.2300e-003	7.2300e-003	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8145
Total	0.0145	0.1572	0.1103	1.5000e-004	0.1028	7.8500e-003	0.1106	0.0461	7.2300e-003	0.0534	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8145

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	6.8800e-003	0.0226	0.1307	3.0000e-005	1.1000e-003	1.2000e-004	1.2200e-003	2.8000e-004	1.1000e-004	3.9000e-004	0.0000	2.8119	2.8119	6.0000e-005	0.0000	2.8130
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	1.7000e-004	4.0000e-005	5.9000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0362	0.0362	0.0000	0.0000	0.0363
Total	7.0500e-003	0.0227	0.1313	3.0000e-005	1.1300e-003	1.2000e-004	1.2500e-003	2.9000e-004	1.1000e-004	4.0000e-004	0.0000	2.8481	2.8481	6.0000e-005	0.0000	2.8493

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Fugitive Dust					0.0462	0.0000	0.0462	0.0104	0.0000	0.0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0128	0.0861	1.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8144
Total	1.9600e-003	0.0128	0.0861	1.5000e-004	0.0462	2.5000e-004	0.0465	0.0104	2.5000e-004	0.0106	0.0000	13.7247	13.7247	4.2700e-003	0.0000	13.8144

Mitigated Construction Off-Site

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

Hauling	6.8800e-003	0.0226	0.1307	3.0000e-005	1.1000e-003	1.2000e-004	1.2200e-003	2.8000e-004	1.1000e-004	3.9000e-004	0.0000	2.8119	2.8119	6.0000e-005	0.0000	2.8130
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	1.7000e-004	4.0000e-005	5.9000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0362	0.0362	0.0000	0.0000	0.0363
Total	7.0500e-003	0.0227	0.1313	3.0000e-005	1.1300e-003	1.2000e-004	1.2500e-003	2.9000e-004	1.1000e-004	4.0000e-004	0.0000	2.8481	2.8481	6.0000e-005	0.0000	2.8493

3.5 Trenching - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Off-Road	0.0192	0.1821	0.1531	2.0000e-004		0.0134	0.0134	0.0123		0.0123	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6933
Total	0.0192	0.1821	0.1531	2.0000e-004		0.0134	0.0134	0.0123		0.0123	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6933

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	1.5000e-004	2.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1231	0.1231	1.0000e-005	0.0000	0.1233
Total	5.8000e-004	1.5000e-004	2.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1231	0.1231	1.0000e-005	0.0000	0.1233

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Off-Road	3.6100e-003	0.0568	0.1537	2.0000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6932
Total	3.6100e-003	0.0568	0.1537	2.0000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	18.5718	18.5718	5.7800e-003	0.0000	18.6932

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	1.5000e-004	2.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1231	0.1231	1.0000e-005	0.0000	0.1233
Total	5.8000e-004	1.5000e-004	2.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1231	0.1231	1.0000e-005	0.0000	0.1233

3.6 Building Construction - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	MT/yr															
Off-Road	0.3503	3.2556	2.6679	4.0200e-003	0.2067	0.2067	0.2067	0.1951	0.1951	0.1951	0.0000	359.0308	359.0308	0.0819	0.0000	360.7514
Total	0.3503	3.2556	2.6679	4.0200e-003	0.2067	0.2067	0.2067	0.1951	0.1951	0.1951	0.0000	359.0308	359.0308	0.0819	0.0000	360.7514

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	0.0552	0.1986	0.8666	2.9000e-004	4.0600e-003	1.1500e-003	5.2100e-003	1.1900e-003	1.0500e-003	2.2400e-003	0.0000	24.8220	24.8220	3.7000e-004	0.0000	24.8298
Worker	0.0482	0.0123	0.1668	1.5000e-004	8.0100e-003	2.3000e-004	8.2400e-003	2.1600e-003	2.1000e-004	2.3700e-003	0.0000	10.2714	10.2714	8.4000e-004	0.0000	10.2889
Total	0.1034	0.2109	1.0334	4.4000e-004	0.0121	1.3800e-003	0.0135	3.3500e-003	1.2600e-003	4.6100e-003	0.0000	35.0933	35.0933	1.2100e-003	0.0000	35.1187

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	MT/yr															
Off-Road	0.0461	0.1999	2.8444	4.0200e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	0.0000	359.0303	359.0303	0.0819	0.0000	360.7510

Total	0.0461	0.1999	2.8444	4.0200e-003	6.1500e-003	6.1500e-003	6.1500e-003	6.1500e-003	0.0000	359.0303	359.0303	0.0819	0.0000	360.7510
-------	--------	--------	--------	-------------	-------------	-------------	-------------	-------------	--------	----------	----------	--------	--------	----------

Mitigated Construction Off-Site

Category	tons/yr													MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
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	0.0552	0.1986	0.8666	2.9000e-004	4.0600e-003	1.1500e-003	5.2100e-003	1.1900e-003	1.0500e-003	2.2400e-003	0.0000	24.8220	24.8220	3.7000e-004	0.0000	24.8298		
Worker	0.0482	0.0123	0.1668	1.5000e-004	8.0100e-003	2.3000e-004	8.2400e-003	2.1600e-003	2.1000e-004	2.3700e-003	0.0000	10.2714	10.2714	8.4000e-004	0.0000	10.2889		
Total	0.1034	0.2109	1.0334	4.4000e-004	0.0121	1.3800e-003	0.0135	3.3500e-003	1.2600e-003	4.6100e-003	0.0000	35.0933	35.0933	1.2100e-003	0.0000	35.1187		

3.7 Paving - 2018

Unmitigated Construction On-Site

Category	tons/yr													MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Off-Road	0.0478	0.4969	0.4337	6.6000e-004		0.0279	0.0279		0.0258	0.0258	0.0000	60.0014	60.0014	0.0184	0.0000	60.3867		
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0478	0.4969	0.4337	6.6000e-004		0.0279	0.0279		0.0258	0.0258	0.0000	60.0014	60.0014	0.0184	0.0000	60.3867		

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0121	0.0396	0.2287	6.0000e-005	6.9000e-004	2.0000e-004	9.0000e-004	1.9000e-004	1.9000e-004	3.8000e-004	0.0000	4.9223	4.9223	1.0000e-004	0.0000	4.9244
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	1.1900e-003	3.0000e-004	4.1200e-003	0.0000	2.0000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.2534	0.2534	2.0000e-005	0.0000	0.2538
Total	0.0132	0.0399	0.2329	6.0000e-005	8.9000e-004	2.1000e-004	1.1000e-003	2.4000e-004	2.0000e-004	4.4000e-004	0.0000	5.1757	5.1757	1.2000e-004	0.0000	5.1782

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Off-Road	9.9200e-003	0.0470	0.4959	6.6000e-004	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	0.0000	60.0013	60.0013	0.0184	0.0000	60.3866
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.9200e-003	0.0470	0.4959	6.6000e-004	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	1.5600e-003	0.0000	60.0013	60.0013	0.0184	0.0000	60.3866

Mitigated Construction Off-Site

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

Hauling	0.0121	0.0396	0.2287	6.0000e-005	6.9000e-004	2.0000e-004	9.0000e-004	1.9000e-004	3.8000e-004	0.0000	4.9223	4.9223	1.0000e-004	0.0000	4.9244
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
Worker	1.1900e-003	3.0000e-004	4.1200e-003	0.0000	2.0000e-004	1.0000e-005	2.0000e-004	5.0000e-005	6.0000e-005	0.0000	0.2534	0.2534	2.0000e-005	0.0000	0.2538
Total	0.0132	0.0399	0.2329	6.0000e-005	8.9000e-004	2.1000e-004	1.1000e-003	2.4000e-004	4.4000e-004	0.0000	5.1757	5.1757	1.2000e-004	0.0000	5.1782

3.8 Architectural Coating - 2018 Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Archit. Coating	1.9765			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-003	0.0697	0.0718	1.1000e-004	4.6600e-003	4.6600e-003	4.6600e-003	4.6400e-003	4.6400e-003	4.6400e-003	0.0000	9.9425	9.9425	1.5100e-003	0.0000	9.9741
Total	1.9858	0.0697	0.0718	1.1000e-004	4.6600e-003	4.6600e-003	4.6600e-003	4.6400e-003	4.6400e-003	4.6400e-003	0.0000	9.9425	9.9425	1.5100e-003	0.0000	9.9741

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9700e-003	7.6000e-004	0.0103	1.0000e-005	4.9000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	0.6328	0.6328	5.0000e-005	0.0000	0.6339
Total	2.9700e-003	7.6000e-004	0.0103	1.0000e-005	4.9000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	0.6328	0.6328	5.0000e-005	0.0000	0.6339

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Archit. Coating	1.9765					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0197	0.0743	1.1000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	0.0000	9.9424	9.9424	1.5100e-003	0.0000	9.9741
Total	1.9781	0.0197	0.0743	1.1000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	0.0000	9.9424	9.9424	1.5100e-003	0.0000	9.9741

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9700e-003	7.6000e-004	0.0103	1.0000e-005	4.9000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	0.6328	0.6328	5.0000e-005	0.0000	0.6339
Total	2.9700e-003	7.6000e-004	0.0103	1.0000e-005	4.9000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	0.6328	0.6328	5.0000e-005	0.0000	0.6339

Construction Modeling and Health Risk Calculations Information

Topgolf, Alviso, CA

DPM Construction Emissions and Modeling Emission Rates - Unmitigated

Construction Year	Construction Area	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ²)	DPM Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2017	Area 1 - A	0.0209	A1A_DPM	41.9	0.01274	1.61E-03	31,667	5.07E-08
	Area 1 - B	0.0198	A1B_DPM	39.5	0.01204	1.52E-03	29,907	5.07E-08
		<u>0.0407</u>		<u>81.4</u>	<u>0.02478</u>	<u>3.12E-03</u>	<u>61,574</u>	
2017	Topgolf	0.3476	TG_DPM	695.2	0.21163	2.67E-02	32,229	8.27E-07
2018	Area 1 - A	0.1268	A1A_DPM	253.6	0.07721	9.73E-03	31,667	3.07E-07
	Area 1 - B	0.1198	A1B_DPM	239.6	0.07292	9.19E-03	29,907	3.07E-07
		<u>0.2466</u>		<u>493.2</u>	<u>0.15014</u>	<u>1.89E-02</u>	<u>61,574</u>	
2018	Topgolf	0.1126	TG_DPM	225.2	0.06855	8.64E-03	32,229	2.68E-07
Total	All	0.7475	-	1495	0.4551	0.0573	93,803	-

hr/day = 9 (7am - 4pm)
 days/yr = 365
 hours/year = 3285

PM2.5 Fugitive Dust Construction Emissions for Modeling - Unmitigated

Construction Year	Construction Area	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions			Modeled Area (m ²)	PM2.5 Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2017	Area 1 - A	A1A_FUG	0.05796	115.9	0.03529	4.45E-03	31,667	1.40E-07
	Area 1 - B	A1B_FUG	0.0547	109.5	0.03333	4.20E-03	29,907	1.40E-07
			<u>0.1127</u>	<u>225.4</u>	<u>0.06861</u>	<u>8.65E-03</u>	<u>61,574</u>	
2017	Topgolf	TG_FUG	0.1530	306.0	0.09315	1.17E-02	32,229	3.64E-07
2018	Area 1 - A	A1A_FUG	0.02582	51.6	0.01572	1.98E-03	31,667	6.25E-08
	Area 1 - B	A1B_FUG	0.0244	48.8	0.01484	1.87E-03	29,907	6.25E-08
			<u>0.0502</u>	<u>100.4</u>	<u>0.03056</u>	<u>3.85E-03</u>	<u>61,574</u>	
2018	Topgolf	TG_FUG	0.0040	8.0	0.00243	3.06E-04	32,229	9.50E-09
Total			0.3199	639.8	0.1948	0.0245	93,803	

hr/day = 9 (7am - 4pm)
 days/yr = 365
 hours/year = 3285

DPM Construction Emissions and Modeling Emission Rates - With Mitigation

Construction Year	Construction Area	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ²)	DPM Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2017	Area 1 - A	0.0008	A1A_DPM	1.6	0.00048	6.08E-05	31,667	1.92E-09
	Area 1 - B	0.0007	A1B_DPM	1.5	0.00046	5.74E-05	29,907	1.92E-09
		<u>0.0015</u>		<u>3.1</u>	<u>0.00094</u>	<u>1.18E-04</u>	<u>61,574</u>	
2017	Topgolf	0.0299	TG_DPM	59.8	0.01820	2.29E-03	32,229	7.12E-08
2018	Area 1 - A	0.0051	A1A_DPM	10.3	0.00313	3.95E-04	31,667	1.25E-08
	Area 1 - B	0.0049	A1B_DPM	9.7	0.00296	3.73E-04	29,907	1.25E-08
		<u>0.0100</u>		<u>20.0</u>	<u>0.00609</u>	<u>7.67E-04</u>	<u>61,574</u>	
2018	Topgolf	0.0125	TG_DPM	25.0	0.00761	9.59E-04	32,229	2.98E-08
Total	All	0.0539	-	108	0.0328	0.0041	93,803	-

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

Construction Year	Construction Area	Area Source	PM2.5 Emissions			Modeled Area (m ²)	PM2.5 Emission Rate (g/s/m ²)	
			(ton/year)	(lb/yr)	(lb/hr)			(g/s)
2017	Area 1 - A	A1A_FUG	0.01327	26.5	0.00808	1.02E-03	31,667	3.21E-08
	Area 1 - B	A1B_FUG	0.0125	25.1	0.00763	9.61E-04	29,907	3.21E-08
			<u>0.0258</u>	<u>51.6</u>	<u>0.01571</u>	<u>1.98E-03</u>	<u>61,574</u>	
2017	Topgolf	TG_FUG	0.0406	81.2	0.02472	3.11E-03	32,229	9.66E-08
2018	Area 1 - A	A1A_FUG	0.00741	14.8	0.00451	5.68E-04	31,667	1.79E-08
	Area 1 - B	A1B_FUG	0.0070	14.0	0.00426	5.37E-04	29,907	1.79E-08
			<u>0.0144</u>	<u>28.8</u>	<u>0.00877</u>	<u>1.10E-03</u>	<u>61,574</u>	
2018	Topgolf	TG_FUG	0.0040	8.0	0.00243	3.06E-04	32,229	9.50E-09
Total			0.0848	169.6	0.0516	0.0065	93,803	

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

Topgolf, Alviso, CA - Health Impacts Summary

Construction Health Impact Summary - Residential Receptors Without Mitigation

Construction Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m ³)
	Exhaust PM2.5/DPM (µg/m ³)	Fugitive PM2.5 (µg/m ³)	Infant/Child	Adult		
	2017	0.2077			0.1802	34.1	0.6	0.042	0.388
2018	0.1780	0.0385	29.24	0.5	0.036	0.217
Total	-	-	63.4	1.1	-	-
Maximum Annual	0.2077	0.1802	-	-	0.04	0.39

Construction Health Impact Summary - Residential Receptors With Mitigation

Construction Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m ³)
	Exhaust PM2.5/DPM (µg/m ³)	Fugitive PM2.5 (µg/m ³)	Infant/Child	Adult		
	2017	0.0170			0.0449	2.8	0.05	0.003	0.062
2018	0.0116	0.0129	1.9	0.03	0.002	0.024
Total	-	-	4.7	0.08	-	-
Maximum Annual	0.0170	0.0449	-	-	0.003	0.06

Maximum Impacts at George Mayne Elementary School - Without Mitigation

Construction Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m ³)
	Exhaust PM2.5/DPM (µg/m ³)	Fugitive PM2.5 (µg/m ³)	Child	Adult		
	2017	0.0564			0.0731	1.5	-	0.011	0.130
2018	0.0823	0.0222	2.1	-	0.016	0.104
Total	-	-	3.6	-	-	-
Maximum Annual	0.0823	0.0731	-	-	0.016	0.13

Topgolf, Alviso, CA - Construction Impacts - Unmitigated Emissions
Maximum DPM Cancer Risk Calculations From Construction
Off-Site Residential Receptor Locations - 1.5 meters receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Fugitive PM2.5	Total PM2.5	
			DPM Conc (ug/m3)			Modeled	Age Sensitivity					
			Year	Annual				Year				Annual
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-	-	
1	1	0 - 1	2017	0.2077	10	34.12	2017	0.20771	1	0.60	0.1802	0.388
2	1	1 - 2	2018	0.1780	10	29.24	2018	0.17801	1	0.51	0.0385	0.217
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						63.4				1.1		

* Third trimester of pregnancy

Topgolf, Alviso, CA - Construction Impacts - Mitigated Emissions
Maximum DPM Cancer Risk Calculations From Construction
Off-Site Residential Receptor Locations - 1.5 meter Receptor Height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Fugitive PM2.5	Total PM2.5		
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled DPM Conc (ug/m3)				Age Sensitivity Factor	Adult Cancer Risk (per million)
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-		
1	1	0 - 1	2017	0.0170	10	2.78	2017	0.0170	1	0.05	0.0449	0.062
2	1	1 - 2	2018	0.0116	10	1.90	2018	0.0116	1	0.03	0.0129	0.024
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						4.7				0.08		

* Third trimester of pregnancy

Topgolf, Alviso, CA - Construction Impacts - Unmitigated Emissions
Maximum DPM Cancer Risk Calculations From Construction
George Mayne Elementary School Receptors - 1.0 meters - Child Exposures

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age -->	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Student - Exposure Information			Student Cancer Risk (per million)
		DPM Conc (ug/m3)		Age*	
		Year	Annual	Sensitivity Factor	
1	1	2017	0.0564	3	1.46
2	1	2018	0.0823	3	2.13
Total Increased Cancer Risk					3.6

Fugitive PM2.5 **Total PM2.5**
 0.0731 0.130
 0.0222 0.104

* Students assumed to be less than 16 years of age

2017 DPM & Fugitive PM2.5 Model Input/Output- Residential Receptors

```

**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2017.INP
**
*****
**
**
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO Residential Receptors
MODELOPT DFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.50
RUNORNOT RUN
ERRORFIL TOPGOL~1.ERR
CO FINISHED
**
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2017 DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2017 Fugitive PM2.5
LOCATION A1B DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2017 DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2017 Fugitive PM2.5
LOCATION TG DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 5.07E-08 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 1.4E-07 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 5.07E-08 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 1.4E-07 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 8.27E-07 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 3.64E-07 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

```

```

EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL

```

SO FINISHED

**

** ISCST3 Receptor Pathway

**

**

RE STARTING

** DESCRREC "" ""

DISCCART	591115.96	4142496.03	1.50
DISCCART	591096.17	4142502.50	1.50
DISCCART	591077.52	4142507.82	1.50
DISCCART	591058.50	4142513.53	1.50
DISCCART	591040.23	4142518.86	1.50
DISCCART	591020.07	4142524.57	1.50
DISCCART	591001.42	4142531.04	1.50
DISCCART	590982.77	4142537.12	1.50
DISCCART	591138.41	4142481.19	1.50
DISCCART	591142.97	4142499.45	1.50
DISCCART	591148.30	4142518.48	1.50
DISCCART	591123.19	4142520.00	1.50
DISCCART	591104.16	4142525.71	1.50
DISCCART	591084.75	4142531.42	1.50
DISCCART	591065.73	4142537.12	1.50
DISCCART	591046.70	4142542.07	1.50
DISCCART	591027.30	4142548.54	1.50
DISCCART	591009.03	4142554.63	1.50
DISCCART	591152.11	4142551.58	1.50
DISCCART	591156.29	4142570.61	1.50
DISCCART	591127.37	4142566.42	1.50
DISCCART	591109.11	4142572.51	1.50
DISCCART	591090.08	4142577.08	1.50
DISCCART	591070.68	4142583.55	1.50
DISCCART	591052.79	4142588.50	1.50
DISCCART	591032.24	4142594.96	1.50
DISCCART	591145.26	4142586.97	1.50
DISCCART	591126.23	4142592.30	1.50
DISCCART	591107.21	4142597.63	1.50
DISCCART	591088.94	4142602.95	1.50
DISCCART	591068.39	4142609.42	1.50
DISCCART	590876.61	4142572.13	1.50
DISCCART	590899.06	4142588.50	1.50
DISCCART	590920.75	4142605.24	1.50
DISCCART	590939.78	4142624.26	1.50
DISCCART	590960.32	4142642.15	1.50
DISCCART	590980.49	4142658.51	1.50
DISCCART	591001.42	4142676.40	1.50
DISCCART	591031.10	4142698.09	1.50
DISCCART	590848.07	4142584.31	1.50
DISCCART	590851.87	4142600.67	1.50
DISCCART	590874.33	4142614.75	1.50
DISCCART	590893.73	4142634.92	1.50
DISCCART	590912.76	4142653.94	1.50
DISCCART	590932.55	4142671.83	1.50
DISCCART	590952.71	4142690.09	1.50
DISCCART	590971.36	4142709.50	1.50
DISCCART	590850.35	4142666.12	1.50
DISCCART	590870.52	4142683.63	1.50
DISCCART	590892.59	4142700.37	1.50
DISCCART	590912.38	4142714.07	1.50
DISCCART	590827.52	4142693.14	1.50
DISCCART	590854.54	4142720.16	1.50
DISCCART	590878.13	4142740.32	1.50
DISCCART	590900.20	4142759.35	1.50
DISCCART	590773.11	4142712.93	1.50
DISCCART	590789.47	4142723.96	1.50
DISCCART	590823.72	4142755.54	1.50
DISCCART	590844.26	4142774.57	1.50
DISCCART	590738.48	4142741.85	1.50
DISCCART	590751.04	4142755.16	1.50
DISCCART	590765.50	4142767.34	1.50
DISCCART	590773.49	4142678.30	1.50
DISCCART	590755.22	4142677.92	1.50
DISCCART	590742.28	4142679.44	1.50
DISCCART	590726.68	4142679.06	1.50
DISCCART	590689.39	4142171.44	1.50
DISCCART	590682.92	4142156.98	1.50
DISCCART	590678.74	4142139.86	1.50
DISCCART	590724.78	4142165.35	1.50
DISCCART	590754.84	4142160.41	1.50

DISCCART	590784.14	4142156.22	1.50
DISCCART	590816.49	4142153.56	1.50
DISCCART	590841.60	4142151.66	1.50
DISCCART	590836.27	4142126.54	1.50
DISCCART	590805.07	4142129.20	1.50
DISCCART	590776.91	4142134.15	1.50
DISCCART	590743.43	4142139.10	1.50
DISCCART	590714.51	4142141.00	1.50
DISCCART	590899.44	4142140.24	1.50
DISCCART	590929.12	4142137.96	1.50
DISCCART	590959.94	4142126.92	1.50
DISCCART	590986.96	4142116.27	1.50
DISCCART	590896.78	4142118.93	1.50
DISCCART	590927.60	4142112.84	1.50
DISCCART	590955.00	4142103.33	1.50
DISCCART	590970.22	4142092.29	1.50
DISCCART	590983.92	4142082.40	1.50
DISCCART	590987.72	4142065.28	1.50
DISCCART	591000.66	4142098.00	1.50
DISCCART	591014.36	4142069.84	1.50
DISCCART	590780.72	4142100.67	1.50
DISCCART	590806.59	4142102.19	1.50
DISCCART	590843.12	4142099.52	1.50
DISCCART	590875.47	4142093.82	1.50
DISCCART	590907.43	4142090.77	1.50
DISCCART	590943.20	4142081.26	1.50
DISCCART	591503.99	4142382.16	1.50
DISCCART	591537.80	4142385.06	1.50
DISCCART	591459.55	4141782.24	1.50
DISCCART	591491.43	4141786.59	1.50
DISCCART	591523.31	4141787.07	1.50
DISCCART	591550.84	4141786.59	1.50
DISCCART	591580.31	4141787.07	1.50
DISCCART	591608.81	4141787.56	1.50
DISCCART	591638.27	4141792.87	1.50
DISCCART	591668.70	4141802.53	1.50
DISCCART	591009.59	4142041.64	1.50
DISCCART	590998.13	4142018.71	1.50
DISCCART	590991.25	4141992.10	1.50
DISCCART	590982.07	4141965.50	1.50
DISCCART	590979.78	4142038.43	1.50
DISCCART	590972.90	4142015.49	1.50
DISCCART	590964.64	4141989.35	1.50
DISCCART	590965.56	4141951.73	1.50
DISCCART	590947.21	4141956.32	1.50
DISCCART	590944.46	4141980.63	1.50
DISCCART	590864.92	4142387.88	1.50
DISCCART	590854.14	4142373.71	1.50
DISCCART	590804.24	4142384.03	1.50
DISCCART	590789.77	4142384.95	1.50
DISCCART	590776.99	4142386.80	1.50
DISCCART	590761.90	4142387.26	1.50
DISCCART	590747.89	4142390.50	1.50
DISCCART	590736.95	4142389.88	1.50
DISCCART	590724.94	4142389.73	1.50
DISCCART	590688.75	4142442.54	1.50
DISCCART	590683.83	4142430.07	1.50
DISCCART	590687.83	4142456.25	1.50
DISCCART	590687.83	4142473.34	1.50
DISCCART	590690.91	4142486.74	1.50
DISCCART	590690.76	4142504.76	1.50
DISCCART	590730.33	4142593.61	1.50
DISCCART	590618.38	4142553.42	1.50
DISCCART	590613.45	4142595.30	1.50
DISCCART	590570.95	4142579.59	1.50
DISCCART	590686.14	4142609.00	1.50
DISCCART	590657.03	4142612.85	1.50
DISCCART	590623.93	4142620.09	1.50
DISCCART	590638.40	4142620.25	1.50
DISCCART	590661.34	4142594.53	1.50
DISCCART	590646.25	4142597.15	1.50
DISCCART	590630.09	4142595.61	1.50
DISCCART	590660.27	4142665.21	1.50
DISCCART	590639.79	4142681.38	1.50
DISCCART	590628.55	4142681.07	1.50
DISCCART	590617.77	4142685.23	1.50
DISCCART	590608.37	4142686.15	1.50
DISCCART	590675.67	4142678.45	1.50
DISCCART	590689.83	4142688.31	1.50
DISCCART	590686.14	4142721.88	1.50
DISCCART	590663.81	4142736.51	1.50
DISCCART	590645.79	4142735.12	1.50
DISCCART	590632.24	4142737.89	1.50
DISCCART	590612.38	4142734.66	1.50
DISCCART	590612.84	4142725.73	1.50
DISCCART	590627.62	4142716.95	1.50
DISCCART	590655.65	4142716.03	1.50

RE FINISHED

**

** ISCST3 Meteorology Pathway

**

**

ME STARTING

INPUTFIL C:\PROJEC-1\I&R\METDAT-1\Alviso\alv96-00.asc

```
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996
ME FINISHED
**
*****
** ISCST3 Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE PERIOD ALL TOPGOL~1.IS\PE00GALL.PLT 31
  PLOTFILE PERIOD DPM TOPGOL~1.IS\PE00G001.PLT 32
  PLOTFILE PERIOD FugPM TOPGOL~1.IS\PE00G002.PLT 33
OU FINISHED

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


**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.50700E-07	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.14000E-06	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.50700E-07	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.14000E-06	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.82700E-06	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.36400E-06	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

(591014.4, 4142069.8, 0.0, 1.5);	(590780.8, 4142100.8, 0.0, 1.5);
(590806.6, 4142102.2, 0.0, 1.5);	(590843.1, 4142099.5, 0.0, 1.5);
(590875.5, 4142093.8, 0.0, 1.5);	(590907.4, 4142090.8, 0.0, 1.5);
(590943.2, 4142081.3, 0.0, 1.5);	(591504.0, 4142382.2, 0.0, 1.5);
(591537.8, 4142385.0, 0.0, 1.5);	(591459.6, 4141782.3, 0.0, 1.5);
(591491.4, 4141786.5, 0.0, 1.5);	(591523.3, 4141787.0, 0.0, 1.5);
(591550.8, 4141786.5, 0.0, 1.5);	(591580.3, 4141787.0, 0.0, 1.5);
(591608.8, 4141787.5, 0.0, 1.5);	(591638.2, 4141792.8, 0.0, 1.5);
(591668.7, 4141802.5, 0.0, 1.5);	(591009.6, 4142041.8, 0.0, 1.5);
(590998.1, 4142018.8, 0.0, 1.5);	(590991.2, 4141992.0, 0.0, 1.5);
(590982.1, 4141965.5, 0.0, 1.5);	(590979.8, 4142038.5, 0.0, 1.5);
(590972.9, 4142015.5, 0.0, 1.5);	(590964.6, 4141989.2, 0.0, 1.5);
(590965.6, 4141951.8, 0.0, 1.5);	(590947.2, 4141956.2, 0.0, 1.5);
(590944.4, 4141980.8, 0.0, 1.5);	(590864.9, 4142388.0, 0.0, 1.5);
(590854.1, 4142373.8, 0.0, 1.5);	(590804.2, 4142384.0, 0.0, 1.5);
(590789.8, 4142385.0, 0.0, 1.5);	(590777.0, 4142386.8, 0.0, 1.5);
(590761.9, 4142387.2, 0.0, 1.5);	(590747.9, 4142390.5, 0.0, 1.5);
(590736.9, 4142390.0, 0.0, 1.5);	(590724.9, 4142389.8, 0.0, 1.5);
(590688.8, 4142442.5, 0.0, 1.5);	(590683.8, 4142430.0, 0.0, 1.5);
(590687.8, 4142456.3, 0.0, 1.5);	(590687.8, 4142473.2, 0.0, 1.5);
(590690.9, 4142486.8, 0.0, 1.5);	(590690.8, 4142504.8, 0.0, 1.5);
(590730.3, 4142593.5, 0.0, 1.5);	(590618.4, 4142553.5, 0.0, 1.5);
(590613.4, 4142595.3, 0.0, 1.5);	(590570.9, 4142579.5, 0.0, 1.5);
(590686.1, 4142609.0, 0.0, 1.5);	(590657.0, 4142612.8, 0.0, 1.5);
(590623.9, 4142620.0, 0.0, 1.5);	(590638.4, 4142620.2, 0.0, 1.5);
(590661.3, 4142594.5, 0.0, 1.5);	(590646.3, 4142597.2, 0.0, 1.5);
(590630.1, 4142595.5, 0.0, 1.5);	(590660.2, 4142665.3, 0.0, 1.5);
(590639.8, 4142681.5, 0.0, 1.5);	(590628.6, 4142681.0, 0.0, 1.5);
(590617.8, 4142685.2, 0.0, 1.5);	(590608.4, 4142686.2, 0.0, 1.5);
(590675.7, 4142678.5, 0.0, 1.5);	(590689.8, 4142688.2, 0.0, 1.5);
(590686.1, 4142722.0, 0.0, 1.5);	(590663.8, 4142736.5, 0.0, 1.5);
(590645.8, 4142735.0, 0.0, 1.5);	(590632.2, 4142738.0, 0.0, 1.5);
(590612.4, 4142734.8, 0.0, 1.5);	(590612.8, 4142725.8, 0.0, 1.5);
(590627.6, 4142717.0, 0.0, 1.5);	(590655.6, 4142716.0, 0.0, 1.5);

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
96	01	01	01	212.7	1.56	283.5	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.15969	591096.19	4142502.50	0.17186
591077.50	4142507.75	0.18306	591058.50	4142513.50	0.19235
591040.25	4142518.75	0.20024	591020.06	4142524.50	0.20663
591001.44	4142531.00	0.20771	590982.75	4142537.00	0.20666
591138.44	4142481.25	0.15261	591143.00	4142499.50	0.12721
591148.31	4142518.50	0.10602	591123.19	4142520.00	0.12554
591104.19	4142525.75	0.13618	591084.75	4142531.50	0.14637
591065.75	4142537.00	0.15569	591046.69	4142542.00	0.16473
591027.31	4142548.50	0.17047	591009.00	4142554.75	0.17355
591152.13	4142551.50	0.08255	591156.31	4142570.50	0.07148
591127.38	4142566.50	0.08765	591109.12	4142572.50	0.09424
591090.06	4142577.00	0.10243	591070.69	4142583.50	0.10944
591052.81	4142588.50	0.11610	591032.25	4142595.00	0.12208
591145.25	4142587.00	0.06923	591126.25	4142592.25	0.07494
591107.19	4142597.75	0.08107	591088.94	4142603.00	0.08722
591068.38	4142609.50	0.09375	590876.62	4142572.25	0.15558
590899.06	4142588.50	0.15537	590920.75	4142605.25	0.14596
590939.75	4142624.25	0.13081	590960.31	4142642.25	0.11469
590980.50	4142658.50	0.09921	591001.44	4142676.50	0.08405
591031.13	4142698.00	0.06704	590848.06	4142584.25	0.13490
590851.88	4142600.75	0.13176	590874.31	4142614.75	0.13406
590893.75	4142635.00	0.12634	590912.75	4142654.00	0.11526
590932.56	4142671.75	0.10311	590952.69	4142690.00	0.09023
590971.38	4142709.50	0.07748	590850.38	4142666.00	0.10735
590870.50	4142683.75	0.10214	590892.56	4142700.25	0.09439
590912.38	4142714.00	0.08646	590827.50	4142693.25	0.09481
590854.56	4142720.25	0.08821	590878.12	4142740.25	0.08023
590900.19	4142759.25	0.07159	590773.12	4142713.00	0.08002
590789.50	4142724.00	0.08114	590823.75	4142755.50	0.07710
590844.25	4142774.50	0.07174	590738.50	4142741.75	0.06893
590751.06	4142755.25	0.06943	590765.50	4142767.25	0.06973
590773.50	4142678.25	0.08569	590755.25	4142678.00	0.08062
590742.25	4142679.50	0.07680	590726.69	4142679.00	0.07251
590689.38	4142171.50	0.01153	590682.94	4142157.00	0.01088
590678.75	4142139.75	0.01042	590724.75	4142165.25	0.01312
590754.81	4142160.50	0.01482	590784.12	4142156.25	0.01685
590816.50	4142153.50	0.01956	590841.62	4142151.75	0.02187
590836.25	4142126.50	0.01977	590805.06	4142129.25	0.01752
590776.94	4142134.25	0.01560	590743.44	4142139.00	0.01353
590714.50	4142141.00	0.01204	590899.44	4142140.25	0.02714

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
 INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.03177	590959.94	4142127.00	0.03747
590986.94	4142116.25	0.04346	590896.75	4142119.00	0.02473
590927.62	4142112.75	0.02853	590955.00	4142103.25	0.03259
590970.25	4142092.25	0.03444	590983.94	4142082.50	0.03611
590987.75	4142065.25	0.03407	591000.69	4142098.00	0.04397
591014.38	4142069.75	0.04190	590780.75	4142100.75	0.01479
590806.56	4142102.25	0.01639	590843.12	4142099.50	0.01853
590875.50	4142093.75	0.02056	590907.44	4142090.75	0.02357
590943.19	4142081.25	0.02760	591504.00	4142382.25	0.02292
591537.81	4142385.00	0.01971	591459.56	4141782.25	0.05478
591491.44	4141786.50	0.05795	591523.31	4141787.00	0.05995
591550.81	4141786.50	0.06121	591580.31	4141787.00	0.06261
591608.81	4141787.50	0.06372	591638.25	4141792.75	0.06570
591668.69	4141802.50	0.06820	591009.56	4142041.75	0.03484
590998.12	4142018.75	0.02896	590991.25	4141992.00	0.02470
590982.06	4141965.50	0.02111	590979.75	4142038.50	0.02863
590972.88	4142015.50	0.02490	590964.63	4141989.25	0.02140
590965.56	4141951.75	0.01850	590947.19	4141956.25	0.01735
590944.44	4141980.75	0.01881	590864.94	4142388.00	0.10876
590854.12	4142373.75	0.08822	590804.25	4142384.00	0.06352
590789.75	4142385.00	0.05613	590777.00	4142386.75	0.05042
590761.88	4142387.25	0.04384	590747.88	4142390.50	0.03919
590736.94	4142390.00	0.03557	590724.94	4142389.75	0.03243
590688.75	4142442.50	0.03177	590683.81	4142430.00	0.02920
590687.81	4142456.25	0.03378	590687.81	4142473.25	0.03710
590690.94	4142486.75	0.04119	590690.75	4142504.75	0.04564
590730.31	4142593.50	0.07817	590618.38	4142553.50	0.03445
590613.44	4142595.25	0.03806	590570.94	4142579.50	0.02873
590686.12	4142609.00	0.06211	590657.00	4142612.75	0.05203
590623.94	4142620.00	0.04306	590638.38	4142620.25	0.04699
590661.31	4142594.50	0.05159	590646.25	4142597.25	0.04703
590630.06	4142595.50	0.04219	590660.25	4142665.25	0.05507
590639.81	4142681.50	0.04982	590628.56	4142681.00	0.04716
590617.75	4142685.25	0.04480	590608.38	4142686.25	0.04284
590675.69	4142678.50	0.05894	590689.81	4142688.25	0.06215
590686.12	4142722.00	0.05952	590663.81	4142736.50	0.05408
590645.81	4142735.00	0.05046	590632.25	4142738.00	0.04772
590612.38	4142734.75	0.04397	590612.81	4142725.75	0.04408
590627.63	4142717.00	0.04704	590655.62	4142716.00	0.05301

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
 INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.15709	591096.19	4142502.50	0.16284
591077.50	4142507.75	0.16890	591058.50	4142513.50	0.17351
591040.25	4142518.75	0.17763	591020.06	4142524.50	0.18090
591001.44	4142531.00	0.18022	590982.75	4142537.00	0.17937
591138.44	4142481.25	0.16178	591143.00	4142499.50	0.12938
591148.31	4142518.50	0.10448	591123.19	4142520.00	0.11892
591104.19	4142525.75	0.12460	591084.75	4142531.50	0.12992
591065.75	4142537.00	0.13475	591046.69	4142542.00	0.13963
591027.31	4142548.50	0.14187	591009.00	4142554.75	0.14279
591152.13	4142551.50	0.07733	591156.31	4142570.50	0.06534
591127.38	4142566.50	0.07871	591109.12	4142572.50	0.08250
591090.06	4142577.00	0.08739	591070.69	4142583.50	0.09087
591052.81	4142588.50	0.09436	591032.25	4142595.00	0.09728
591145.25	4142587.00	0.06166	591126.25	4142592.25	0.06561
591107.19	4142597.75	0.06943	591088.94	4142603.00	0.07299
591068.38	4142609.50	0.07645	590876.62	4142572.25	0.15558
590899.06	4142588.50	0.13546	590920.75	4142605.25	0.11829
590939.75	4142624.25	0.10189	590960.31	4142642.25	0.08774
590980.50	4142658.50	0.07571	591001.44	4142676.50	0.06436
591031.13	4142698.00	0.05187	590848.06	4142584.25	0.14503
590851.88	4142600.75	0.12826	590874.31	4142614.75	0.11613
590893.75	4142635.00	0.10160	590912.75	4142654.00	0.08918
590932.56	4142671.75	0.07823	590952.69	4142690.00	0.06802
590971.38	4142709.50	0.05852	590850.38	4142666.00	0.08821
590870.50	4142683.75	0.07975	590892.56	4142700.25	0.07170
590912.38	4142714.00	0.06495	590827.50	4142693.25	0.07759
590854.56	4142720.25	0.06767	590878.12	4142740.25	0.06015
590900.19	4142759.25	0.05328	590773.12	4142713.00	0.07054
590789.50	4142724.00	0.06777	590823.75	4142755.50	0.05918
590844.25	4142774.50	0.05373	590738.50	4142741.75	0.06125
590751.06	4142755.25	0.05887	590765.50	4142767.25	0.05683
590773.50	4142678.25	0.08249	590755.25	4142678.00	0.08190
590742.25	4142679.50	0.08044	590726.69	4142679.00	0.07919
590689.38	4142171.50	0.00969	590682.94	4142157.00	0.00904
590678.75	4142139.75	0.00853	590724.75	4142165.25	0.01126
590754.81	4142160.50	0.01293	590784.12	4142156.25	0.01500
590816.50	4142153.50	0.01776	590841.62	4142151.75	0.02019
590836.25	4142126.50	0.01764	590805.06	4142129.25	0.01531
590776.94	4142134.25	0.01343	590743.44	4142139.00	0.01145
590714.50	4142141.00	0.01007	590899.44	4142140.25	0.02567

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.02985	590959.94	4142127.00	0.03387
590986.94	4142116.25	0.03755	590896.75	4142119.00	0.02273
590927.62	4142112.75	0.02594	590955.00	4142103.25	0.02880
590970.25	4142092.25	0.02965	590983.94	4142082.50	0.03038
590987.75	4142065.25	0.02819	591000.69	4142098.00	0.03665
591014.38	4142069.75	0.03356	590780.75	4142100.75	0.01233
590806.56	4142102.25	0.01397	590843.12	4142099.50	0.01622
590875.50	4142093.75	0.01826	590907.44	4142090.75	0.02101
590943.19	4142081.25	0.02409	591504.00	4142382.25	0.01983
591537.81	4142385.00	0.01658	591459.56	4141782.25	0.03403
591491.44	4141786.50	0.03596	591523.31	4141787.00	0.03718
591550.81	4141786.50	0.03796	591580.31	4141787.00	0.03882
591608.81	4141787.50	0.03952	591638.25	4141792.75	0.04075
591668.69	4141802.50	0.04233	591009.56	4142041.75	0.02775
590998.12	4142018.75	0.02315	590991.25	4141992.00	0.01965
590982.06	4141965.50	0.01673	590979.75	4142038.50	0.02348
590972.88	4142015.50	0.02028	590964.63	4141989.25	0.01732
590965.56	4141951.75	0.01475	590947.19	4141956.25	0.01400
590944.44	4141980.75	0.01535	590864.94	4142388.00	0.19233
590854.12	4142373.75	0.14551	590804.25	4142384.00	0.11337
590789.75	4142385.00	0.09755	590777.00	4142386.75	0.08462
590761.88	4142387.25	0.06701	590747.88	4142390.50	0.05510
590736.94	4142390.00	0.04487	590724.94	4142389.75	0.03710
590688.75	4142442.50	0.03744	590683.81	4142430.00	0.03204
590687.81	4142456.25	0.04232	590687.81	4142473.25	0.05078
590690.94	4142486.75	0.06193	590690.75	4142504.75	0.07233
590730.31	4142593.50	0.15755	590618.38	4142553.50	0.03749
590613.44	4142595.25	0.04243	590570.94	4142579.50	0.02790
590686.12	4142609.00	0.09414	590657.00	4142612.75	0.06893
590623.94	4142620.00	0.05041	590638.38	4142620.25	0.05775
590661.31	4142594.50	0.07027	590646.25	4142597.25	0.05969
590630.06	4142595.50	0.05002	590660.25	4142665.25	0.06710
590639.81	4142681.50	0.05726	590628.56	4142681.00	0.05337
590617.75	4142685.25	0.04959	590608.38	4142686.25	0.04665
590675.69	4142678.50	0.06973	590689.81	4142688.25	0.07034
590686.12	4142722.00	0.06102	590663.81	4142736.50	0.05501
590645.81	4142735.00	0.05229	590632.25	4142738.00	0.04939
590612.38	4142734.75	0.04559	590612.81	4142725.75	0.04626
590627.63	4142717.00	0.05044	590655.62	4142716.00	0.05703

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.31678	591096.19	4142502.50	0.33470
591077.50	4142507.75	0.35196	591058.50	4142513.50	0.36585
591040.25	4142518.75	0.37787	591020.06	4142524.50	0.38752
591001.44	4142531.00	0.38793	590982.75	4142537.00	0.38602
591138.44	4142481.25	0.31439	591143.00	4142499.50	0.25659
591148.31	4142518.50	0.21050	591123.19	4142520.00	0.24446
591104.19	4142525.75	0.26078	591084.75	4142531.50	0.27630
591065.75	4142537.00	0.29044	591046.69	4142542.00	0.30436
591027.31	4142548.50	0.31234	591009.00	4142554.75	0.31634
591152.13	4142551.50	0.15988	591156.31	4142570.50	0.13682
591127.38	4142566.50	0.16636	591109.12	4142572.50	0.17674
591090.06	4142577.00	0.18983	591070.69	4142583.50	0.20031
591052.81	4142588.50	0.21045	591032.25	4142595.00	0.21936
591145.25	4142587.00	0.13088	591126.25	4142592.25	0.14055
591107.19	4142597.75	0.15050	591088.94	4142603.00	0.16021
591068.38	4142609.50	0.17020	590876.62	4142572.25	0.31116
590899.06	4142588.50	0.29082	590920.75	4142605.25	0.26425
590939.75	4142624.25	0.23270	590960.31	4142642.25	0.20243
590980.50	4142658.50	0.17491	591001.44	4142676.50	0.14841
591031.13	4142698.00	0.11890	590848.06	4142584.25	0.27993
590851.88	4142600.75	0.26002	590874.31	4142614.75	0.25019
590893.75	4142635.00	0.22795	590912.75	4142654.00	0.20443
590932.56	4142671.75	0.18134	590952.69	4142690.00	0.15826
590971.38	4142709.50	0.13600	590850.38	4142666.00	0.19556
590870.50	4142683.75	0.18189	590892.56	4142700.25	0.16609
590912.38	4142714.00	0.15141	590827.50	4142693.25	0.17241
590854.56	4142720.25	0.15588	590878.12	4142740.25	0.14038
590900.19	4142759.25	0.12487	590773.12	4142713.00	0.15056
590789.50	4142724.00	0.14891	590823.75	4142755.50	0.13629
590844.25	4142774.50	0.12547	590738.50	4142741.75	0.13018
590751.06	4142755.25	0.12830	590765.50	4142767.25	0.12656
590773.50	4142678.25	0.16818	590755.25	4142678.00	0.16251
590742.25	4142679.50	0.15723	590726.69	4142679.00	0.15171
590689.38	4142171.50	0.02122	590682.94	4142157.00	0.01992
590678.75	4142139.75	0.01895	590724.75	4142165.25	0.02438
590754.81	4142160.50	0.02775	590784.12	4142156.25	0.03185
590816.50	4142153.50	0.03731	590841.62	4142151.75	0.04206
590836.25	4142126.50	0.03741	590805.06	4142129.25	0.03284
590776.94	4142134.25	0.02903	590743.44	4142139.00	0.02499
590714.50	4142141.00	0.02211	590899.44	4142140.25	0.05281

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.06162	590959.94	4142127.00	0.07134
590986.94	4142116.25	0.08101	590896.75	4142119.00	0.04746
590927.62	4142112.75	0.05448	590955.00	4142103.25	0.06139
590970.25	4142092.25	0.06408	590983.94	4142082.50	0.06649
590987.75	4142065.25	0.06226	591000.69	4142098.00	0.08062
591014.38	4142069.75	0.07546	590780.75	4142100.75	0.02712
590806.56	4142102.25	0.03035	590843.12	4142099.50	0.03475
590875.50	4142093.75	0.03881	590907.44	4142090.75	0.04458
590943.19	4142081.25	0.05169	591504.00	4142382.25	0.04275
591537.81	4142385.00	0.03629	591459.56	4141782.25	0.08881
591491.44	4141786.50	0.09391	591523.31	4141787.00	0.09713
591550.81	4141786.50	0.09917	591580.31	4141787.00	0.10143
591608.81	4141787.50	0.10323	591638.25	4141792.75	0.10645
591668.69	4141802.50	0.11052	591009.56	4142041.75	0.06259
590998.12	4142018.75	0.05211	590991.25	4141992.00	0.04435
590982.06	4141965.50	0.03784	590979.75	4142038.50	0.05211
590972.88	4142015.50	0.04518	590964.63	4141989.25	0.03872
590965.56	4141951.75	0.03325	590947.19	4141956.25	0.03135
590944.44	4141980.75	0.03415	590864.94	4142388.00	0.30108
590854.12	4142373.75	0.23373	590804.25	4142384.00	0.17688
590789.75	4142385.00	0.15367	590777.00	4142386.75	0.13504
590761.88	4142387.25	0.11084	590747.88	4142390.50	0.09430
590736.94	4142390.00	0.08044	590724.94	4142389.75	0.06953
590688.75	4142442.50	0.06921	590683.81	4142430.00	0.06124
590687.81	4142456.25	0.07610	590687.81	4142473.25	0.08789
590690.94	4142486.75	0.10313	590690.75	4142504.75	0.11797
590730.31	4142593.50	0.23572	590618.38	4142553.50	0.07193
590613.44	4142595.25	0.08049	590570.94	4142579.50	0.05662
590686.12	4142609.00	0.15625	590657.00	4142612.75	0.12097
590623.94	4142620.00	0.09348	590638.38	4142620.25	0.10474
590661.31	4142594.50	0.12186	590646.25	4142597.25	0.10671
590630.06	4142595.50	0.09221	590660.25	4142665.25	0.12217
590639.81	4142681.50	0.10709	590628.56	4142681.00	0.10053
590617.75	4142685.25	0.09440	590608.38	4142686.25	0.08948
590675.69	4142678.50	0.12867	590689.81	4142688.25	0.13248
590686.12	4142722.00	0.12054	590663.81	4142736.50	0.10909
590645.81	4142735.00	0.10275	590632.25	4142738.00	0.09710
590612.38	4142734.75	0.08956	590612.81	4142725.75	0.09034
590627.63	4142717.00	0.09748	590655.62	4142716.00	0.11004

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.20771 AT (	591001.44,	4142531.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.20666 AT (	590982.75,	4142537.00,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.20663 AT (	591020.06,	4142524.50,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.20024 AT (	591040.25,	4142518.75,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.19235 AT (	591058.50,	4142513.50,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.18306 AT (	591077.50,	4142507.75,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.17355 AT (	591009.00,	4142554.75,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.17186 AT (	591096.19,	4142502.50,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.17047 AT (	591027.31,	4142548.50,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.16473 AT (	591046.69,	4142542.00,	0.00,	1.50) DC NA
FUGPM	1ST HIGHEST VALUE IS	0.19233 AT (	590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.18090 AT (	591020.06,	4142524.50,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.18022 AT (	591001.44,	4142531.00,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.17937 AT (	590982.75,	4142537.00,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.17763 AT (	591040.25,	4142518.75,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.17351 AT (	591058.50,	4142513.50,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.16890 AT (	591077.50,	4142507.75,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.16284 AT (	591096.19,	4142502.50,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.16178 AT (	591138.44,	4142481.25,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.15755 AT (	590730.31,	4142593.50,	0.00,	1.50) DC NA
ALL	1ST HIGHEST VALUE IS	0.38793 AT (	591001.44,	4142531.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.38752 AT (	591020.06,	4142524.50,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.38602 AT (	590982.75,	4142537.00,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.37787 AT (	591040.25,	4142518.75,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.36585 AT (	591058.50,	4142513.50,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.35196 AT (	591077.50,	4142507.75,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.33470 AT (	591096.19,	4142502.50,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.31678 AT (	591115.94,	4142496.00,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.31634 AT (	591009.00,	4142554.75,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.31439 AT (	591138.44,	4142481.25,	0.00,	1.50) DC NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** Residential Receptors

*** 10/27/16
*** 18:36:17
PAGE 17

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***

2018 DPM & Fugitive PM2.5 Model Input/Output- Residential Receptors

```
**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2018.INP
**
*****
**
**
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO Residential Receptors
MODELOPT DFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.50
RUNORNOT RUN
ERRORFIL TOPGOL~2.ERR
CO FINISHED
**
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2018 DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2018 Fugitive PM2.5
LOCATION A1B DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2018 DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2018 Fugitive PM2.5
LOCATION TG DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 3.07E-07 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 6.25E-08 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 3.07E-07 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 6.25E-08 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 2.68E-07 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 9.5E-09 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
```



```

EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL

```

SO FINISHED

**

** ISCST3 Receptor Pathway

**

**

RE STARTING

** DESCRREC "" ""

DISCCART	591115.96	4142496.03	1.50
DISCCART	591096.17	4142502.50	1.50
DISCCART	591077.52	4142507.82	1.50
DISCCART	591058.50	4142513.53	1.50
DISCCART	591040.23	4142518.86	1.50
DISCCART	591020.07	4142524.57	1.50
DISCCART	591001.42	4142531.04	1.50
DISCCART	590982.77	4142537.12	1.50
DISCCART	591138.41	4142481.19	1.50
DISCCART	591142.97	4142499.45	1.50
DISCCART	591148.30	4142518.48	1.50
DISCCART	591123.19	4142520.00	1.50
DISCCART	591104.16	4142525.71	1.50
DISCCART	591084.75	4142531.42	1.50
DISCCART	591065.73	4142537.12	1.50
DISCCART	591046.70	4142542.07	1.50
DISCCART	591027.30	4142548.54	1.50
DISCCART	591009.03	4142554.63	1.50
DISCCART	591152.11	4142551.58	1.50
DISCCART	591156.29	4142570.61	1.50
DISCCART	591127.37	4142566.42	1.50
DISCCART	591109.11	4142572.51	1.50
DISCCART	591090.08	4142577.08	1.50
DISCCART	591070.68	4142583.55	1.50
DISCCART	591052.79	4142588.50	1.50
DISCCART	591032.24	4142594.96	1.50
DISCCART	591145.26	4142586.97	1.50
DISCCART	591126.23	4142592.30	1.50
DISCCART	591107.21	4142597.63	1.50
DISCCART	591088.94	4142602.95	1.50
DISCCART	591068.39	4142609.42	1.50
DISCCART	590876.61	4142572.13	1.50
DISCCART	590899.06	4142588.50	1.50
DISCCART	590920.75	4142605.24	1.50
DISCCART	590939.78	4142624.26	1.50
DISCCART	590960.32	4142642.15	1.50
DISCCART	590980.49	4142658.51	1.50
DISCCART	591001.42	4142676.40	1.50
DISCCART	591031.10	4142698.09	1.50
DISCCART	590848.07	4142584.31	1.50
DISCCART	590851.87	4142600.67	1.50
DISCCART	590874.33	4142614.75	1.50
DISCCART	590893.73	4142634.92	1.50
DISCCART	590912.76	4142653.94	1.50
DISCCART	590932.55	4142671.83	1.50
DISCCART	590952.71	4142690.09	1.50
DISCCART	590971.36	4142709.50	1.50
DISCCART	590850.35	4142666.12	1.50
DISCCART	590870.52	4142683.63	1.50
DISCCART	590892.59	4142700.37	1.50
DISCCART	590912.38	4142714.07	1.50
DISCCART	590827.52	4142693.14	1.50
DISCCART	590854.54	4142720.16	1.50
DISCCART	590878.13	4142740.32	1.50
DISCCART	590900.20	4142759.35	1.50
DISCCART	590773.11	4142712.93	1.50
DISCCART	590789.47	4142723.96	1.50
DISCCART	590823.72	4142755.54	1.50
DISCCART	590844.26	4142774.57	1.50
DISCCART	590738.48	4142741.85	1.50
DISCCART	590751.04	4142755.16	1.50
DISCCART	590765.50	4142767.34	1.50
DISCCART	590773.49	4142678.30	1.50
DISCCART	590755.22	4142677.92	1.50
DISCCART	590742.28	4142679.44	1.50
DISCCART	590726.68	4142679.06	1.50
DISCCART	590689.39	4142171.44	1.50
DISCCART	590682.92	4142156.98	1.50
DISCCART	590678.74	4142139.86	1.50
DISCCART	590724.78	4142165.35	1.50
DISCCART	590754.84	4142160.41	1.50

DISCCART	590784.14	4142156.22	1.50
DISCCART	590816.49	4142153.56	1.50
DISCCART	590841.60	4142151.66	1.50
DISCCART	590836.27	4142126.54	1.50
DISCCART	590805.07	4142129.20	1.50
DISCCART	590776.91	4142134.15	1.50
DISCCART	590743.43	4142139.10	1.50
DISCCART	590714.51	4142141.00	1.50
DISCCART	590899.44	4142140.24	1.50
DISCCART	590929.12	4142137.96	1.50
DISCCART	590959.94	4142126.92	1.50
DISCCART	590986.96	4142116.27	1.50
DISCCART	590896.78	4142118.93	1.50
DISCCART	590927.60	4142112.84	1.50
DISCCART	590955.00	4142103.33	1.50
DISCCART	590970.22	4142092.29	1.50
DISCCART	590983.92	4142082.40	1.50
DISCCART	590987.72	4142065.28	1.50
DISCCART	591000.66	4142098.00	1.50
DISCCART	591014.36	4142069.84	1.50
DISCCART	590780.72	4142100.67	1.50
DISCCART	590806.59	4142102.19	1.50
DISCCART	590843.12	4142099.52	1.50
DISCCART	590875.47	4142093.82	1.50
DISCCART	590907.43	4142090.77	1.50
DISCCART	590943.20	4142081.26	1.50
DISCCART	591503.99	4142382.16	1.50
DISCCART	591537.80	4142385.06	1.50
DISCCART	591459.55	4141782.24	1.50
DISCCART	591491.43	4141786.59	1.50
DISCCART	591523.31	4141787.07	1.50
DISCCART	591550.84	4141786.59	1.50
DISCCART	591580.31	4141787.07	1.50
DISCCART	591608.81	4141787.56	1.50
DISCCART	591638.27	4141792.87	1.50
DISCCART	591668.70	4141802.53	1.50
DISCCART	591009.59	4142041.64	1.50
DISCCART	590998.13	4142018.71	1.50
DISCCART	590991.25	4141992.10	1.50
DISCCART	590982.07	4141965.50	1.50
DISCCART	590979.78	4142038.43	1.50
DISCCART	590972.90	4142015.49	1.50
DISCCART	590964.64	4141989.35	1.50
DISCCART	590965.56	4141951.73	1.50
DISCCART	590947.21	4141956.32	1.50
DISCCART	590944.46	4141980.63	1.50
DISCCART	590864.92	4142387.88	1.50
DISCCART	590854.14	4142373.71	1.50
DISCCART	590804.24	4142384.03	1.50
DISCCART	590789.77	4142384.95	1.50
DISCCART	590776.99	4142386.80	1.50
DISCCART	590761.90	4142387.26	1.50
DISCCART	590747.89	4142390.50	1.50
DISCCART	590736.95	4142389.88	1.50
DISCCART	590724.94	4142389.73	1.50
DISCCART	590688.75	4142442.54	1.50
DISCCART	590683.83	4142430.07	1.50
DISCCART	590687.83	4142456.25	1.50
DISCCART	590687.83	4142473.34	1.50
DISCCART	590690.91	4142486.74	1.50
DISCCART	590690.76	4142504.76	1.50
DISCCART	590730.33	4142593.61	1.50
DISCCART	590618.38	4142553.42	1.50
DISCCART	590613.45	4142595.30	1.50
DISCCART	590570.95	4142579.59	1.50
DISCCART	590686.14	4142609.00	1.50
DISCCART	590657.03	4142612.85	1.50
DISCCART	590623.93	4142620.09	1.50
DISCCART	590638.40	4142620.25	1.50
DISCCART	590661.34	4142594.53	1.50
DISCCART	590646.25	4142597.15	1.50
DISCCART	590630.09	4142595.61	1.50
DISCCART	590660.27	4142665.21	1.50
DISCCART	590639.79	4142681.38	1.50
DISCCART	590628.55	4142681.07	1.50
DISCCART	590617.77	4142685.23	1.50
DISCCART	590608.37	4142686.15	1.50
DISCCART	590675.67	4142678.45	1.50
DISCCART	590689.83	4142688.31	1.50
DISCCART	590686.14	4142721.88	1.50
DISCCART	590663.81	4142736.51	1.50
DISCCART	590645.79	4142735.12	1.50
DISCCART	590632.24	4142737.89	1.50
DISCCART	590612.38	4142734.66	1.50
DISCCART	590612.84	4142725.73	1.50
DISCCART	590627.62	4142716.95	1.50
DISCCART	590655.65	4142716.03	1.50

RE FINISHED

**

** ISCST3 Meteorology Pathway

**

**

ME STARTING

INPUTFIL C:\PROJEC-1\I&R\METDAT-1\Alviso\alv96-00.asc

```
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996
ME FINISHED
**
*****
** ISCST3 Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE PERIOD ALL TOPGOL~2.IS\PE00GALL.PLT 31
  PLOTFILE PERIOD DPM TOPGOL~2.IS\PE00G001.PLT 32
  PLOTFILE PERIOD FugPM TOPGOL~2.IS\PE00G002.PLT 33
OU FINISHED

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


**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.30700E-06	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.62500E-07	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.30700E-06	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.62500E-07	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.26800E-06	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.95000E-08	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

(591014.4, 4142069.8, 0.0, 1.5);	(590780.8, 4142100.8, 0.0, 1.5);
(590806.6, 4142102.2, 0.0, 1.5);	(590843.1, 4142099.5, 0.0, 1.5);
(590875.5, 4142093.8, 0.0, 1.5);	(590907.4, 4142090.8, 0.0, 1.5);
(590943.2, 4142081.3, 0.0, 1.5);	(591504.0, 4142382.2, 0.0, 1.5);
(591537.8, 4142385.0, 0.0, 1.5);	(591459.6, 4141782.3, 0.0, 1.5);
(591491.4, 4141786.5, 0.0, 1.5);	(591523.3, 4141787.0, 0.0, 1.5);
(591550.8, 4141786.5, 0.0, 1.5);	(591580.3, 4141787.0, 0.0, 1.5);
(591608.8, 4141787.5, 0.0, 1.5);	(591638.2, 4141792.8, 0.0, 1.5);
(591668.7, 4141802.5, 0.0, 1.5);	(591009.6, 4142041.8, 0.0, 1.5);
(590998.1, 4142018.8, 0.0, 1.5);	(590991.2, 4141992.0, 0.0, 1.5);
(590982.1, 4141965.5, 0.0, 1.5);	(590979.8, 4142038.5, 0.0, 1.5);
(590972.9, 4142015.5, 0.0, 1.5);	(590964.6, 4141989.2, 0.0, 1.5);
(590965.6, 4141951.8, 0.0, 1.5);	(590947.2, 4141956.2, 0.0, 1.5);
(590944.4, 4141980.8, 0.0, 1.5);	(590864.9, 4142388.0, 0.0, 1.5);
(590854.1, 4142373.8, 0.0, 1.5);	(590804.2, 4142384.0, 0.0, 1.5);
(590789.8, 4142385.0, 0.0, 1.5);	(590777.0, 4142386.8, 0.0, 1.5);
(590761.9, 4142387.2, 0.0, 1.5);	(590747.9, 4142390.5, 0.0, 1.5);
(590736.9, 4142390.0, 0.0, 1.5);	(590724.9, 4142389.8, 0.0, 1.5);
(590688.8, 4142442.5, 0.0, 1.5);	(590683.8, 4142430.0, 0.0, 1.5);
(590687.8, 4142456.3, 0.0, 1.5);	(590687.8, 4142473.2, 0.0, 1.5);
(590690.9, 4142486.8, 0.0, 1.5);	(590690.8, 4142504.8, 0.0, 1.5);
(590730.3, 4142593.5, 0.0, 1.5);	(590618.4, 4142553.5, 0.0, 1.5);
(590613.4, 4142595.3, 0.0, 1.5);	(590570.9, 4142579.5, 0.0, 1.5);
(590686.1, 4142609.0, 0.0, 1.5);	(590657.0, 4142612.8, 0.0, 1.5);
(590623.9, 4142620.0, 0.0, 1.5);	(590638.4, 4142620.2, 0.0, 1.5);
(590661.3, 4142594.5, 0.0, 1.5);	(590646.3, 4142597.2, 0.0, 1.5);
(590630.1, 4142595.5, 0.0, 1.5);	(590660.2, 4142665.3, 0.0, 1.5);
(590639.8, 4142681.5, 0.0, 1.5);	(590628.6, 4142681.0, 0.0, 1.5);
(590617.8, 4142685.2, 0.0, 1.5);	(590608.4, 4142686.2, 0.0, 1.5);
(590675.7, 4142678.5, 0.0, 1.5);	(590689.8, 4142688.2, 0.0, 1.5);
(590686.1, 4142722.0, 0.0, 1.5);	(590663.8, 4142736.5, 0.0, 1.5);
(590645.8, 4142735.0, 0.0, 1.5);	(590632.2, 4142738.0, 0.0, 1.5);
(590612.4, 4142734.8, 0.0, 1.5);	(590612.8, 4142725.8, 0.0, 1.5);
(590627.6, 4142717.0, 0.0, 1.5);	(590655.6, 4142716.0, 0.0, 1.5);

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
 FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
 SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
 NAME: UNKNOWN NAME: UNKNOWN
 YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
96	01	01	01	212.7	1.56	283.5	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
 FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.16067	591096.19	4142502.50	0.16440
591077.50	4142507.75	0.16850	591058.50	4142513.50	0.17185
591040.25	4142518.75	0.17484	591020.06	4142524.50	0.17746
591001.44	4142531.00	0.17801	590982.75	4142537.00	0.17877
591138.44	4142481.25	0.16371	591143.00	4142499.50	0.14155
591148.31	4142518.50	0.12072	591123.19	4142520.00	0.13257
591104.19	4142525.75	0.13676	591084.75	4142531.50	0.14078
591065.75	4142537.00	0.14443	591046.69	4142542.00	0.14802
591027.31	4142548.50	0.14978	591009.00	4142554.75	0.15101
591152.13	4142551.50	0.09402	591156.31	4142570.50	0.08093
591127.38	4142566.50	0.09523	591109.12	4142572.50	0.09886
591090.06	4142577.00	0.10334	591070.69	4142583.50	0.10617
591052.81	4142588.50	0.10906	591032.25	4142595.00	0.11162
591145.25	4142587.00	0.07682	591126.25	4142592.25	0.08127
591107.19	4142597.75	0.08524	591088.94	4142603.00	0.08865
591068.38	4142609.50	0.09173	590876.62	4142572.25	0.17090
590899.06	4142588.50	0.15273	590920.75	4142605.25	0.13518
590939.75	4142624.25	0.11824	590960.31	4142642.25	0.10342
590980.50	4142658.50	0.09095	591001.44	4142676.50	0.07883
591031.13	4142698.00	0.06503	590848.06	4142584.25	0.16509
590851.88	4142600.75	0.15154	590874.31	4142614.75	0.13745
590893.75	4142635.00	0.12073	590912.75	4142654.00	0.10662
590932.56	4142671.75	0.09436	590952.69	4142690.00	0.08307
590971.38	4142709.50	0.07262	590850.38	4142666.00	0.10965
590870.50	4142683.75	0.09834	590892.56	4142700.25	0.08834
590912.38	4142714.00	0.08036	590827.50	4142693.25	0.09901
590854.56	4142720.25	0.08503	590878.12	4142740.25	0.07548
590900.19	4142759.25	0.06723	590773.12	4142713.00	0.09535
590789.50	4142724.00	0.08988	590823.75	4142755.50	0.07614
590844.25	4142774.50	0.06867	590738.50	4142741.75	0.08541
590751.06	4142755.25	0.08074	590765.50	4142767.25	0.07661
590773.50	4142678.25	0.11144	590755.25	4142678.00	0.11282
590742.25	4142679.50	0.11239	590726.69	4142679.00	0.11234
590689.38	4142171.50	0.01269	590682.94	4142157.00	0.01183
590678.75	4142139.75	0.01114	590724.75	4142165.25	0.01490
590754.81	4142160.50	0.01717	590784.12	4142156.25	0.01999
590816.50	4142153.50	0.02368	590841.62	4142151.75	0.02694
590836.25	4142126.50	0.02341	590805.06	4142129.25	0.02020
590776.94	4142134.25	0.01769	590743.44	4142139.00	0.01508
590714.50	4142141.00	0.01323	590899.44	4142140.25	0.03449

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.03973	590959.94	4142127.00	0.04389
590986.94	4142116.25	0.04763	590896.75	4142119.00	0.03059
590927.62	4142112.75	0.03459	590955.00	4142103.25	0.03768
590970.25	4142092.25	0.03843	590983.94	4142082.50	0.03911
590987.75	4142065.25	0.03646	591000.69	4142098.00	0.04619
591014.38	4142069.75	0.04238	590780.75	4142100.75	0.01607
590806.56	4142102.25	0.01836	590843.12	4142099.50	0.02160
590875.50	4142093.75	0.02454	590907.44	4142090.75	0.02822
590943.19	4142081.25	0.03190	591504.00	4142382.25	0.02744
591537.81	4142385.00	0.02300	591459.56	4141782.25	0.04041
591491.44	4141786.50	0.04270	591523.31	4141787.00	0.04419
591550.81	4141786.50	0.04518	591580.31	4141787.00	0.04626
591608.81	4141787.50	0.04716	591638.25	4141792.75	0.04869
591668.69	4141802.50	0.05065	591009.56	4142041.75	0.03581
590998.12	4142018.75	0.03043	590991.25	4141992.00	0.02616
590982.06	4141965.50	0.02250	590979.75	4142038.50	0.03083
590972.88	4142015.50	0.02691	590964.63	4141989.25	0.02320
590965.56	4141951.75	0.01996	590947.19	4141956.25	0.01896
590944.44	4141980.75	0.02068	590864.94	4142388.00	0.23267
590854.12	4142373.75	0.18637	590804.25	4142384.00	0.13517
590789.75	4142385.00	0.11338	590777.00	4142386.75	0.09567
590761.88	4142387.25	0.07458	590747.88	4142390.50	0.05982
590736.94	4142390.00	0.04911	590724.94	4142389.75	0.04094
590688.75	4142442.50	0.03831	590683.81	4142430.00	0.03435
590687.81	4142456.25	0.04218	590687.81	4142473.25	0.04958
590690.94	4142486.75	0.05936	590690.75	4142504.75	0.07158
590730.31	4142593.50	0.15601	590618.38	4142553.50	0.04797
590613.44	4142595.25	0.05790	590570.94	4142579.50	0.03724
590686.12	4142609.00	0.12215	590657.00	4142612.75	0.09466
590623.94	4142620.00	0.07090	590638.38	4142620.25	0.08106
590661.31	4142594.50	0.09324	590646.25	4142597.25	0.08081
590630.06	4142595.50	0.06809	590660.25	4142665.25	0.09854
590639.81	4142681.50	0.08543	590628.56	4142681.00	0.07961
590617.75	4142685.25	0.07407	590608.38	4142686.25	0.06957
590675.69	4142678.50	0.10270	590689.81	4142688.25	0.10321
590686.12	4142722.00	0.08988	590663.81	4142736.50	0.08205
590645.81	4142735.00	0.07877	590632.25	4142738.00	0.07473
590612.38	4142734.75	0.06917	590612.81	4142725.75	0.07011
590627.63	4142717.00	0.07632	590655.62	4142716.00	0.08564

**MODELOPTs:
CONC

RURAL FLAT FLGPOOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.03687	591096.19	4142502.50	0.03694
591077.50	4142507.75	0.03739	591058.50	4142513.50	0.03771
591040.25	4142518.75	0.03810	591020.06	4142524.50	0.03851
591001.44	4142531.00	0.03849	590982.75	4142537.00	0.03884
591138.44	4142481.25	0.04009	591143.00	4142499.50	0.03198
591148.31	4142518.50	0.02582	591123.19	4142520.00	0.02805
591104.19	4142525.75	0.02842	591084.75	4142531.50	0.02881
591065.75	4142537.00	0.02918	591046.69	4142542.00	0.02960
591027.31	4142548.50	0.02961	591009.00	4142554.75	0.02969
591152.13	4142551.50	0.01886	591156.31	4142570.50	0.01579
591127.38	4142566.50	0.01855	591109.12	4142572.50	0.01899
591090.06	4142577.00	0.01960	591070.69	4142583.50	0.01981
591052.81	4142588.50	0.02010	591032.25	4142595.00	0.02033
591145.25	4142587.00	0.01467	591126.25	4142592.25	0.01538
591107.19	4142597.75	0.01594	591088.94	4142603.00	0.01636
591068.38	4142609.50	0.01666	590876.62	4142572.25	0.04139
590899.06	4142588.50	0.03198	590920.75	4142605.25	0.02593
590939.75	4142624.25	0.02147	590960.31	4142642.25	0.01819
590980.50	4142658.50	0.01577	591001.44	4142676.50	0.01356
591031.13	4142698.00	0.01115	590848.06	4142584.25	0.04131
590851.88	4142600.75	0.03421	590874.31	4142614.75	0.02789
590893.75	4142635.00	0.02261	590912.75	4142654.00	0.01905
590932.56	4142671.75	0.01639	590952.69	4142690.00	0.01420
590971.38	4142709.50	0.01232	590850.38	4142666.00	0.02058
590870.50	4142683.75	0.01757	590892.56	4142700.25	0.01530
590912.38	4142714.00	0.01370	590827.50	4142693.25	0.01826
590854.56	4142720.25	0.01479	590878.12	4142740.25	0.01280
590900.19	4142759.25	0.01126	590773.12	4142713.00	0.01817
590789.50	4142724.00	0.01654	590823.75	4142755.50	0.01311
590844.25	4142774.50	0.01155	590738.50	4142741.75	0.01605
590751.06	4142755.25	0.01475	590765.50	4142767.25	0.01366
590773.50	4142678.25	0.02276	590755.25	4142678.00	0.02361
590742.25	4142679.50	0.02375	590726.69	4142679.00	0.02409
590689.38	4142171.50	0.00227	590682.94	4142157.00	0.00210
590678.75	4142139.75	0.00196	590724.75	4142165.25	0.00268
590754.81	4142160.50	0.00310	590784.12	4142156.25	0.00363
590816.50	4142153.50	0.00430	590841.62	4142151.75	0.00490
590836.25	4142126.50	0.00418	590805.06	4142129.25	0.00360
590776.94	4142134.25	0.00314	590743.44	4142139.00	0.00267
590714.50	4142141.00	0.00234	590899.44	4142140.25	0.00630

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00720	590959.94	4142127.00	0.00777
590986.94	4142116.25	0.00824	590896.75	4142119.00	0.00551
590927.62	4142112.75	0.00617	590955.00	4142103.25	0.00661
590970.25	4142092.25	0.00665	590983.94	4142082.50	0.00669
590987.75	4142065.25	0.00619	591000.69	4142098.00	0.00784
591014.38	4142069.75	0.00705	590780.75	4142100.75	0.00279
590806.56	4142102.25	0.00321	590843.12	4142099.50	0.00381
590875.50	4142093.75	0.00435	590907.44	4142090.75	0.00500
590943.19	4142081.25	0.00557	591504.00	4142382.25	0.00496
591537.81	4142385.00	0.00407	591459.56	4141782.25	0.00556
591491.44	4141786.50	0.00587	591523.31	4141787.00	0.00608
591550.81	4141786.50	0.00621	591580.31	4141787.00	0.00636
591608.81	4141787.50	0.00649	591638.25	4141792.75	0.00670
591668.69	4141802.50	0.00698	591009.56	4142041.75	0.00596
590998.12	4142018.75	0.00509	590991.25	4141992.00	0.00437
590982.06	4141965.50	0.00375	590979.75	4142038.50	0.00522
590972.88	4142015.50	0.00454	590964.63	4141989.25	0.00391
590965.56	4141951.75	0.00334	590947.19	4141956.25	0.00319
590944.44	4141980.75	0.00350	590864.94	4142388.00	0.06721
590854.12	4142373.75	0.04988	590804.25	4142384.00	0.04055
590789.75	4142385.00	0.03455	590777.00	4142386.75	0.02955
590761.88	4142387.25	0.02252	590747.88	4142390.50	0.01780
590736.94	4142390.00	0.01371	590724.94	4142389.75	0.01070
590688.75	4142442.50	0.01109	590683.81	4142430.00	0.00909
590687.81	4142456.25	0.01299	590687.81	4142473.25	0.01633
590690.94	4142486.75	0.02077	590690.75	4142504.75	0.02491
590730.31	4142593.50	0.05913	590618.38	4142553.50	0.01110
590613.44	4142595.25	0.01294	590570.94	4142579.50	0.00771
590686.12	4142609.00	0.03314	590657.00	4142612.75	0.02309
590623.94	4142620.00	0.01592	590638.38	4142620.25	0.01872
590661.31	4142594.50	0.02370	590646.25	4142597.25	0.01953
590630.06	4142595.50	0.01580	590660.25	4142665.25	0.02187
590639.81	4142681.50	0.01815	590628.56	4142681.00	0.01677
590617.75	4142685.25	0.01539	590608.38	4142686.25	0.01433
590675.69	4142678.50	0.02239	590689.81	4142688.25	0.02203
590686.12	4142722.00	0.01801	590663.81	4142736.50	0.01621
590645.81	4142735.00	0.01564	590632.25	4142738.00	0.01478
590612.38	4142734.75	0.01366	590612.81	4142725.75	0.01396
590627.63	4142717.00	0.01542	590655.62	4142716.00	0.01743

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.19753	591096.19	4142502.50	0.20134
591077.50	4142507.75	0.20588	591058.50	4142513.50	0.20956
591040.25	4142518.75	0.21294	591020.06	4142524.50	0.21597
591001.44	4142531.00	0.21650	590982.75	4142537.00	0.21761
591138.44	4142481.25	0.20379	591143.00	4142499.50	0.17353
591148.31	4142518.50	0.14654	591123.19	4142520.00	0.16062
591104.19	4142525.75	0.16518	591084.75	4142531.50	0.16959
591065.75	4142537.00	0.17361	591046.69	4142542.00	0.17762
591027.31	4142548.50	0.17939	591009.00	4142554.75	0.18070
591152.13	4142551.50	0.11287	591156.31	4142570.50	0.09672
591127.38	4142566.50	0.11379	591109.12	4142572.50	0.11785
591090.06	4142577.00	0.12294	591070.69	4142583.50	0.12598
591052.81	4142588.50	0.12916	591032.25	4142595.00	0.13196
591145.25	4142587.00	0.09149	591126.25	4142592.25	0.09665
591107.19	4142597.75	0.10118	591088.94	4142603.00	0.10501
591068.38	4142609.50	0.10839	590876.62	4142572.25	0.21229
590899.06	4142588.50	0.18471	590920.75	4142605.25	0.16111
590939.75	4142624.25	0.13970	590960.31	4142642.25	0.12161
590980.50	4142658.50	0.10672	591001.44	4142676.50	0.09239
591031.13	4142698.00	0.07618	590848.06	4142584.25	0.20639
590851.88	4142600.75	0.18575	590874.31	4142614.75	0.16534
590893.75	4142635.00	0.14335	590912.75	4142654.00	0.12567
590932.56	4142671.75	0.11075	590952.69	4142690.00	0.09727
590971.38	4142709.50	0.08494	590850.38	4142666.00	0.13023
590870.50	4142683.75	0.11590	590892.56	4142700.25	0.10363
590912.38	4142714.00	0.09406	590827.50	4142693.25	0.11727
590854.56	4142720.25	0.09982	590878.12	4142740.25	0.08828
590900.19	4142759.25	0.07849	590773.12	4142713.00	0.11352
590789.50	4142724.00	0.10641	590823.75	4142755.50	0.08925
590844.25	4142774.50	0.08022	590738.50	4142741.75	0.10146
590751.06	4142755.25	0.09549	590765.50	4142767.25	0.09026
590773.50	4142678.25	0.13420	590755.25	4142678.00	0.13642
590742.25	4142679.50	0.13614	590726.69	4142679.00	0.13643
590689.38	4142171.50	0.01496	590682.94	4142157.00	0.01393
590678.75	4142139.75	0.01310	590724.75	4142165.25	0.01758
590754.81	4142160.50	0.02027	590784.12	4142156.25	0.02362
590816.50	4142153.50	0.02798	590841.62	4142151.75	0.03184
590836.25	4142126.50	0.02759	590805.06	4142129.25	0.02380
590776.94	4142134.25	0.02083	590743.44	4142139.00	0.01775
590714.50	4142141.00	0.01557	590899.44	4142140.25	0.04079

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.04693	590959.94	4142127.00	0.05166
590986.94	4142116.25	0.05587	590896.75	4142119.00	0.03611
590927.62	4142112.75	0.04076	590955.00	4142103.25	0.04429
590970.25	4142092.25	0.04507	590983.94	4142082.50	0.04579
590987.75	4142065.25	0.04265	591000.69	4142098.00	0.05403
591014.38	4142069.75	0.04943	590780.75	4142100.75	0.01885
590806.56	4142102.25	0.02158	590843.12	4142099.50	0.02541
590875.50	4142093.75	0.02889	590907.44	4142090.75	0.03322
590943.19	4142081.25	0.03746	591504.00	4142382.25	0.03240
591537.81	4142385.00	0.02706	591459.56	4141782.25	0.04597
591491.44	4141786.50	0.04857	591523.31	4141787.00	0.05027
591550.81	4141786.50	0.05139	591580.31	4141787.00	0.05262
591608.81	4141787.50	0.05365	591638.25	4141792.75	0.05539
591668.69	4141802.50	0.05762	591009.56	4142041.75	0.04177
590998.12	4142018.75	0.03551	590991.25	4141992.00	0.03052
590982.06	4141965.50	0.02625	590979.75	4142038.50	0.03604
590972.88	4142015.50	0.03145	590964.63	4141989.25	0.02711
590965.56	4141951.75	0.02329	590947.19	4141956.25	0.02215
590944.44	4141980.75	0.02418	590864.94	4142388.00	0.29987
590854.12	4142373.75	0.23625	590804.25	4142384.00	0.17572
590789.75	4142385.00	0.14792	590777.00	4142386.75	0.12522
590761.88	4142387.25	0.09710	590747.88	4142390.50	0.07762
590736.94	4142390.00	0.06282	590724.94	4142389.75	0.05164
590688.75	4142442.50	0.04939	590683.81	4142430.00	0.04344
590687.81	4142456.25	0.05517	590687.81	4142473.25	0.06591
590690.94	4142486.75	0.08013	590690.75	4142504.75	0.09648
590730.31	4142593.50	0.21513	590618.38	4142553.50	0.05907
590613.44	4142595.25	0.07084	590570.94	4142579.50	0.04495
590686.12	4142609.00	0.15529	590657.00	4142612.75	0.11775
590623.94	4142620.00	0.08682	590638.38	4142620.25	0.09978
590661.31	4142594.50	0.11694	590646.25	4142597.25	0.10034
590630.06	4142595.50	0.08390	590660.25	4142665.25	0.12041
590639.81	4142681.50	0.10358	590628.56	4142681.00	0.09637
590617.75	4142685.25	0.08945	590608.38	4142686.25	0.08389
590675.69	4142678.50	0.12510	590689.81	4142688.25	0.12524
590686.12	4142722.00	0.10789	590663.81	4142736.50	0.09826
590645.81	4142735.00	0.09441	590632.25	4142738.00	0.08951
590612.38	4142734.75	0.08284	590612.81	4142725.75	0.08407
590627.63	4142717.00	0.09173	590655.62	4142716.00	0.10308

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.23267 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.18637 AT (590854.12,	4142373.75,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.17877 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.17801 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.17746 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.17484 AT (591040.25,	4142518.75,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.17185 AT (591058.50,	4142513.50,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.17090 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.16850 AT (591077.50,	4142507.75,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.16509 AT (590848.06,	4142584.25,	0.00,	1.50) DC NA
FUGPM	1ST HIGHEST VALUE IS	0.06721 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.05913 AT (590730.31,	4142593.50,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.04988 AT (590854.12,	4142373.75,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.04139 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.04131 AT (590848.06,	4142584.25,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.04055 AT (590804.25,	4142384.00,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.04009 AT (591138.44,	4142481.25,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.03884 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.03851 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.03849 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
ALL	1ST HIGHEST VALUE IS	0.29987 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.23625 AT (590854.12,	4142373.75,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.21761 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.21650 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.21597 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.21513 AT (590730.31,	4142593.50,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.21294 AT (591040.25,	4142518.75,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.21229 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.20956 AT (591058.50,	4142513.50,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.20639 AT (590848.06,	4142584.25,	0.00,	1.50) DC NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** Residential Receptors

*** 10/27/16
*** 19:24:10
PAGE 17

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***

2017 DPM & Fugitive PM2.5 Model Input/Output- Residential Receptors - Mitigated Emissions

```

**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2017-Mitigated.INP
**
*****
**
**
*****
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO Mitigated Emissions - Residential Receptors
MODELOPT DEFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.50
RUNORNOT RUN
ERRORFIL TO8F37~1.ERR
CO FINISHED
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2017 Mitigated DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2017 Mitigated Fugitive PM2.5
LOCATION A1B DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2017 Mitigated DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2017 Mitigated Fugitive PM2.5
LOCATION TG DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 Mitigated DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 Mitigated Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 1.92E-09 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 3.21E-08 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 1.92E-09 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 3.21E-08 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 7.12E-08 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 9.66E-08 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0

```

```

EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL

```

SO FINISHED

**

** ISCST3 Receptor Pathway

**

**

RE STARTING

** DESCRREC "" ""

DISCCART	591115.96	4142496.03	1.50
DISCCART	591096.17	4142502.50	1.50
DISCCART	591077.52	4142507.82	1.50
DISCCART	591058.50	4142513.53	1.50
DISCCART	591040.23	4142518.86	1.50
DISCCART	591020.07	4142524.57	1.50
DISCCART	591001.42	4142531.04	1.50
DISCCART	590982.77	4142537.12	1.50
DISCCART	591138.41	4142481.19	1.50
DISCCART	591142.97	4142499.45	1.50
DISCCART	591148.30	4142518.48	1.50
DISCCART	591123.19	4142520.00	1.50
DISCCART	591104.16	4142525.71	1.50
DISCCART	591084.75	4142531.42	1.50
DISCCART	591065.73	4142537.12	1.50
DISCCART	591046.70	4142542.07	1.50
DISCCART	591027.30	4142548.54	1.50
DISCCART	591009.03	4142554.63	1.50
DISCCART	591152.11	4142551.58	1.50
DISCCART	591156.29	4142570.61	1.50
DISCCART	591127.37	4142566.42	1.50
DISCCART	591109.11	4142572.51	1.50
DISCCART	591090.08	4142577.08	1.50
DISCCART	591070.68	4142583.55	1.50
DISCCART	591052.79	4142588.50	1.50
DISCCART	591032.24	4142594.96	1.50
DISCCART	591145.26	4142586.97	1.50
DISCCART	591126.23	4142592.30	1.50
DISCCART	591107.21	4142597.63	1.50
DISCCART	591088.94	4142602.95	1.50
DISCCART	591068.39	4142609.42	1.50
DISCCART	590876.61	4142572.13	1.50
DISCCART	590899.06	4142588.50	1.50
DISCCART	590920.75	4142605.24	1.50
DISCCART	590939.78	4142624.26	1.50
DISCCART	590960.32	4142642.15	1.50
DISCCART	590980.49	4142658.51	1.50
DISCCART	591001.42	4142676.40	1.50
DISCCART	591031.10	4142698.09	1.50
DISCCART	590848.07	4142584.31	1.50
DISCCART	590851.87	4142600.67	1.50
DISCCART	590874.33	4142614.75	1.50
DISCCART	590893.73	4142634.92	1.50
DISCCART	590912.76	4142653.94	1.50
DISCCART	590932.55	4142671.83	1.50
DISCCART	590952.71	4142690.09	1.50
DISCCART	590971.36	4142709.50	1.50
DISCCART	590850.35	4142666.12	1.50
DISCCART	590870.52	4142683.63	1.50
DISCCART	590892.59	4142700.37	1.50
DISCCART	590912.38	4142714.07	1.50
DISCCART	590827.52	4142693.14	1.50
DISCCART	590854.54	4142720.16	1.50
DISCCART	590878.13	4142740.32	1.50
DISCCART	590900.20	4142759.35	1.50
DISCCART	590773.11	4142712.93	1.50
DISCCART	590789.47	4142723.96	1.50
DISCCART	590823.72	4142755.54	1.50
DISCCART	590844.26	4142774.57	1.50
DISCCART	590738.48	4142741.85	1.50
DISCCART	590751.04	4142755.16	1.50
DISCCART	590765.50	4142767.34	1.50
DISCCART	590773.49	4142678.30	1.50
DISCCART	590755.22	4142677.92	1.50
DISCCART	590742.28	4142679.44	1.50
DISCCART	590726.68	4142679.06	1.50
DISCCART	590689.39	4142171.44	1.50
DISCCART	590682.92	4142156.98	1.50
DISCCART	590678.74	4142139.86	1.50
DISCCART	590724.78	4142165.35	1.50
DISCCART	590754.84	4142160.41	1.50

DISCCART	590784.14	4142156.22	1.50
DISCCART	590816.49	4142153.56	1.50
DISCCART	590841.60	4142151.66	1.50
DISCCART	590836.27	4142126.54	1.50
DISCCART	590805.07	4142129.20	1.50
DISCCART	590776.91	4142134.15	1.50
DISCCART	590743.43	4142139.10	1.50
DISCCART	590714.51	4142141.00	1.50
DISCCART	590899.44	4142140.24	1.50
DISCCART	590929.12	4142137.96	1.50
DISCCART	590959.94	4142126.92	1.50
DISCCART	590986.96	4142116.27	1.50
DISCCART	590896.78	4142118.93	1.50
DISCCART	590927.60	4142112.84	1.50
DISCCART	590955.00	4142103.33	1.50
DISCCART	590970.22	4142092.29	1.50
DISCCART	590983.92	4142082.40	1.50
DISCCART	590987.72	4142065.28	1.50
DISCCART	591000.66	4142098.00	1.50
DISCCART	591014.36	4142069.84	1.50
DISCCART	590780.72	4142100.67	1.50
DISCCART	590806.59	4142102.19	1.50
DISCCART	590843.12	4142099.52	1.50
DISCCART	590875.47	4142093.82	1.50
DISCCART	590907.43	4142090.77	1.50
DISCCART	590943.20	4142081.26	1.50
DISCCART	591503.99	4142382.16	1.50
DISCCART	591537.80	4142385.06	1.50
DISCCART	591459.55	4141782.24	1.50
DISCCART	591491.43	4141786.59	1.50
DISCCART	591523.31	4141787.07	1.50
DISCCART	591550.84	4141786.59	1.50
DISCCART	591580.31	4141787.07	1.50
DISCCART	591608.81	4141787.56	1.50
DISCCART	591638.27	4141792.87	1.50
DISCCART	591668.70	4141802.53	1.50
DISCCART	591009.59	4142041.64	1.50
DISCCART	590998.13	4142018.71	1.50
DISCCART	590991.25	4141992.10	1.50
DISCCART	590982.07	4141965.50	1.50
DISCCART	590979.78	4142038.43	1.50
DISCCART	590972.90	4142015.49	1.50
DISCCART	590964.64	4141989.35	1.50
DISCCART	590965.56	4141951.73	1.50
DISCCART	590947.21	4141956.32	1.50
DISCCART	590944.46	4141980.63	1.50
DISCCART	590864.92	4142387.88	1.50
DISCCART	590854.14	4142373.71	1.50
DISCCART	590804.24	4142384.03	1.50
DISCCART	590789.77	4142384.95	1.50
DISCCART	590776.99	4142386.80	1.50
DISCCART	590761.90	4142387.26	1.50
DISCCART	590747.89	4142390.50	1.50
DISCCART	590736.95	4142389.88	1.50
DISCCART	590724.94	4142389.73	1.50
DISCCART	590688.75	4142442.54	1.50
DISCCART	590683.83	4142430.07	1.50
DISCCART	590687.83	4142456.25	1.50
DISCCART	590687.83	4142473.34	1.50
DISCCART	590690.91	4142486.74	1.50
DISCCART	590690.76	4142504.76	1.50
DISCCART	590730.33	4142593.61	1.50
DISCCART	590618.38	4142553.42	1.50
DISCCART	590613.45	4142595.30	1.50
DISCCART	590570.95	4142579.59	1.50
DISCCART	590686.14	4142609.00	1.50
DISCCART	590657.03	4142612.85	1.50
DISCCART	590623.93	4142620.09	1.50
DISCCART	590638.40	4142620.25	1.50
DISCCART	590661.34	4142594.53	1.50
DISCCART	590646.25	4142597.15	1.50
DISCCART	590630.09	4142595.61	1.50
DISCCART	590660.27	4142665.21	1.50
DISCCART	590639.79	4142681.38	1.50
DISCCART	590628.55	4142681.07	1.50
DISCCART	590617.77	4142685.23	1.50
DISCCART	590608.37	4142686.15	1.50
DISCCART	590675.67	4142678.45	1.50
DISCCART	590689.83	4142688.31	1.50
DISCCART	590686.14	4142721.88	1.50
DISCCART	590663.81	4142736.51	1.50
DISCCART	590645.79	4142735.12	1.50
DISCCART	590632.24	4142737.89	1.50
DISCCART	590612.38	4142734.66	1.50
DISCCART	590612.84	4142725.73	1.50
DISCCART	590627.62	4142716.95	1.50
DISCCART	590655.65	4142716.03	1.50

RE FINISHED

**

** ISCST3 Meteorology Pathway

**

**

ME STARTING

INPUTFIL C:\PROJEC-1\I&R\METDAT-1\Alviso\alv96-00.asc

```
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996
ME FINISHED
**
*****
** ISCST3 Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE PERIOD ALL TO8745~1.IS\PE00GALL.PLT 31
  PLOTFILE PERIOD DPM TO8745~1.IS\PE00G001.PLT 32
  PLOTFILE PERIOD FugPM TO8745~1.IS\PE00G002.PLT 33
OU FINISHED

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


**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.19200E-08	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.32100E-07	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.19200E-08	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.32100E-07	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.71200E-07	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.96600E-07	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

(591014.4, 4142069.8, 0.0, 1.5);	(590780.8, 4142100.8, 0.0, 1.5);
(590806.6, 4142102.2, 0.0, 1.5);	(590843.1, 4142099.5, 0.0, 1.5);
(590875.5, 4142093.8, 0.0, 1.5);	(590907.4, 4142090.8, 0.0, 1.5);
(590943.2, 4142081.3, 0.0, 1.5);	(591504.0, 4142382.2, 0.0, 1.5);
(591537.8, 4142385.0, 0.0, 1.5);	(591459.6, 4141782.3, 0.0, 1.5);
(591491.4, 4141786.5, 0.0, 1.5);	(591523.3, 4141787.0, 0.0, 1.5);
(591550.8, 4141786.5, 0.0, 1.5);	(591580.3, 4141787.0, 0.0, 1.5);
(591608.8, 4141787.5, 0.0, 1.5);	(591638.2, 4141792.8, 0.0, 1.5);
(591668.7, 4141802.5, 0.0, 1.5);	(591009.6, 4142041.8, 0.0, 1.5);
(590998.1, 4142018.8, 0.0, 1.5);	(590991.2, 4141992.0, 0.0, 1.5);
(590982.1, 4141965.5, 0.0, 1.5);	(590979.8, 4142038.5, 0.0, 1.5);
(590972.9, 4142015.5, 0.0, 1.5);	(590964.6, 4141989.2, 0.0, 1.5);
(590965.6, 4141951.8, 0.0, 1.5);	(590947.2, 4141956.2, 0.0, 1.5);
(590944.4, 4141980.8, 0.0, 1.5);	(590864.9, 4142388.0, 0.0, 1.5);
(590854.1, 4142373.8, 0.0, 1.5);	(590804.2, 4142384.0, 0.0, 1.5);
(590789.8, 4142385.0, 0.0, 1.5);	(590777.0, 4142386.8, 0.0, 1.5);
(590761.9, 4142387.2, 0.0, 1.5);	(590747.9, 4142390.5, 0.0, 1.5);
(590736.9, 4142390.0, 0.0, 1.5);	(590724.9, 4142389.8, 0.0, 1.5);
(590688.8, 4142442.5, 0.0, 1.5);	(590683.8, 4142430.0, 0.0, 1.5);
(590687.8, 4142456.3, 0.0, 1.5);	(590687.8, 4142473.2, 0.0, 1.5);
(590690.9, 4142486.8, 0.0, 1.5);	(590690.8, 4142504.8, 0.0, 1.5);
(590730.3, 4142593.5, 0.0, 1.5);	(590618.4, 4142553.5, 0.0, 1.5);
(590613.4, 4142595.3, 0.0, 1.5);	(590570.9, 4142579.5, 0.0, 1.5);
(590686.1, 4142609.0, 0.0, 1.5);	(590657.0, 4142612.8, 0.0, 1.5);
(590623.9, 4142620.0, 0.0, 1.5);	(590638.4, 4142620.2, 0.0, 1.5);
(590661.3, 4142594.5, 0.0, 1.5);	(590646.3, 4142597.2, 0.0, 1.5);
(590630.1, 4142595.5, 0.0, 1.5);	(590660.2, 4142665.3, 0.0, 1.5);
(590639.8, 4142681.5, 0.0, 1.5);	(590628.6, 4142681.0, 0.0, 1.5);
(590617.8, 4142685.2, 0.0, 1.5);	(590608.4, 4142686.2, 0.0, 1.5);
(590675.7, 4142678.5, 0.0, 1.5);	(590689.8, 4142688.2, 0.0, 1.5);
(590686.1, 4142722.0, 0.0, 1.5);	(590663.8, 4142736.5, 0.0, 1.5);
(590645.8, 4142735.0, 0.0, 1.5);	(590632.2, 4142738.0, 0.0, 1.5);
(590612.4, 4142734.8, 0.0, 1.5);	(590612.8, 4142725.8, 0.0, 1.5);
(590627.6, 4142717.0, 0.0, 1.5);	(590655.6, 4142716.0, 0.0, 1.5);

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	MIXING HEIGHT (M) URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
96	01	01	01	212.7	1.56	283.5	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.01283	591096.19	4142502.50	0.01388
591077.50	4142507.75	0.01484	591058.50	4142513.50	0.01564
591040.25	4142518.75	0.01631	591020.06	4142524.50	0.01686
591001.44	4142531.00	0.01695	590982.75	4142537.00	0.01685
591138.44	4142481.25	0.01218	591143.00	4142499.50	0.01011
591148.31	4142518.50	0.00840	591123.19	4142520.00	0.01004
591104.19	4142525.75	0.01095	591084.75	4142531.50	0.01182
591065.75	4142537.00	0.01261	591046.69	4142542.00	0.01339
591027.31	4142548.50	0.01388	591009.00	4142554.75	0.01414
591152.13	4142551.50	0.00654	591156.31	4142570.50	0.00567
591127.38	4142566.50	0.00698	591109.12	4142572.50	0.00754
591090.06	4142577.00	0.00823	591070.69	4142583.50	0.00883
591052.81	4142588.50	0.00939	591032.25	4142595.00	0.00990
591145.25	4142587.00	0.00550	591126.25	4142592.25	0.00597
591107.19	4142597.75	0.00648	591088.94	4142603.00	0.00700
591068.38	4142609.50	0.00756	590876.62	4142572.25	0.01238
590899.06	4142588.50	0.01251	590920.75	4142605.25	0.01183
590939.75	4142624.25	0.01062	590960.31	4142642.25	0.00932
590980.50	4142658.50	0.00805	591001.44	4142676.50	0.00680
591031.13	4142698.00	0.00541	590848.06	4142584.25	0.01059
590851.88	4142600.75	0.01043	590874.31	4142614.75	0.01075
590893.75	4142635.00	0.01021	590912.75	4142654.00	0.00934
590932.56	4142671.75	0.00836	590952.69	4142690.00	0.00732
590971.38	4142709.50	0.00627	590850.38	4142666.00	0.00861
590870.50	4142683.75	0.00824	590892.56	4142700.25	0.00764
590912.38	4142714.00	0.00700	590827.50	4142693.25	0.00759
590854.56	4142720.25	0.00712	590878.12	4142740.25	0.00649
590900.19	4142759.25	0.00579	590773.12	4142713.00	0.00631
590789.50	4142724.00	0.00645	590823.75	4142755.50	0.00621
590844.25	4142774.50	0.00579	590738.50	4142741.75	0.00540
590751.06	4142755.25	0.00549	590765.50	4142767.25	0.00555
590773.50	4142678.25	0.00667	590755.25	4142678.00	0.00621
590742.25	4142679.50	0.00588	590726.69	4142679.00	0.00550
590689.38	4142171.50	0.00092	590682.94	4142157.00	0.00087
590678.75	4142139.75	0.00083	590724.75	4142165.25	0.00104
590754.81	4142160.50	0.00117	590784.12	4142156.25	0.00133
590816.50	4142153.50	0.00154	590841.62	4142151.75	0.00172
590836.25	4142126.50	0.00156	590805.06	4142129.25	0.00139
590776.94	4142134.25	0.00124	590743.44	4142139.00	0.00108
590714.50	4142141.00	0.00096	590899.44	4142140.25	0.00212

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00249	590959.94	4142127.00	0.00296
590986.94	4142116.25	0.00346	590896.75	4142119.00	0.00194
590927.62	4142112.75	0.00224	590955.00	4142103.25	0.00258
590970.25	4142092.25	0.00274	590983.94	4142082.50	0.00288
590987.75	4142065.25	0.00272	591000.69	4142098.00	0.00352
591014.38	4142069.75	0.00336	590780.75	4142100.75	0.00118
590806.56	4142102.25	0.00130	590843.12	4142099.50	0.00146
590875.50	4142093.75	0.00162	590907.44	4142090.75	0.00186
590943.19	4142081.25	0.00218	591504.00	4142382.25	0.00180
591537.81	4142385.00	0.00156	591459.56	4141782.25	0.00453
591491.44	4141786.50	0.00479	591523.31	4141787.00	0.00495
591550.81	4141786.50	0.00506	591580.31	4141787.00	0.00517
591608.81	4141787.50	0.00526	591638.25	4141792.75	0.00543
591668.69	4141802.50	0.00563	591009.56	4142041.75	0.00279
590998.12	4142018.75	0.00232	590991.25	4141992.00	0.00197
590982.06	4141965.50	0.00169	590979.75	4142038.50	0.00228
590972.88	4142015.50	0.00198	590964.63	4141989.25	0.00171
590965.56	4141951.75	0.00148	590947.19	4141956.25	0.00138
590944.44	4141980.75	0.00150	590864.94	4142388.00	0.00770
590854.12	4142373.75	0.00627	590804.25	4142384.00	0.00450
590789.75	4142385.00	0.00403	590777.00	4142386.75	0.00367
590761.88	4142387.25	0.00327	590747.88	4142390.50	0.00298
590736.94	4142390.00	0.00275	590724.94	4142389.75	0.00254
590688.75	4142442.50	0.00250	590683.81	4142430.00	0.00230
590687.81	4142456.25	0.00265	590687.81	4142473.25	0.00288
590690.94	4142486.75	0.00316	590690.75	4142504.75	0.00345
590730.31	4142593.50	0.00563	590618.38	4142553.50	0.00266
590613.44	4142595.25	0.00289	590570.94	4142579.50	0.00224
590686.12	4142609.00	0.00449	590657.00	4142612.75	0.00383
590623.94	4142620.00	0.00323	590638.38	4142620.25	0.00349
590661.31	4142594.50	0.00380	590646.25	4142597.25	0.00350
590630.06	4142595.50	0.00317	590660.25	4142665.25	0.00406
590639.81	4142681.50	0.00371	590628.56	4142681.00	0.00352
590617.75	4142685.25	0.00336	590608.38	4142686.25	0.00322
590675.69	4142678.50	0.00437	590689.81	4142688.25	0.00465
590686.12	4142722.00	0.00453	590663.81	4142736.50	0.00411
590645.81	4142735.00	0.00382	590632.25	4142738.00	0.00361
590612.38	4142734.75	0.00332	590612.81	4142725.75	0.00333
590627.63	4142717.00	0.00354	590655.62	4142716.00	0.00399

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
 INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.03887	591096.19	4142502.50	0.04041
591077.50	4142507.75	0.04199	591058.50	4142513.50	0.04320
591040.25	4142518.75	0.04427	591020.06	4142524.50	0.04511
591001.44	4142531.00	0.04493	590982.75	4142537.00	0.04467
591138.44	4142481.25	0.03985	591143.00	4142499.50	0.03188
591148.31	4142518.50	0.02574	591123.19	4142520.00	0.02942
591104.19	4142525.75	0.03091	591084.75	4142531.50	0.03230
591065.75	4142537.00	0.03356	591046.69	4142542.00	0.03483
591027.31	4142548.50	0.03543	591009.00	4142554.75	0.03566
591152.13	4142551.50	0.01908	591156.31	4142570.50	0.01613
591127.38	4142566.50	0.01947	591109.12	4142572.50	0.02045
591090.06	4142577.00	0.02171	591070.69	4142583.50	0.02262
591052.81	4142588.50	0.02353	591032.25	4142595.00	0.02429
591145.25	4142587.00	0.01524	591126.25	4142592.25	0.01624
591107.19	4142597.75	0.01721	591088.94	4142603.00	0.01813
591068.38	4142609.50	0.01903	590876.62	4142572.25	0.03808
590899.06	4142588.50	0.03350	590920.75	4142605.25	0.02943
590939.75	4142624.25	0.02543	590960.31	4142642.25	0.02192
590980.50	4142658.50	0.01891	591001.44	4142676.50	0.01606
591031.13	4142698.00	0.01292	590848.06	4142584.25	0.03527
590851.88	4142600.75	0.03139	590874.31	4142614.75	0.02868
590893.75	4142635.00	0.02525	590912.75	4142654.00	0.02223
590932.56	4142671.75	0.01953	590952.69	4142690.00	0.01699
590971.38	4142709.50	0.01460	590850.38	4142666.00	0.02184
590870.50	4142683.75	0.01983	590892.56	4142700.25	0.01787
590912.38	4142714.00	0.01621	590827.50	4142693.25	0.01920
590854.56	4142720.25	0.01684	590878.12	4142740.25	0.01500
590900.19	4142759.25	0.01329	590773.12	4142713.00	0.01732
590789.50	4142724.00	0.01672	590823.75	4142755.50	0.01471
590844.25	4142774.50	0.01339	590738.50	4142741.75	0.01501
590751.06	4142755.25	0.01449	590765.50	4142767.25	0.01404
590773.50	4142678.25	0.02012	590755.25	4142678.00	0.01989
590742.25	4142679.50	0.01949	590726.69	4142679.00	0.01913
590689.38	4142171.50	0.00240	590682.94	4142157.00	0.00224
590678.75	4142139.75	0.00211	590724.75	4142165.25	0.00278
590754.81	4142160.50	0.00319	590784.12	4142156.25	0.00370
590816.50	4142153.50	0.00438	590841.62	4142151.75	0.00498
590836.25	4142126.50	0.00436	590805.06	4142129.25	0.00379
590776.94	4142134.25	0.00332	590743.44	4142139.00	0.00284
590714.50	4142141.00	0.00249	590899.44	4142140.25	0.00633

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00737	590959.94	4142127.00	0.00840
590986.94	4142116.25	0.00934	590896.75	4142119.00	0.00561
590927.62	4142112.75	0.00641	590955.00	4142103.25	0.00714
590970.25	4142092.25	0.00736	590983.94	4142082.50	0.00756
590987.75	4142065.25	0.00701	591000.69	4142098.00	0.00914
591014.38	4142069.75	0.00838	590780.75	4142100.75	0.00306
590806.56	4142102.25	0.00346	590843.12	4142099.50	0.00401
590875.50	4142093.75	0.00451	590907.44	4142090.75	0.00519
590943.19	4142081.25	0.00597	591504.00	4142382.25	0.00488
591537.81	4142385.00	0.00409	591459.56	4141782.25	0.00863
591491.44	4141786.50	0.00912	591523.31	4141787.00	0.00943
591550.81	4141786.50	0.00963	591580.31	4141787.00	0.00984
591608.81	4141787.50	0.01002	591638.25	4141792.75	0.01033
591668.69	4141802.50	0.01073	591009.56	4142041.75	0.00691
590998.12	4142018.75	0.00576	590991.25	4141992.00	0.00488
590982.06	4141965.50	0.00416	590979.75	4142038.50	0.00584
590972.88	4142015.50	0.00504	590964.63	4141989.25	0.00430
590965.56	4141951.75	0.00366	590947.19	4141956.25	0.00347
590944.44	4141980.75	0.00381	590864.94	4142388.00	0.04570
590854.12	4142373.75	0.03466	590804.25	4142384.00	0.02686
590789.75	4142385.00	0.02314	590777.00	4142386.75	0.02011
590761.88	4142387.25	0.01600	590747.88	4142390.50	0.01322
590736.94	4142390.00	0.01083	590724.94	4142389.75	0.00901
590688.75	4142442.50	0.00907	590683.81	4142430.00	0.00779
590687.81	4142456.25	0.01021	590687.81	4142473.25	0.01219
590690.94	4142486.75	0.01479	590690.75	4142504.75	0.01722
590730.31	4142593.50	0.03709	590618.38	4142553.50	0.00908
590613.44	4142595.25	0.01024	590570.94	4142579.50	0.00680
590686.12	4142609.00	0.02235	590657.00	4142612.75	0.01646
590623.94	4142620.00	0.01212	590638.38	4142620.25	0.01385
590661.31	4142594.50	0.01677	590646.25	4142597.25	0.01430
590630.06	4142595.50	0.01203	590660.25	4142665.25	0.01608
590639.81	4142681.50	0.01377	590628.56	4142681.00	0.01284
590617.75	4142685.25	0.01195	590608.38	4142686.25	0.01125
590675.69	4142678.50	0.01674	590689.81	4142688.25	0.01693
590686.12	4142722.00	0.01478	590663.81	4142736.50	0.01333
590645.81	4142735.00	0.01265	590632.25	4142738.00	0.01195
590612.38	4142734.75	0.01103	590612.81	4142725.75	0.01118
590627.63	4142717.00	0.01218	590655.62	4142716.00	0.01376

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.05171	591096.19	4142502.50	0.05429
591077.50	4142507.75	0.05683	591058.50	4142513.50	0.05883
591040.25	4142518.75	0.06058	591020.06	4142524.50	0.06197
591001.44	4142531.00	0.06188	590982.75	4142537.00	0.06152
591138.44	4142481.25	0.05203	591143.00	4142499.50	0.04199
591148.31	4142518.50	0.03414	591123.19	4142520.00	0.03945
591104.19	4142525.75	0.04185	591084.75	4142531.50	0.04411
591065.75	4142537.00	0.04617	591046.69	4142542.00	0.04821
591027.31	4142548.50	0.04931	591009.00	4142554.75	0.04981
591152.13	4142551.50	0.02562	591156.31	4142570.50	0.02180
591127.38	4142566.50	0.02645	591109.12	4142572.50	0.02799
591090.06	4142577.00	0.02993	591070.69	4142583.50	0.03144
591052.81	4142588.50	0.03292	591032.25	4142595.00	0.03419
591145.25	4142587.00	0.02074	591126.25	4142592.25	0.02221
591107.19	4142597.75	0.02370	591088.94	4142603.00	0.02513
591068.38	4142609.50	0.02658	590876.62	4142572.25	0.05046
590899.06	4142588.50	0.04602	590920.75	4142605.25	0.04126
590939.75	4142624.25	0.03605	590960.31	4142642.25	0.03124
590980.50	4142658.50	0.02695	591001.44	4142676.50	0.02286
591031.13	4142698.00	0.01833	590848.06	4142584.25	0.04586
590851.88	4142600.75	0.04182	590874.31	4142614.75	0.03944
590893.75	4142635.00	0.03546	590912.75	4142654.00	0.03157
590932.56	4142671.75	0.02789	590952.69	4142690.00	0.02430
590971.38	4142709.50	0.02087	590850.38	4142666.00	0.03045
590870.50	4142683.75	0.02808	590892.56	4142700.25	0.02552
590912.38	4142714.00	0.02321	590827.50	4142693.25	0.02679
590854.56	4142720.25	0.02396	590878.12	4142740.25	0.02149
590900.19	4142759.25	0.01908	590773.12	4142713.00	0.02362
590789.50	4142724.00	0.02317	590823.75	4142755.50	0.02092
590844.25	4142774.50	0.01918	590738.50	4142741.75	0.02042
590751.06	4142755.25	0.01998	590765.50	4142767.25	0.01959
590773.50	4142678.25	0.02679	590755.25	4142678.00	0.02610
590742.25	4142679.50	0.02536	590726.69	4142679.00	0.02462
590689.38	4142171.50	0.00332	590682.94	4142157.00	0.00311
590678.75	4142139.75	0.00295	590724.75	4142165.25	0.00382
590754.81	4142160.50	0.00437	590784.12	4142156.25	0.00503
590816.50	4142153.50	0.00592	590841.62	4142151.75	0.00670
590836.25	4142126.50	0.00592	590805.06	4142129.25	0.00518
590776.94	4142134.25	0.00456	590743.44	4142139.00	0.00391
590714.50	4142141.00	0.00345	590899.44	4142140.25	0.00845

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00986	590959.94	4142127.00	0.01136
590986.94	4142116.25	0.01280	590896.75	4142119.00	0.00755
590927.62	4142112.75	0.00866	590955.00	4142103.25	0.00972
590970.25	4142092.25	0.01010	590983.94	4142082.50	0.01044
590987.75	4142065.25	0.00973	591000.69	4142098.00	0.01265
591014.38	4142069.75	0.01174	590780.75	4142100.75	0.00424
590806.56	4142102.25	0.00476	590843.12	4142099.50	0.00548
590875.50	4142093.75	0.00613	590907.44	4142090.75	0.00705
590943.19	4142081.25	0.00815	591504.00	4142382.25	0.00669
591537.81	4142385.00	0.00565	591459.56	4141782.25	0.01316
591491.44	4141786.50	0.01391	591523.31	4141787.00	0.01438
591550.81	4141786.50	0.01468	591580.31	4141787.00	0.01502
591608.81	4141787.50	0.01528	591638.25	4141792.75	0.01576
591668.69	4141802.50	0.01636	591009.56	4142041.75	0.00971
590998.12	4142018.75	0.00808	590991.25	4141992.00	0.00686
590982.06	4141965.50	0.00584	590979.75	4142038.50	0.00812
590972.88	4142015.50	0.00702	590964.63	4141989.25	0.00601
590965.56	4141951.75	0.00514	590947.19	4141956.25	0.00485
590944.44	4141980.75	0.00530	590864.94	4142388.00	0.05340
590854.12	4142373.75	0.04093	590804.25	4142384.00	0.03136
590789.75	4142385.00	0.02717	590777.00	4142386.75	0.02378
590761.88	4142387.25	0.01926	590747.88	4142390.50	0.01620
590736.94	4142390.00	0.01358	590724.94	4142389.75	0.01155
590688.75	4142442.50	0.01157	590683.81	4142430.00	0.01010
590687.81	4142456.25	0.01286	590687.81	4142473.25	0.01507
590690.94	4142486.75	0.01795	590690.75	4142504.75	0.02067
590730.31	4142593.50	0.04272	590618.38	4142553.50	0.01174
590613.44	4142595.25	0.01314	590570.94	4142579.50	0.00904
590686.12	4142609.00	0.02684	590657.00	4142612.75	0.02029
590623.94	4142620.00	0.01535	590638.38	4142620.25	0.01734
590661.31	4142594.50	0.02057	590646.25	4142597.25	0.01779
590630.06	4142595.50	0.01520	590660.25	4142665.25	0.02014
590639.81	4142681.50	0.01747	590628.56	4142681.00	0.01636
590617.75	4142685.25	0.01531	590608.38	4142686.25	0.01447
590675.69	4142678.50	0.02111	590689.81	4142688.25	0.02158
590686.12	4142722.00	0.01931	590663.81	4142736.50	0.01744
590645.81	4142735.00	0.01647	590632.25	4142738.00	0.01556
590612.38	4142734.75	0.01435	590612.81	4142725.75	0.01451
590627.63	4142717.00	0.01571	590655.62	4142716.00	0.01775

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.01695 AT (591001.44, 4142531.00,	0.00,	1.50) DC	NA
	2ND HIGHEST VALUE IS	0.01686 AT (591020.06, 4142524.50,	0.00,	1.50) DC	NA
	3RD HIGHEST VALUE IS	0.01685 AT (590982.75, 4142537.00,	0.00,	1.50) DC	NA
	4TH HIGHEST VALUE IS	0.01631 AT (591040.25, 4142518.75,	0.00,	1.50) DC	NA
	5TH HIGHEST VALUE IS	0.01564 AT (591058.50, 4142513.50,	0.00,	1.50) DC	NA
	6TH HIGHEST VALUE IS	0.01484 AT (591077.50, 4142507.75,	0.00,	1.50) DC	NA
	7TH HIGHEST VALUE IS	0.01414 AT (591009.00, 4142554.75,	0.00,	1.50) DC	NA
	8TH HIGHEST VALUE IS	0.01388 AT (591096.19, 4142502.50,	0.00,	1.50) DC	NA
	9TH HIGHEST VALUE IS	0.01388 AT (591027.31, 4142548.50,	0.00,	1.50) DC	NA
	10TH HIGHEST VALUE IS	0.01339 AT (591046.69, 4142542.00,	0.00,	1.50) DC	NA
FUGPM	1ST HIGHEST VALUE IS	0.04570 AT (590864.94, 4142388.00,	0.00,	1.50) DC	NA
	2ND HIGHEST VALUE IS	0.04511 AT (591020.06, 4142524.50,	0.00,	1.50) DC	NA
	3RD HIGHEST VALUE IS	0.04493 AT (591001.44, 4142531.00,	0.00,	1.50) DC	NA
	4TH HIGHEST VALUE IS	0.04467 AT (590982.75, 4142537.00,	0.00,	1.50) DC	NA
	5TH HIGHEST VALUE IS	0.04427 AT (591040.25, 4142518.75,	0.00,	1.50) DC	NA
	6TH HIGHEST VALUE IS	0.04320 AT (591058.50, 4142513.50,	0.00,	1.50) DC	NA
	7TH HIGHEST VALUE IS	0.04199 AT (591077.50, 4142507.75,	0.00,	1.50) DC	NA
	8TH HIGHEST VALUE IS	0.04041 AT (591096.19, 4142502.50,	0.00,	1.50) DC	NA
	9TH HIGHEST VALUE IS	0.03985 AT (591138.44, 4142481.25,	0.00,	1.50) DC	NA
	10TH HIGHEST VALUE IS	0.03887 AT (591115.94, 4142496.00,	0.00,	1.50) DC	NA
ALL	1ST HIGHEST VALUE IS	0.06197 AT (591020.06, 4142524.50,	0.00,	1.50) DC	NA
	2ND HIGHEST VALUE IS	0.06188 AT (591001.44, 4142531.00,	0.00,	1.50) DC	NA
	3RD HIGHEST VALUE IS	0.06152 AT (590982.75, 4142537.00,	0.00,	1.50) DC	NA
	4TH HIGHEST VALUE IS	0.06058 AT (591040.25, 4142518.75,	0.00,	1.50) DC	NA
	5TH HIGHEST VALUE IS	0.05883 AT (591058.50, 4142513.50,	0.00,	1.50) DC	NA
	6TH HIGHEST VALUE IS	0.05683 AT (591077.50, 4142507.75,	0.00,	1.50) DC	NA
	7TH HIGHEST VALUE IS	0.05429 AT (591096.19, 4142502.50,	0.00,	1.50) DC	NA
	8TH HIGHEST VALUE IS	0.05340 AT (590864.94, 4142388.00,	0.00,	1.50) DC	NA
	9TH HIGHEST VALUE IS	0.05203 AT (591138.44, 4142481.25,	0.00,	1.50) DC	NA
	10TH HIGHEST VALUE IS	0.05171 AT (591115.94, 4142496.00,	0.00,	1.50) DC	NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** Mitigated Emissions - Residential Receptors

*** 10/27/16
*** 21:15:47
PAGE 17

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***

2018 DPM & Fugitive PM2.5 Model Input/Output- Residential Receptors - Mitigated Emissions

```

**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2018-Mitigated.INP
**
*****
**
**
*****
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO Mitigated Emissions - Residential Receptors
MODELOPT DFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.50
RUNORNOT RUN
ERRORFIL TO8FD7~1.ERR
CO FINISHED
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2018 Mitigated DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2018 Mitigated Fugitive PM2.5
LOCATION A1B DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2018 Mitigated DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2018 Mitigated Fugitive PM2.5
LOCATION TG DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 Mitigated DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 Mitigated Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 1.25E-08 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 1.79E-08 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 1.25E-08 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 1.79E-08 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 2.98E-08 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 9.5E-09 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0

```

```

EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL

```

SO FINISHED

**

** ISCST3 Receptor Pathway

**

**

RE STARTING

** DESCRREC "" ""

DISCCART	591115.96	4142496.03	1.50
DISCCART	591096.17	4142502.50	1.50
DISCCART	591077.52	4142507.82	1.50
DISCCART	591058.50	4142513.53	1.50
DISCCART	591040.23	4142518.86	1.50
DISCCART	591020.07	4142524.57	1.50
DISCCART	591001.42	4142531.04	1.50
DISCCART	590982.77	4142537.12	1.50
DISCCART	591138.41	4142481.19	1.50
DISCCART	591142.97	4142499.45	1.50
DISCCART	591148.30	4142518.48	1.50
DISCCART	591123.19	4142520.00	1.50
DISCCART	591104.16	4142525.71	1.50
DISCCART	591084.75	4142531.42	1.50
DISCCART	591065.73	4142537.12	1.50
DISCCART	591046.70	4142542.07	1.50
DISCCART	591027.30	4142548.54	1.50
DISCCART	591009.03	4142554.63	1.50
DISCCART	591152.11	4142551.58	1.50
DISCCART	591156.29	4142570.61	1.50
DISCCART	591127.37	4142566.42	1.50
DISCCART	591109.11	4142572.51	1.50
DISCCART	591090.08	4142577.08	1.50
DISCCART	591070.68	4142583.55	1.50
DISCCART	591052.79	4142588.50	1.50
DISCCART	591032.24	4142594.96	1.50
DISCCART	591145.26	4142586.97	1.50
DISCCART	591126.23	4142592.30	1.50
DISCCART	591107.21	4142597.63	1.50
DISCCART	591088.94	4142602.95	1.50
DISCCART	591068.39	4142609.42	1.50
DISCCART	590876.61	4142572.13	1.50
DISCCART	590899.06	4142588.50	1.50
DISCCART	590920.75	4142605.24	1.50
DISCCART	590939.78	4142624.26	1.50
DISCCART	590960.32	4142642.15	1.50
DISCCART	590980.49	4142658.51	1.50
DISCCART	591001.42	4142676.40	1.50
DISCCART	591031.10	4142698.09	1.50
DISCCART	590848.07	4142584.31	1.50
DISCCART	590851.87	4142600.67	1.50
DISCCART	590874.33	4142614.75	1.50
DISCCART	590893.73	4142634.92	1.50
DISCCART	590912.76	4142653.94	1.50
DISCCART	590932.55	4142671.83	1.50
DISCCART	590952.71	4142690.09	1.50
DISCCART	590971.36	4142709.50	1.50
DISCCART	590850.35	4142666.12	1.50
DISCCART	590870.52	4142683.63	1.50
DISCCART	590892.59	4142700.37	1.50
DISCCART	590912.38	4142714.07	1.50
DISCCART	590827.52	4142693.14	1.50
DISCCART	590854.54	4142720.16	1.50
DISCCART	590878.13	4142740.32	1.50
DISCCART	590900.20	4142759.35	1.50
DISCCART	590773.11	4142712.93	1.50
DISCCART	590789.47	4142723.96	1.50
DISCCART	590823.72	4142755.54	1.50
DISCCART	590844.26	4142774.57	1.50
DISCCART	590738.48	4142741.85	1.50
DISCCART	590751.04	4142755.16	1.50
DISCCART	590765.50	4142767.34	1.50
DISCCART	590773.49	4142678.30	1.50
DISCCART	590755.22	4142677.92	1.50
DISCCART	590742.28	4142679.44	1.50
DISCCART	590726.68	4142679.06	1.50
DISCCART	590689.39	4142171.44	1.50
DISCCART	590682.92	4142156.98	1.50
DISCCART	590678.74	4142139.86	1.50
DISCCART	590724.78	4142165.35	1.50
DISCCART	590754.84	4142160.41	1.50

DISCCART	590784.14	4142156.22	1.50
DISCCART	590816.49	4142153.56	1.50
DISCCART	590841.60	4142151.66	1.50
DISCCART	590836.27	4142126.54	1.50
DISCCART	590805.07	4142129.20	1.50
DISCCART	590776.91	4142134.15	1.50
DISCCART	590743.43	4142139.10	1.50
DISCCART	590714.51	4142141.00	1.50
DISCCART	590899.44	4142140.24	1.50
DISCCART	590929.12	4142137.96	1.50
DISCCART	590959.94	4142126.92	1.50
DISCCART	590986.96	4142116.27	1.50
DISCCART	590896.78	4142118.93	1.50
DISCCART	590927.60	4142112.84	1.50
DISCCART	590955.00	4142103.33	1.50
DISCCART	590970.22	4142092.29	1.50
DISCCART	590983.92	4142082.40	1.50
DISCCART	590987.72	4142065.28	1.50
DISCCART	591000.66	4142098.00	1.50
DISCCART	591014.36	4142069.84	1.50
DISCCART	590780.72	4142100.67	1.50
DISCCART	590806.59	4142102.19	1.50
DISCCART	590843.12	4142099.52	1.50
DISCCART	590875.47	4142093.82	1.50
DISCCART	590907.43	4142090.77	1.50
DISCCART	590943.20	4142081.26	1.50
DISCCART	591503.99	4142382.16	1.50
DISCCART	591537.80	4142385.06	1.50
DISCCART	591459.55	4141782.24	1.50
DISCCART	591491.43	4141786.59	1.50
DISCCART	591523.31	4141787.07	1.50
DISCCART	591550.84	4141786.59	1.50
DISCCART	591580.31	4141787.07	1.50
DISCCART	591608.81	4141787.56	1.50
DISCCART	591638.27	4141792.87	1.50
DISCCART	591668.70	4141802.53	1.50
DISCCART	591009.59	4142041.64	1.50
DISCCART	590998.13	4142018.71	1.50
DISCCART	590991.25	4141992.10	1.50
DISCCART	590982.07	4141965.50	1.50
DISCCART	590979.78	4142038.43	1.50
DISCCART	590972.90	4142015.49	1.50
DISCCART	590964.64	4141989.35	1.50
DISCCART	590965.56	4141951.73	1.50
DISCCART	590947.21	4141956.32	1.50
DISCCART	590944.46	4141980.63	1.50
DISCCART	590864.92	4142387.88	1.50
DISCCART	590854.14	4142373.71	1.50
DISCCART	590804.24	4142384.03	1.50
DISCCART	590789.77	4142384.95	1.50
DISCCART	590776.99	4142386.80	1.50
DISCCART	590761.90	4142387.26	1.50
DISCCART	590747.89	4142390.50	1.50
DISCCART	590736.95	4142389.88	1.50
DISCCART	590724.94	4142389.73	1.50
DISCCART	590688.75	4142442.54	1.50
DISCCART	590683.83	4142430.07	1.50
DISCCART	590687.83	4142456.25	1.50
DISCCART	590687.83	4142473.34	1.50
DISCCART	590690.91	4142486.74	1.50
DISCCART	590690.76	4142504.76	1.50
DISCCART	590730.33	4142593.61	1.50
DISCCART	590618.38	4142553.42	1.50
DISCCART	590613.45	4142595.30	1.50
DISCCART	590570.95	4142579.59	1.50
DISCCART	590686.14	4142609.00	1.50
DISCCART	590657.03	4142612.85	1.50
DISCCART	590623.93	4142620.09	1.50
DISCCART	590638.40	4142620.25	1.50
DISCCART	590661.34	4142594.53	1.50
DISCCART	590646.25	4142597.15	1.50
DISCCART	590630.09	4142595.61	1.50
DISCCART	590660.27	4142665.21	1.50
DISCCART	590639.79	4142681.38	1.50
DISCCART	590628.55	4142681.07	1.50
DISCCART	590617.77	4142685.23	1.50
DISCCART	590608.37	4142686.15	1.50
DISCCART	590675.67	4142678.45	1.50
DISCCART	590689.83	4142688.31	1.50
DISCCART	590686.14	4142721.88	1.50
DISCCART	590663.81	4142736.51	1.50
DISCCART	590645.79	4142735.12	1.50
DISCCART	590632.24	4142737.89	1.50
DISCCART	590612.38	4142734.66	1.50
DISCCART	590612.84	4142725.73	1.50
DISCCART	590627.62	4142716.95	1.50
DISCCART	590655.65	4142716.03	1.50

RE FINISHED

**

** ISCST3 Meteorology Pathway

**

**

ME STARTING

INPUTFIL C:\PROJEC-1\I&R\METDAT-1\Alviso\alv96-00.asc

```
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996
ME FINISHED
**
*****
** ISCST3 Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE PERIOD ALL TO87E5~1.IS\PE00GALL.PLT 31
  PLOTFILE PERIOD DPM TO87E5~1.IS\PE00G001.PLT 32
  PLOTFILE PERIOD FugPM TO87E5~1.IS\PE00G002.PLT 33
OU FINISHED

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


**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.12500E-07	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.17900E-07	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.12500E-07	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.17900E-07	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.29800E-07	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.95000E-08	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

(591014.4, 4142069.8, 0.0, 1.5);	(590780.8, 4142100.8, 0.0, 1.5);
(590806.6, 4142102.2, 0.0, 1.5);	(590843.1, 4142099.5, 0.0, 1.5);
(590875.5, 4142093.8, 0.0, 1.5);	(590907.4, 4142090.8, 0.0, 1.5);
(590943.2, 4142081.3, 0.0, 1.5);	(591504.0, 4142382.2, 0.0, 1.5);
(591537.8, 4142385.0, 0.0, 1.5);	(591459.6, 4141782.3, 0.0, 1.5);
(591491.4, 4141786.5, 0.0, 1.5);	(591523.3, 4141787.0, 0.0, 1.5);
(591550.8, 4141786.5, 0.0, 1.5);	(591580.3, 4141787.0, 0.0, 1.5);
(591608.8, 4141787.5, 0.0, 1.5);	(591638.2, 4141792.8, 0.0, 1.5);
(591668.7, 4141802.5, 0.0, 1.5);	(591009.6, 4142041.8, 0.0, 1.5);
(590998.1, 4142018.8, 0.0, 1.5);	(590991.2, 4141992.0, 0.0, 1.5);
(590982.1, 4141965.5, 0.0, 1.5);	(590979.8, 4142038.5, 0.0, 1.5);
(590972.9, 4142015.5, 0.0, 1.5);	(590964.6, 4141989.2, 0.0, 1.5);
(590965.6, 4141951.8, 0.0, 1.5);	(590947.2, 4141956.2, 0.0, 1.5);
(590944.4, 4141980.8, 0.0, 1.5);	(590864.9, 4142388.0, 0.0, 1.5);
(590854.1, 4142373.8, 0.0, 1.5);	(590804.2, 4142384.0, 0.0, 1.5);
(590789.8, 4142385.0, 0.0, 1.5);	(590777.0, 4142386.8, 0.0, 1.5);
(590761.9, 4142387.2, 0.0, 1.5);	(590747.9, 4142390.5, 0.0, 1.5);
(590736.9, 4142390.0, 0.0, 1.5);	(590724.9, 4142389.8, 0.0, 1.5);
(590688.8, 4142442.5, 0.0, 1.5);	(590683.8, 4142430.0, 0.0, 1.5);
(590687.8, 4142456.3, 0.0, 1.5);	(590687.8, 4142473.2, 0.0, 1.5);
(590690.9, 4142486.8, 0.0, 1.5);	(590690.8, 4142504.8, 0.0, 1.5);
(590730.3, 4142593.5, 0.0, 1.5);	(590618.4, 4142553.5, 0.0, 1.5);
(590613.4, 4142595.3, 0.0, 1.5);	(590570.9, 4142579.5, 0.0, 1.5);
(590686.1, 4142609.0, 0.0, 1.5);	(590657.0, 4142612.8, 0.0, 1.5);
(590623.9, 4142620.0, 0.0, 1.5);	(590638.4, 4142620.2, 0.0, 1.5);
(590661.3, 4142594.5, 0.0, 1.5);	(590646.3, 4142597.2, 0.0, 1.5);
(590630.1, 4142595.5, 0.0, 1.5);	(590660.2, 4142665.3, 0.0, 1.5);
(590639.8, 4142681.5, 0.0, 1.5);	(590628.6, 4142681.0, 0.0, 1.5);
(590617.8, 4142685.2, 0.0, 1.5);	(590608.4, 4142686.2, 0.0, 1.5);
(590675.7, 4142678.5, 0.0, 1.5);	(590689.8, 4142688.2, 0.0, 1.5);
(590686.1, 4142722.0, 0.0, 1.5);	(590663.8, 4142736.5, 0.0, 1.5);
(590645.8, 4142735.0, 0.0, 1.5);	(590632.2, 4142738.0, 0.0, 1.5);
(590612.4, 4142734.8, 0.0, 1.5);	(590612.8, 4142725.8, 0.0, 1.5);
(590627.6, 4142717.0, 0.0, 1.5);	(590655.6, 4142716.0, 0.0, 1.5);

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
96	01	01	01	212.7	1.56	283.5	6	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0 300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0 300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.00976	591096.19	4142502.50	0.01019
591077.50	4142507.75	0.01061	591058.50	4142513.50	0.01095
591040.25	4142518.75	0.01125	591020.06	4142524.50	0.01150
591001.44	4142531.00	0.01155	590982.75	4142537.00	0.01155
591138.44	4142481.25	0.00970	591143.00	4142499.50	0.00827
591148.31	4142518.50	0.00699	591123.19	4142520.00	0.00790
591104.19	4142525.75	0.00831	591084.75	4142531.50	0.00870
591065.75	4142537.00	0.00906	591046.69	4142542.00	0.00941
591027.31	4142548.50	0.00962	591009.00	4142554.75	0.00973
591152.13	4142551.50	0.00545	591156.31	4142570.50	0.00470
591127.38	4142566.50	0.00561	591109.12	4142572.50	0.00591
591090.06	4142577.00	0.00627	591070.69	4142583.50	0.00654
591052.81	4142588.50	0.00681	591032.25	4142595.00	0.00705
591145.25	4142587.00	0.00449	591126.25	4142592.25	0.00479
591107.19	4142597.75	0.00509	591088.94	4142603.00	0.00536
591068.38	4142609.50	0.00563	590876.62	4142572.25	0.01003
590899.06	4142588.50	0.00936	590920.75	4142605.25	0.00849
590939.75	4142624.25	0.00750	590960.31	4142642.25	0.00657
590980.50	4142658.50	0.00573	591001.44	4142676.50	0.00492
591031.13	4142698.00	0.00401	590848.06	4142584.25	0.00932
590851.88	4142600.75	0.00875	590874.31	4142614.75	0.00828
590893.75	4142635.00	0.00748	590912.75	4142654.00	0.00670
590932.56	4142671.75	0.00595	590952.69	4142690.00	0.00523
590971.38	4142709.50	0.00454	590850.38	4142666.00	0.00662
590870.50	4142683.75	0.00608	590892.56	4142700.25	0.00552
590912.38	4142714.00	0.00504	590827.50	4142693.25	0.00592
590854.56	4142720.25	0.00525	590878.12	4142740.25	0.00471
590900.19	4142759.25	0.00420	590773.12	4142713.00	0.00543
590789.50	4142724.00	0.00526	590823.75	4142755.50	0.00466
590844.25	4142774.50	0.00425	590738.50	4142741.75	0.00480
590751.06	4142755.25	0.00464	590765.50	4142767.25	0.00450
590773.50	4142678.25	0.00616	590755.25	4142678.00	0.00609
590742.25	4142679.50	0.00598	590726.69	4142679.00	0.00588
590689.38	4142171.50	0.00074	590682.94	4142157.00	0.00070
590678.75	4142139.75	0.00066	590724.75	4142165.25	0.00086
590754.81	4142160.50	0.00099	590784.12	4142156.25	0.00114
590816.50	4142153.50	0.00134	590841.62	4142151.75	0.00152
590836.25	4142126.50	0.00134	590805.06	4142129.25	0.00116
590776.94	4142134.25	0.00103	590743.44	4142139.00	0.00088
590714.50	4142141.00	0.00078	590899.44	4142140.25	0.00192

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
 INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00223	590959.94	4142127.00	0.00252
590986.94	4142116.25	0.00280	590896.75	4142119.00	0.00172
590927.62	4142112.75	0.00196	590955.00	4142103.25	0.00217
590970.25	4142092.25	0.00224	590983.94	4142082.50	0.00231
590987.75	4142065.25	0.00216	591000.69	4142098.00	0.00276
591014.38	4142069.75	0.00257	590780.75	4142100.75	0.00095
590806.56	4142102.25	0.00107	590843.12	4142099.50	0.00124
590875.50	4142093.75	0.00140	590907.44	4142090.75	0.00161
590943.19	4142081.25	0.00184	591504.00	4142382.25	0.00156
591537.81	4142385.00	0.00132	591459.56	4141782.25	0.00281
591491.44	4141786.50	0.00297	591523.31	4141787.00	0.00307
591550.81	4141786.50	0.00314	591580.31	4141787.00	0.00321
591608.81	4141787.50	0.00327	591638.25	4141792.75	0.00337
591668.69	4141802.50	0.00351	591009.56	4142041.75	0.00216
590998.12	4142018.75	0.00182	590991.25	4141992.00	0.00156
590982.06	4141965.50	0.00134	590979.75	4142038.50	0.00182
590972.88	4142015.50	0.00159	590964.63	4141989.25	0.00137
590965.56	4141951.75	0.00118	590947.19	4141956.25	0.00112
590944.44	4141980.75	0.00121	590864.94	4142388.00	0.01117
590854.12	4142373.75	0.00897	590804.25	4142384.00	0.00650
590789.75	4142385.00	0.00552	590777.00	4142386.75	0.00473
590761.88	4142387.25	0.00380	590747.88	4142390.50	0.00314
590736.94	4142390.00	0.00266	590724.94	4142389.75	0.00229
590688.75	4142442.50	0.00217	590683.81	4142430.00	0.00197
590687.81	4142456.25	0.00236	590687.81	4142473.25	0.00272
590690.94	4142486.75	0.00317	590690.75	4142504.75	0.00373
590730.31	4142593.50	0.00762	590618.38	4142553.50	0.00259
590613.44	4142595.25	0.00305	590570.94	4142579.50	0.00206
590686.12	4142609.00	0.00599	590657.00	4142612.75	0.00473
590623.94	4142620.00	0.00364	590638.38	4142620.25	0.00411
590661.31	4142594.50	0.00467	590646.25	4142597.25	0.00410
590630.06	4142595.50	0.00352	590660.25	4142665.25	0.00495
590639.81	4142681.50	0.00434	590628.56	4142681.00	0.00406
590617.75	4142685.25	0.00380	590608.38	4142686.25	0.00359
590675.69	4142678.50	0.00519	590689.81	4142688.25	0.00529
590686.12	4142722.00	0.00474	590663.81	4142736.50	0.00432
590645.81	4142735.00	0.00411	590632.25	4142738.00	0.00390
590612.38	4142734.75	0.00360	590612.81	4142725.75	0.00364
590627.63	4142717.00	0.00394	590655.62	4142716.00	0.00443

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
 INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.01203	591096.19	4142502.50	0.01216
591077.50	4142507.75	0.01239	591058.50	4142513.50	0.01256
591040.25	4142518.75	0.01274	591020.06	4142524.50	0.01290
591001.44	4142531.00	0.01288	590982.75	4142537.00	0.01295
591138.44	4142481.25	0.01291	591143.00	4142499.50	0.01030
591148.31	4142518.50	0.00832	591123.19	4142520.00	0.00914
591104.19	4142525.75	0.00934	591084.75	4142531.50	0.00954
591065.75	4142537.00	0.00973	591046.69	4142542.00	0.00993
591027.31	4142548.50	0.00998	591009.00	4142554.75	0.01001
591152.13	4142551.50	0.00609	591156.31	4142570.50	0.00512
591127.38	4142566.50	0.00605	591109.12	4142572.50	0.00623
591090.06	4142577.00	0.00647	591070.69	4142583.50	0.00659
591052.81	4142588.50	0.00673	591032.25	4142595.00	0.00685
591145.25	4142587.00	0.00477	591126.25	4142592.25	0.00502
591107.19	4142597.75	0.00523	591088.94	4142603.00	0.00540
591068.38	4142609.50	0.00555	590876.62	4142572.25	0.01310
590899.06	4142588.50	0.01042	590920.75	4142605.25	0.00862
590939.75	4142624.25	0.00721	590960.31	4142642.25	0.00614
590980.50	4142658.50	0.00532	591001.44	4142676.50	0.00456
591031.13	4142698.00	0.00373	590848.06	4142584.25	0.01287
590851.88	4142600.75	0.01082	590874.31	4142614.75	0.00905
590893.75	4142635.00	0.00748	590912.75	4142654.00	0.00638
590932.56	4142671.75	0.00551	590952.69	4142690.00	0.00478
590971.38	4142709.50	0.00414	590850.38	4142666.00	0.00673
590870.50	4142683.75	0.00583	590892.56	4142700.25	0.00512
590912.38	4142714.00	0.00460	590827.50	4142693.25	0.00596
590854.56	4142720.25	0.00492	590878.12	4142740.25	0.00429
590900.19	4142759.25	0.00378	590773.12	4142713.00	0.00579
590789.50	4142724.00	0.00534	590823.75	4142755.50	0.00434
590844.25	4142774.50	0.00386	590738.50	4142741.75	0.00510
590751.06	4142755.25	0.00474	590765.50	4142767.25	0.00443
590773.50	4142678.25	0.00714	590755.25	4142678.00	0.00734
590742.25	4142679.50	0.00734	590726.69	4142679.00	0.00740
590689.38	4142171.50	0.00074	590682.94	4142157.00	0.00069
590678.75	4142139.75	0.00064	590724.75	4142165.25	0.00087
590754.81	4142160.50	0.00101	590784.12	4142156.25	0.00118
590816.50	4142153.50	0.00139	590841.62	4142151.75	0.00159
590836.25	4142126.50	0.00136	590805.06	4142129.25	0.00117
590776.94	4142134.25	0.00103	590743.44	4142139.00	0.00087
590714.50	4142141.00	0.00077	590899.44	4142140.25	0.00203

**MODELOPTs:
 CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
 INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00233	590959.94	4142127.00	0.00255
590986.94	4142116.25	0.00274	590896.75	4142119.00	0.00178
590927.62	4142112.75	0.00201	590955.00	4142103.25	0.00217
590970.25	4142092.25	0.00220	590983.94	4142082.50	0.00222
590987.75	4142065.25	0.00206	591000.69	4142098.00	0.00262
591014.38	4142069.75	0.00237	590780.75	4142100.75	0.00092
590806.56	4142102.25	0.00105	590843.12	4142099.50	0.00124
590875.50	4142093.75	0.00141	590907.44	4142090.75	0.00163
590943.19	4142081.25	0.00182	591504.00	4142382.25	0.00159
591537.81	4142385.00	0.00131	591459.56	4141782.25	0.00202
591491.44	4141786.50	0.00213	591523.31	4141787.00	0.00221
591550.81	4141786.50	0.00225	591580.31	4141787.00	0.00231
591608.81	4141787.50	0.00235	591638.25	4141792.75	0.00243
591668.69	4141802.50	0.00253	591009.56	4142041.75	0.00199
590998.12	4142018.75	0.00169	590991.25	4141992.00	0.00145
590982.06	4141965.50	0.00124	590979.75	4142038.50	0.00173
590972.88	4142015.50	0.00150	590964.63	4141989.25	0.00129
590965.56	4141951.75	0.00110	590947.19	4141956.25	0.00105
590944.44	4141980.75	0.00115	590864.94	4142388.00	0.02007
590854.12	4142373.75	0.01495	590804.25	4142384.00	0.01206
590789.75	4142385.00	0.01029	590777.00	4142386.75	0.00883
590761.88	4142387.25	0.00678	590747.88	4142390.50	0.00540
590736.94	4142390.00	0.00421	590724.94	4142389.75	0.00332
590688.75	4142442.50	0.00342	590683.81	4142430.00	0.00284
590687.81	4142456.25	0.00398	590687.81	4142473.25	0.00496
590690.94	4142486.75	0.00625	590690.75	4142504.75	0.00746
590730.31	4142593.50	0.01743	590618.38	4142553.50	0.00343
590613.44	4142595.25	0.00397	590570.94	4142579.50	0.00242
590686.12	4142609.00	0.00989	590657.00	4142612.75	0.00695
590623.94	4142620.00	0.00485	590638.38	4142620.25	0.00567
590661.31	4142594.50	0.00713	590646.25	4142597.25	0.00591
590630.06	4142595.50	0.00482	590660.25	4142665.25	0.00662
590639.81	4142681.50	0.00553	590628.56	4142681.00	0.00511
590617.75	4142685.25	0.00471	590608.38	4142686.25	0.00439
590675.69	4142678.50	0.00680	590689.81	4142688.25	0.00672
590686.12	4142722.00	0.00557	590663.81	4142736.50	0.00501
590645.81	4142735.00	0.00482	590632.25	4142738.00	0.00455
590612.38	4142734.75	0.00421	590612.81	4142725.75	0.00430
590627.63	4142717.00	0.00473	590655.62	4142716.00	0.00535

**MODELOPTs:
CONC

RURAL FLAT FLGPOLE DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591115.94	4142496.00	0.02179	591096.19	4142502.50	0.02235
591077.50	4142507.75	0.02300	591058.50	4142513.50	0.02352
591040.25	4142518.75	0.02399	591020.06	4142524.50	0.02441
591001.44	4142531.00	0.02443	590982.75	4142537.00	0.02450
591138.44	4142481.25	0.02260	591143.00	4142499.50	0.01857
591148.31	4142518.50	0.01531	591123.19	4142520.00	0.01704
591104.19	4142525.75	0.01765	591084.75	4142531.50	0.01825
591065.75	4142537.00	0.01879	591046.69	4142542.00	0.01934
591027.31	4142548.50	0.01959	591009.00	4142554.75	0.01975
591152.13	4142551.50	0.01154	591156.31	4142570.50	0.00981
591127.38	4142566.50	0.01166	591109.12	4142572.50	0.01214
591090.06	4142577.00	0.01274	591070.69	4142583.50	0.01313
591052.81	4142588.50	0.01354	591032.25	4142595.00	0.01389
591145.25	4142587.00	0.00926	591126.25	4142592.25	0.00981
591107.19	4142597.75	0.01032	591088.94	4142603.00	0.01077
591068.38	4142609.50	0.01118	590876.62	4142572.25	0.02313
590899.06	4142588.50	0.01978	590920.75	4142605.25	0.01710
590939.75	4142624.25	0.01471	590960.31	4142642.25	0.01270
590980.50	4142658.50	0.01105	591001.44	4142676.50	0.00948
591031.13	4142698.00	0.00773	590848.06	4142584.25	0.02219
590851.88	4142600.75	0.01957	590874.31	4142614.75	0.01733
590893.75	4142635.00	0.01497	590912.75	4142654.00	0.01307
590932.56	4142671.75	0.01147	590952.69	4142690.00	0.01001
590971.38	4142709.50	0.00868	590850.38	4142666.00	0.01335
590870.50	4142683.75	0.01191	590892.56	4142700.25	0.01064
590912.38	4142714.00	0.00964	590827.50	4142693.25	0.01188
590854.56	4142720.25	0.01017	590878.12	4142740.25	0.00900
590900.19	4142759.25	0.00798	590773.12	4142713.00	0.01123
590789.50	4142724.00	0.01060	590823.75	4142755.50	0.00900
590844.25	4142774.50	0.00811	590738.50	4142741.75	0.00990
590751.06	4142755.25	0.00938	590765.50	4142767.25	0.00893
590773.50	4142678.25	0.01330	590755.25	4142678.00	0.01342
590742.25	4142679.50	0.01332	590726.69	4142679.00	0.01328
590689.38	4142171.50	0.00149	590682.94	4142157.00	0.00138
590678.75	4142139.75	0.00130	590724.75	4142165.25	0.00174
590754.81	4142160.50	0.00199	590784.12	4142156.25	0.00232
590816.50	4142153.50	0.00273	590841.62	4142151.75	0.00310
590836.25	4142126.50	0.00270	590805.06	4142129.25	0.00234
590776.94	4142134.25	0.00205	590743.44	4142139.00	0.00175
590714.50	4142141.00	0.00154	590899.44	4142140.25	0.00395

**MODELOPTs:
 CONC

RURAL FLAT FLGPOOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
590929.12	4142138.00	0.00456	590959.94	4142127.00	0.00507
590986.94	4142116.25	0.00554	590896.75	4142119.00	0.00350
590927.62	4142112.75	0.00397	590955.00	4142103.25	0.00434
590970.25	4142092.25	0.00444	590983.94	4142082.50	0.00453
590987.75	4142065.25	0.00422	591000.69	4142098.00	0.00538
591014.38	4142069.75	0.00494	590780.75	4142100.75	0.00187
590806.56	4142102.25	0.00212	590843.12	4142099.50	0.00248
590875.50	4142093.75	0.00281	590907.44	4142090.75	0.00323
590943.19	4142081.25	0.00366	591504.00	4142382.25	0.00315
591537.81	4142385.00	0.00263	591459.56	4141782.25	0.00483
591491.44	4141786.50	0.00510	591523.31	4141787.00	0.00528
591550.81	4141786.50	0.00539	591580.31	4141787.00	0.00552
591608.81	4141787.50	0.00562	591638.25	4141792.75	0.00580
591668.69	4141802.50	0.00603	591009.56	4142041.75	0.00415
590998.12	4142018.75	0.00351	590991.25	4141992.00	0.00300
590982.06	4141965.50	0.00257	590979.75	4142038.50	0.00355
590972.88	4142015.50	0.00309	590964.63	4141989.25	0.00266
590965.56	4141951.75	0.00228	590947.19	4141956.25	0.00216
590944.44	4141980.75	0.00236	590864.94	4142388.00	0.03124
590854.12	4142373.75	0.02393	590804.25	4142384.00	0.01856
590789.75	4142385.00	0.01581	590777.00	4142386.75	0.01356
590761.88	4142387.25	0.01057	590747.88	4142390.50	0.00854
590736.94	4142390.00	0.00687	590724.94	4142389.75	0.00561
590688.75	4142442.50	0.00560	590683.81	4142430.00	0.00480
590687.81	4142456.25	0.00635	590687.81	4142473.25	0.00767
590690.94	4142486.75	0.00943	590690.75	4142504.75	0.01119
590730.31	4142593.50	0.02505	590618.38	4142553.50	0.00602
590613.44	4142595.25	0.00702	590570.94	4142579.50	0.00448
590686.12	4142609.00	0.01587	590657.00	4142612.75	0.01169
590623.94	4142620.00	0.00850	590638.38	4142620.25	0.00979
590661.31	4142594.50	0.01180	590646.25	4142597.25	0.01001
590630.06	4142595.50	0.00833	590660.25	4142665.25	0.01157
590639.81	4142681.50	0.00987	590628.56	4142681.00	0.00918
590617.75	4142685.25	0.00851	590608.38	4142686.25	0.00798
590675.69	4142678.50	0.01199	590689.81	4142688.25	0.01201
590686.12	4142722.00	0.01031	590663.81	4142736.50	0.00933
590645.81	4142735.00	0.00893	590632.25	4142738.00	0.00845
590612.38	4142734.75	0.00781	590612.81	4142725.75	0.00793
590627.63	4142717.00	0.00867	590655.62	4142716.00	0.00977

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.01155 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.01155 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.01150 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.01125 AT (591040.25,	4142518.75,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.01117 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.01095 AT (591058.50,	4142513.50,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.01061 AT (591077.50,	4142507.75,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.01019 AT (591096.19,	4142502.50,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.01003 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.00976 AT (591115.94,	4142496.00,	0.00,	1.50) DC NA
FUGPM	1ST HIGHEST VALUE IS	0.02007 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.01743 AT (590730.31,	4142593.50,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.01495 AT (590854.12,	4142373.75,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.01310 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.01295 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.01291 AT (591138.44,	4142481.25,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.01290 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.01288 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.01287 AT (590848.06,	4142584.25,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.01274 AT (591040.25,	4142518.75,	0.00,	1.50) DC NA
ALL	1ST HIGHEST VALUE IS	0.03124 AT (590864.94,	4142388.00,	0.00,	1.50) DC NA
	2ND HIGHEST VALUE IS	0.02505 AT (590730.31,	4142593.50,	0.00,	1.50) DC NA
	3RD HIGHEST VALUE IS	0.02450 AT (590982.75,	4142537.00,	0.00,	1.50) DC NA
	4TH HIGHEST VALUE IS	0.02443 AT (591001.44,	4142531.00,	0.00,	1.50) DC NA
	5TH HIGHEST VALUE IS	0.02441 AT (591020.06,	4142524.50,	0.00,	1.50) DC NA
	6TH HIGHEST VALUE IS	0.02399 AT (591040.25,	4142518.75,	0.00,	1.50) DC NA
	7TH HIGHEST VALUE IS	0.02393 AT (590854.12,	4142373.75,	0.00,	1.50) DC NA
	8TH HIGHEST VALUE IS	0.02352 AT (591058.50,	4142513.50,	0.00,	1.50) DC NA
	9TH HIGHEST VALUE IS	0.02313 AT (590876.62,	4142572.25,	0.00,	1.50) DC NA
	10TH HIGHEST VALUE IS	0.02300 AT (591077.50,	4142507.75,	0.00,	1.50) DC NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** Mitigated Emissions - Residential Receptors

*** 10/27/16
*** 21:30:54
PAGE 17

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***

2017 DPM & Fugitive PM2.5 Model Input/Output- School Receptors

```

**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2017-School.INP
**
*****
**
**
*****
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO School Receptors - 1.0 meter receptor heights
MODELOPT DEFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.00
RUNORNOT RUN
ERRORFIL TOPGOL-3.ERR
CO FINISHED
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A_DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2017 DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2017 Fugitive PM2.5
LOCATION A1B_DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2017 DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2017 Fugitive PM2.5
LOCATION TG_DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2017 Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 5.07E-08 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 1.4E-07 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 5.07E-08 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 1.4E-07 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 8.27E-07 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 3.64E-07 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

```

```

EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL

```

SO FINISHED

**

** ISCST3 Receptor Pathway

**

**

RE STARTING

** DESCRREC "" ""

DISCCART	591457.75	4142446.89	1.00
DISCCART	591436.31	4142442.91	1.00
DISCCART	591414.88	4142439.24	1.00
DISCCART	591453.46	4142467.71	1.00
DISCCART	591432.33	4142463.12	1.00
DISCCART	591411.51	4142460.37	1.00
DISCCART	591449.48	4142488.23	1.00
DISCCART	591428.04	4142484.86	1.00
DISCCART	591407.53	4142480.88	1.00
DISCCART	591446.11	4142509.36	1.00
DISCCART	591424.68	4142505.07	1.00
DISCCART	591403.85	4142501.70	1.00
DISCCART	591464.18	4142543.96	1.00
DISCCART	591435.09	4142539.37	1.00
DISCCART	591378.75	4142521.61	1.00
DISCCART	591375.68	4142536.30	1.00
DISCCART	591353.02	4142517.32	1.00
DISCCART	591350.88	4142532.02	1.00
DISCCART	591393.44	4142589.28	1.00
DISCCART	591379.66	4142593.26	1.00
DISCCART	591303.32	4142461.21	1.00
DISCCART	591281.72	4142464.06	1.00
DISCCART	591284.57	4142448.16	1.00
DISCCART	591441.51	4142406.99	1.00
DISCCART	591439.88	4142419.22	1.00
DISCCART	591395.86	4142427.37	1.00
DISCCART	591382.00	4142424.11	1.00

RE FINISHED

**

** ISCST3 Meteorology Pathway

**

**

ME STARTING

```

INPUTFIL C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996

```

ME FINISHED

**

** ISCST3 Output Pathway

**

**

OU STARTING

```

** Auto-Generated Plotfiles
PLOTFILE PERIOD ALL TOPGOL~3.IS\PE00GALL.PLT 31
PLOTFILE PERIOD DPM TOPGOL~3.IS\PE00G001.PLT 32
PLOTFILE PERIOD FugPM TOPGOL~3.IS\PE00G002.PLT 33

```

OU FINISHED

*** SETUP Finishes Successfully ***

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.50700E-07	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.14000E-06	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.50700E-07	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.14000E-06	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.82700E-06	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.36400E-06	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	MIXING HEIGHT (M) URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
96	01	01	01	212.7	1.56	283.5	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
591457.75	4142447.00	0.02062	591436.31	4142443.00	0.02307	□□□□□□□□□□
591414.88	4142439.25	0.02597	591453.44	4142467.75	0.01955	
591432.31	4142463.00	0.02185	591411.50	4142460.25	0.02435	
591449.50	4142488.25	0.01871	591428.06	4142484.75	0.02080	
591407.50	4142481.00	0.02325	591446.12	4142509.25	0.01796	
591424.69	4142505.00	0.02004	591403.88	4142501.75	0.02251	
591464.19	4142544.00	0.01534	591435.06	4142539.25	0.01772	
591378.75	4142521.50	0.02466	591375.69	4142536.25	0.02406	
591353.00	4142517.25	0.02835	591350.88	4142532.00	0.02724	
591393.44	4142589.25	0.01941	591379.69	4142593.25	0.02018	
591303.31	4142461.25	0.04636	591281.75	4142464.00	0.05270	
591284.56	4142448.25	0.05643	591441.50	4142407.00	0.02643	
591439.88	4142419.25	0.02510	591395.88	4142427.25	0.03013	
591382.00	4142424.00	0.03294				

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591457.75	4142447.00	0.01751	591436.31	4142443.00	0.02016
591414.88	4142439.25	0.02352	591453.44	4142467.75	0.01641
591432.31	4142463.00	0.01887	591411.50	4142460.25	0.02164
591449.50	4142488.25	0.01557	591428.06	4142484.75	0.01772
591407.50	4142481.00	0.02014	591446.12	4142509.25	0.01479
591424.69	4142505.00	0.01672	591403.88	4142501.75	0.01893
591464.19	4142544.00	0.01222	591435.06	4142539.25	0.01420
591378.75	4142521.50	0.02045	591375.69	4142536.25	0.01970
591353.00	4142517.25	0.02453	591350.88	4142532.00	0.02323
591393.44	4142589.25	0.01497	591379.69	4142593.25	0.01574
591303.31	4142461.25	0.05202	591281.75	4142464.00	0.06308
591284.56	4142448.25	0.07309	591441.50	4142407.00	0.02384
591439.88	4142419.25	0.02235	591395.88	4142427.25	0.02873
591382.00	4142424.00	0.03251			

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591457.75	4142447.00	0.03813	591436.31	4142443.00	0.04323
591414.88	4142439.25	0.04949	591453.44	4142467.75	0.03596
591432.31	4142463.00	0.04072	591411.50	4142460.25	0.04599
591449.50	4142488.25	0.03428	591428.06	4142484.75	0.03852
591407.50	4142481.00	0.04338	591446.12	4142509.25	0.03275
591424.69	4142505.00	0.03677	591403.88	4142501.75	0.04144
591464.19	4142544.00	0.02756	591435.06	4142539.25	0.03192
591378.75	4142521.50	0.04511	591375.69	4142536.25	0.04376
591353.00	4142517.25	0.05287	591350.88	4142532.00	0.05047
591393.44	4142589.25	0.03437	591379.69	4142593.25	0.03593
591303.31	4142461.25	0.09838	591281.75	4142464.00	0.11577
591284.56	4142448.25	0.12953	591441.50	4142407.00	0.05027
591439.88	4142419.25	0.04745	591395.88	4142427.25	0.05886
591382.00	4142424.00	0.06545			

**MODELOPTs:
 CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF	TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.05643 AT (	591284.56,	4142448.25,	0.00,	1.00)	DC NA
	2ND HIGHEST VALUE IS	0.05270 AT (	591281.75,	4142464.00,	0.00,	1.00)	DC NA
	3RD HIGHEST VALUE IS	0.04636 AT (	591303.31,	4142461.25,	0.00,	1.00)	DC NA
	4TH HIGHEST VALUE IS	0.03294 AT (	591382.00,	4142424.00,	0.00,	1.00)	DC NA
	5TH HIGHEST VALUE IS	0.03013 AT (	591395.88,	4142427.25,	0.00,	1.00)	DC NA
	6TH HIGHEST VALUE IS	0.02835 AT (	591353.00,	4142517.25,	0.00,	1.00)	DC NA
	7TH HIGHEST VALUE IS	0.02724 AT (	591350.88,	4142532.00,	0.00,	1.00)	DC NA
	8TH HIGHEST VALUE IS	0.02643 AT (	591441.50,	4142407.00,	0.00,	1.00)	DC NA
	9TH HIGHEST VALUE IS	0.02597 AT (	591414.88,	4142439.25,	0.00,	1.00)	DC NA
	10TH HIGHEST VALUE IS	0.02510 AT (	591439.88,	4142419.25,	0.00,	1.00)	DC NA
FUGPM	1ST HIGHEST VALUE IS	0.07309 AT (	591284.56,	4142448.25,	0.00,	1.00)	DC NA
	2ND HIGHEST VALUE IS	0.06308 AT (	591281.75,	4142464.00,	0.00,	1.00)	DC NA
	3RD HIGHEST VALUE IS	0.05202 AT (	591303.31,	4142461.25,	0.00,	1.00)	DC NA
	4TH HIGHEST VALUE IS	0.03251 AT (	591382.00,	4142424.00,	0.00,	1.00)	DC NA
	5TH HIGHEST VALUE IS	0.02873 AT (	591395.88,	4142427.25,	0.00,	1.00)	DC NA
	6TH HIGHEST VALUE IS	0.02453 AT (	591353.00,	4142517.25,	0.00,	1.00)	DC NA
	7TH HIGHEST VALUE IS	0.02384 AT (	591441.50,	4142407.00,	0.00,	1.00)	DC NA
	8TH HIGHEST VALUE IS	0.02352 AT (	591414.88,	4142439.25,	0.00,	1.00)	DC NA
	9TH HIGHEST VALUE IS	0.02323 AT (	591350.88,	4142532.00,	0.00,	1.00)	DC NA
	10TH HIGHEST VALUE IS	0.02235 AT (	591439.88,	4142419.25,	0.00,	1.00)	DC NA
ALL	1ST HIGHEST VALUE IS	0.12953 AT (	591284.56,	4142448.25,	0.00,	1.00)	DC NA
	2ND HIGHEST VALUE IS	0.11577 AT (	591281.75,	4142464.00,	0.00,	1.00)	DC NA
	3RD HIGHEST VALUE IS	0.09838 AT (	591303.31,	4142461.25,	0.00,	1.00)	DC NA
	4TH HIGHEST VALUE IS	0.06545 AT (	591382.00,	4142424.00,	0.00,	1.00)	DC NA
	5TH HIGHEST VALUE IS	0.05886 AT (	591395.88,	4142427.25,	0.00,	1.00)	DC NA
	6TH HIGHEST VALUE IS	0.05287 AT (	591353.00,	4142517.25,	0.00,	1.00)	DC NA
	7TH HIGHEST VALUE IS	0.05047 AT (	591350.88,	4142532.00,	0.00,	1.00)	DC NA
	8TH HIGHEST VALUE IS	0.05027 AT (	591441.50,	4142407.00,	0.00,	1.00)	DC NA
	9TH HIGHEST VALUE IS	0.04949 AT (	591414.88,	4142439.25,	0.00,	1.00)	DC NA
	10TH HIGHEST VALUE IS	0.04745 AT (	591439.88,	4142419.25,	0.00,	1.00)	DC NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2017 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** School Receptors - 1.0 meter receptor heights

*** 10/27/16
*** 20:39:27
PAGE 13

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***

2018 DPM & Fugitive PM2.5 Model Input/Output- School Receptors

```

**
*****
**
** ISCAST3 Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 10/27/2016
** File: G:\Projects\I&R\Topgolf\Model\Topgolf-Const-2018-School.INP
**
*****
**
**
*****
** ISCAST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
TITLETWO School Receptors - 1.0 meter receptor heights
MODELOPT DEFAULT CONC RURAL
AVERTIME PERIOD
POLLUTID OTHER
TERRHGT5 FLAT
FLAGPOLE 1.00
RUNORNOT RUN
ERRORFIL TOPGOL-4.ERR
CO FINISHED
**
*****
** ISCAST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION A1A DPM AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A -2018 DPM
LOCATION A1A_FUG AREAPOLY 590982.382 4142485.552
** DESCRSRC Hotel-Retail Construction Area 1A - 2018 Fugitive PM2.5
LOCATION A1B DPM AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B -2018 DPM
LOCATION A1B_FUG AREAPOLY 591301.474 4142218.829
** DESCRSRC Hotel-Retail Construction Area 1B - 2018 Fugitive PM2.5
LOCATION TG DPM AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 DPM
LOCATION TG_FUG AREAPOLY 591150.648 4142203.130
** DESCRSRC TopGolf Construction Area - 2018 Fugitive PM2.5
** Source Parameters **
SRCPARAM A1A_DPM 3.07E-07 6.000 10
AREAVERT A1A_DPM 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_DPM 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_DPM 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_DPM 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_DPM 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1A_FUG 6.25E-08 2.000 10 0.000
AREAVERT A1A_FUG 590982.382 4142485.552 590982.973 4142360.599
AREAVERT A1A_FUG 590932.165 4142360.304 590931.869 4142424.996
AREAVERT A1A_FUG 590725.978 4142425.291 590724.501 4142578.306
AREAVERT A1A_FUG 590750.791 4142579.193 590817.551 4142552.016
AREAVERT A1A_FUG 590897.308 4142516.273 590944.276 4142497.663
SRCPARAM A1B_DPM 3.07E-07 6.000 6
AREAVERT A1B_DPM 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_DPM 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_DPM 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM A1B_FUG 6.25E-08 2.000 6 0.000
AREAVERT A1B_FUG 591301.474 4142218.829 591227.737 4142338.088
AREAVERT A1B_FUG 590982.822 4142414.835 590982.446 4142485.563
AREAVERT A1B_FUG 591162.276 4142428.755 591349.629 4142369.313
SRCPARAM TG_DPM 2.68E-07 6.000 10
AREAVERT TG_DPM 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_DPM 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_DPM 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_DPM 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_DPM 591226.892 4142337.693 591256.845 4142288.678
SRCPARAM TG_FUG 9.5E-09 2.000 10 0.000
AREAVERT TG_FUG 591150.648 4142203.130 591119.106 4142224.461
AREAVERT TG_FUG 591099.137 4142234.899 591081.211 4142244.883
AREAVERT TG_FUG 591057.158 4142256.229 591031.743 4142290.267
AREAVERT TG_FUG 590984.090 4142283.459 590983.636 4142413.710
AREAVERT TG_FUG 591226.892 4142337.693 591256.845 4142288.678
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "7am-4pm"
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_DPM HROFDY 1.0 1.0 1.0 1.0 1.0 0.0
EMISFACT A1A_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1A_FUG HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1A_FUG HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_DPM HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_DPM HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

```

```
EMISFACT A1B_DPM      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A1B_FUG      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT A1B_FUG      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_DPM       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_DPM       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT TG_FUG       HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT TG_FUG       HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP DPM          A1A_DPM A1B_DPM TG_DPM
SRCGROUP FugPM        A1A_FUG A1B_FUG TG_FUG
SRCGROUP ALL
```

SO FINISHED

**

** ISCST3 Receptor Pathway

**
**

RE STARTING

```
** DESCRREC "" ""
DISCCART 591457.75 4142446.89 1.00
DISCCART 591436.31 4142442.91 1.00
DISCCART 591414.88 4142439.24 1.00
DISCCART 591453.46 4142467.71 1.00
DISCCART 591432.33 4142463.12 1.00
DISCCART 591411.51 4142460.37 1.00
DISCCART 591449.48 4142488.23 1.00
DISCCART 591428.04 4142484.86 1.00
DISCCART 591407.53 4142480.88 1.00
DISCCART 591446.11 4142509.36 1.00
DISCCART 591424.68 4142505.07 1.00
DISCCART 591403.85 4142501.70 1.00
DISCCART 591464.18 4142543.96 1.00
DISCCART 591435.09 4142539.37 1.00
DISCCART 591378.75 4142521.61 1.00
DISCCART 591375.68 4142536.30 1.00
DISCCART 591353.02 4142517.32 1.00
DISCCART 591350.88 4142532.02 1.00
DISCCART 591393.44 4142589.28 1.00
DISCCART 591379.66 4142593.26 1.00
DISCCART 591303.32 4142461.21 1.00
DISCCART 591281.72 4142464.06 1.00
DISCCART 591284.57 4142448.16 1.00
DISCCART 591441.51 4142406.99 1.00
DISCCART 591439.88 4142419.22 1.00
DISCCART 591395.86 4142427.37 1.00
DISCCART 591382.00 4142424.11 1.00
```

RE FINISHED

**

** ISCST3 Meteorology Pathway

**
**

ME STARTING

```
INPUTFIL C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
ANEMHGHT 10 METERS
SURFDATA 7905 1996
UAIRDATA 7905 1996
```

ME FINISHED

**

** ISCST3 Output Pathway

**
**

OU STARTING

```
** Auto-Generated Plotfiles
PLOTFILE PERIOD ALL TOPGOL~4.IS\PE00GALL.PLT 31
PLOTFILE PERIOD DPM TOPGOL~4.IS\PE00G001.PLT 32
PLOTFILE PERIOD FugPM TOPGOL~4.IS\PE00G002.PLT 33
```

OU FINISHED

*** SETUP Finishes Successfully ***

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
A1A_DPM	0	0.30700E-06	590982.4	4142485.5	0.0	6.00	10	0.00	HROFDY
A1A_FUG	0	0.62500E-07	590982.4	4142485.5	0.0	2.00	10	0.00	HROFDY
A1B_DPM	0	0.30700E-06	591301.5	4142218.8	0.0	6.00	6	0.00	HROFDY
A1B_FUG	0	0.62500E-07	591301.5	4142218.8	0.0	2.00	6	0.00	HROFDY
TG_DPM	0	0.26800E-06	591150.6	4142203.2	0.0	6.00	10	0.00	HROFDY
TG_FUG	0	0.95000E-08	591150.6	4142203.2	0.0	2.00	10	0.00	HROFDY

*** ISCST3 - VERSION 02035 ***

*** TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** School Receptors - 1.0 meter receptor heights

*** 10/27/16
*** 20:46:32
PAGE 3

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
DPM	A1A_DPM , A1B_DPM , TG_DPM ,
FUGPM	A1A_FUG , A1B_FUG , TG_FUG ,
ALL	A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = A1A DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1A FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = A1B FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = TG DPM ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
SOURCE ID = TG FUG ; SOURCE TYPE = AREAPOLY :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

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

FILE: C:\PROJEC~1\I&R\METDAT~1\Alviso\alv96-00.asc
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 7905 UPPER AIR STATION NO.: 7905
NAME: UNKNOWN NAME: UNKNOWN
YEAR: 1996 YEAR: 1996

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
96	01	01	01	212.7	1.56	283.5	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	02	186.7	1.03	284.0	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	03	162.3	1.79	284.0	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	04	185.1	1.97	283.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	05	132.3	2.46	283.0	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	06	97.9	4.16	283.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	07	95.8	1.61	284.4	6	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	08	152.8	3.58	285.9	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	09	157.8	5.54	288.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	10	158.3	5.01	289.9	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	11	162.5	5.54	291.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	12	161.7	5.72	292.4	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	13	168.0	6.84	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	14	182.2	6.12	292.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	15	153.1	5.68	292.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	16	112.6	4.34	291.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	17	134.5	3.84	290.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	18	143.4	4.38	290.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	19	145.1	3.62	290.6	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	20	161.2	4.83	289.3	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	21	155.0	4.83	289.3	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	22	105.9	4.25	286.5	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	23	48.0	2.68	285.6	5	300.0	300.0	0.0000	0.0	0.0000	0	0.00
96	01	01	24	89.0	2.46	285.8	4	300.0	300.0	0.0000	0.0	0.0000	0	0.00

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: DPM ***
INCLUDING SOURCE(S): A1A_DPM , A1B_DPM , TG_DPM ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591457.75	4142447.00	0.02346	591436.31	4142443.00	0.02681
591414.88	4142439.25	0.03084	591453.44	4142467.75	0.02188
591432.31	4142463.00	0.02494	591411.50	4142460.25	0.02817
591449.50	4142488.25	0.02065	591428.06	4142484.75	0.02324
591407.50	4142481.00	0.02600	591446.12	4142509.25	0.01951
591424.69	4142505.00	0.02177	591403.88	4142501.75	0.02422
591464.19	4142544.00	0.01614	591435.06	4142539.25	0.01840
591378.75	4142521.50	0.02549	591375.69	4142536.25	0.02447
591353.00	4142517.25	0.03022	591350.88	4142532.00	0.02872
591393.44	4142589.25	0.01864	591379.69	4142593.25	0.01960
591303.31	4142461.25	0.06089	591281.75	4142464.00	0.07375
591284.56	4142448.25	0.08228	591441.50	4142407.00	0.03204
591439.88	4142419.25	0.02992	591395.88	4142427.25	0.03691
591382.00	4142424.00	0.04088			

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGPM ***
INCLUDING SOURCE(S): A1A_FUG , A1B_FUG , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591457.75	4142447.00	0.00426	591436.31	4142443.00	0.00501
591414.88	4142439.25	0.00600	591453.44	4142467.75	0.00396
591432.31	4142463.00	0.00465	591411.50	4142460.25	0.00544
591449.50	4142488.25	0.00373	591428.06	4142484.75	0.00431
591407.50	4142481.00	0.00493	591446.12	4142509.25	0.00351
591424.69	4142505.00	0.00398	591403.88	4142501.75	0.00449
591464.19	4142544.00	0.00282	591435.06	4142539.25	0.00325
591378.75	4142521.50	0.00469	591375.69	4142536.25	0.00445
591353.00	4142517.25	0.00579	591350.88	4142532.00	0.00542
591393.44	4142589.25	0.00319	591379.69	4142593.25	0.00339
591303.31	4142461.25	0.01466	591281.75	4142464.00	0.01841
591284.56	4142448.25	0.02218	591441.50	4142407.00	0.00609
591439.88	4142419.25	0.00565	591395.88	4142427.25	0.00758
591382.00	4142424.00	0.00874			

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): A1A_DPM , A1A_FUG , A1B_DPM , A1B_FUG , TG_DPM , TG_FUG ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
591457.75	4142447.00	0.02772	591436.31	4142443.00	0.03182
591414.88	4142439.25	0.03684	591453.44	4142467.75	0.02584
591432.31	4142463.00	0.02959	591411.50	4142460.25	0.03361
591449.50	4142488.25	0.02438	591428.06	4142484.75	0.02755
591407.50	4142481.00	0.03094	591446.12	4142509.25	0.02302
591424.69	4142505.00	0.02575	591403.88	4142501.75	0.02871
591464.19	4142544.00	0.01896	591435.06	4142539.25	0.02165
591378.75	4142521.50	0.03018	591375.69	4142536.25	0.02892
591353.00	4142517.25	0.03601	591350.88	4142532.00	0.03414
591393.44	4142589.25	0.02183	591379.69	4142593.25	0.02300
591303.31	4142461.25	0.07554	591281.75	4142464.00	0.09216
591284.56	4142448.25	0.10445	591441.50	4142407.00	0.03812
591439.88	4142419.25	0.03556	591395.88	4142427.25	0.04449
591382.00	4142424.00	0.04961			

**MODELOPTs:
CONC

RURAL FLAT FLGPOL DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
DPM	1ST HIGHEST VALUE IS	0.08228 AT (591284.56,	4142448.25,	0.00,	1.00) DC NA
	2ND HIGHEST VALUE IS	0.07375 AT (591281.75,	4142464.00,	0.00,	1.00) DC NA
	3RD HIGHEST VALUE IS	0.06089 AT (591303.31,	4142461.25,	0.00,	1.00) DC NA
	4TH HIGHEST VALUE IS	0.04088 AT (591382.00,	4142424.00,	0.00,	1.00) DC NA
	5TH HIGHEST VALUE IS	0.03691 AT (591395.88,	4142427.25,	0.00,	1.00) DC NA
	6TH HIGHEST VALUE IS	0.03204 AT (591441.50,	4142407.00,	0.00,	1.00) DC NA
	7TH HIGHEST VALUE IS	0.03084 AT (591414.88,	4142439.25,	0.00,	1.00) DC NA
	8TH HIGHEST VALUE IS	0.03022 AT (591353.00,	4142517.25,	0.00,	1.00) DC NA
	9TH HIGHEST VALUE IS	0.02992 AT (591439.88,	4142419.25,	0.00,	1.00) DC NA
	10TH HIGHEST VALUE IS	0.02872 AT (591350.88,	4142532.00,	0.00,	1.00) DC NA
FUGPM	1ST HIGHEST VALUE IS	0.02218 AT (591284.56,	4142448.25,	0.00,	1.00) DC NA
	2ND HIGHEST VALUE IS	0.01841 AT (591281.75,	4142464.00,	0.00,	1.00) DC NA
	3RD HIGHEST VALUE IS	0.01466 AT (591303.31,	4142461.25,	0.00,	1.00) DC NA
	4TH HIGHEST VALUE IS	0.00874 AT (591382.00,	4142424.00,	0.00,	1.00) DC NA
	5TH HIGHEST VALUE IS	0.00758 AT (591395.88,	4142427.25,	0.00,	1.00) DC NA
	6TH HIGHEST VALUE IS	0.00609 AT (591441.50,	4142407.00,	0.00,	1.00) DC NA
	7TH HIGHEST VALUE IS	0.00600 AT (591414.88,	4142439.25,	0.00,	1.00) DC NA
	8TH HIGHEST VALUE IS	0.00579 AT (591353.00,	4142517.25,	0.00,	1.00) DC NA
	9TH HIGHEST VALUE IS	0.00565 AT (591439.88,	4142419.25,	0.00,	1.00) DC NA
	10TH HIGHEST VALUE IS	0.00544 AT (591411.50,	4142460.25,	0.00,	1.00) DC NA
ALL	1ST HIGHEST VALUE IS	0.10445 AT (591284.56,	4142448.25,	0.00,	1.00) DC NA
	2ND HIGHEST VALUE IS	0.09216 AT (591281.75,	4142464.00,	0.00,	1.00) DC NA
	3RD HIGHEST VALUE IS	0.07554 AT (591303.31,	4142461.25,	0.00,	1.00) DC NA
	4TH HIGHEST VALUE IS	0.04961 AT (591382.00,	4142424.00,	0.00,	1.00) DC NA
	5TH HIGHEST VALUE IS	0.04449 AT (591395.88,	4142427.25,	0.00,	1.00) DC NA
	6TH HIGHEST VALUE IS	0.03812 AT (591441.50,	4142407.00,	0.00,	1.00) DC NA
	7TH HIGHEST VALUE IS	0.03684 AT (591414.88,	4142439.25,	0.00,	1.00) DC NA
	8TH HIGHEST VALUE IS	0.03601 AT (591353.00,	4142517.25,	0.00,	1.00) DC NA
	9TH HIGHEST VALUE IS	0.03556 AT (591439.88,	4142419.25,	0.00,	1.00) DC NA
	10TH HIGHEST VALUE IS	0.03414 AT (591350.88,	4142532.00,	0.00,	1.00) DC NA

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

*** ISCST3 - VERSION 02035 *** *** TopGolf-2018 Construction DPM/PM2.5, 1996-2000 Alviso Met Data
*** School Receptors - 1.0 meter receptor heights

*** 10/27/16
*** 20:46:32
PAGE 13

**MODELOPTs:
CONC RURAL FLAT FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 121 Informational Message(s)

A Total of 121 Calm Hours Identified

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

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST3 Finishes Successfully ***
