Air Quality Analysis for the Proposed OSSE DOT Bus Terminal Located at 1601 W Street, NE, Washington D.C.

Prepared for:

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Background

Atlantic Pacific Communities has contracted Sullivan Environmental Consulting, Inc. to conduct an air dispersion modeling analysis with respect to the local impact area around the proposed development of the OSSE DOT Bus Terminal site located at 1601 W Street NE, Washington, DC. This facility is bounded by W Street NE (to the north), Montana Ave NE (to the east), and New York Ave NE (to the south). The purpose of this analysis is to determine whether or not vehicle emissions resulting from the development of this bus terminal will result in exceedances of the National Ambient Air Quality Standards (NAAQS). The analysis was conducted for carbon monoxide (CO) consistent with EPA emissions and modeling guidelines as well as procedures developed by the Air Quality Division of the Department of Health of the District of Columbia Government (DC AQD, 2007).

Technical Approach

The technical approach used in this analysis is consistent with EPA air modeling guidelines (U.S. EPA, 2003), the EPA MOVES vehicle emissions model (U.S. EPA, 2015), Draft DOEE Guidance on using MOVES (DC DOEE, 2018), and the EPA Volume 9 guidance document (U.S. EPA, 1978) for emission estimates for street intersections. The approach is designed to most effectively meet the requirements of Volume 9, using maximum rush-hour hourly traffic volume data for the surrounding streets. Each of the key components of the proposed air quality analysis (site description, traffic flow patterns, emissions assessment, dispersion modeling, background analysis, meteorological data, and model results) is described in this report.

1.0 Site Description

The OSSE DIT Bus Terminal project site is located in Northeast Washington, D.C. along W Street NE as shown in Figure 1. The project site is located inside the area bounded by W Street NE (to the north), Montana Ave NE (to the east), and New York Ave NE (to the south). The project will consist of a series of at-grade parking lots for both 230 buses and cars. There will be 230 bus spaces and 47 car spaces available on site. The maximum predicted hourly traffic count through the parking lot is conservatively estimated to be 115 buses/hour, and 24 cars/hour, or about 50 percent of parking capacity.

2.0 Traffic Flow Patterns

All existing (2019) and future (2021) intersection peak-hour traffic volumes and traffic signalization data for all key locations within this study area were obtained from a traffic study conducted by AMT Consulting Engineers and Land Surveyors (AMT, 2019). The projected future traffic volumes provided by the AMT traffic study address all current and known future nearby project sites. The maximum peak traffic values and the analysis of the traffic light queue lengths were used in the assessment of the vehicle emissions (see Appendix A). The existing and future peak 1-hour and 8-hour traffic volumes for all key intersections are presented in Tables 1 and 2.

Figure 1. Satellite View of the OSSE DOT Bus Terminal Site and Surrounding Roads

Table 1. Existing (2019) Peak 1-Hour and 8-Hour Traffic Volume Flows for All Key Intersections

INTERSECTIONS	EXISTING TRAFFIC VOLUME FLOWS (VEH/HR)			
	AM MAX	PM MAX	1-HR MAX	8-HR MAX
18th St. From North	350	134	350	245
W St. From SW	102	70	102	71
Montana Ave From NW	324	342	342	239
Montana Ave From SE	663	725	725	508
W St. From East	108	90	108	76
W St. From West	106	51	106	74
16th Street From North	25	25	25	18
Bryant St. From East	39	24	39	27
17th St. From North	24	13	24	17
Montana Ave From NW	337	343	343	240
Montana Ave From SE	467	515	515	361
Edwin St. From East	4	9	9	6
Driveway From West	0	6	6	4
Montana Ave From NW	697	458	697	488
Montana Ave From SE	659	733	733	513

Table 2. Future (2021) Peak 1-Hour and 8-Hour Traffic Volume Flows for All Key Intersections

INTERSECTIONS	EXISTING TRAFFIC VOLUME FLOWS (VEH/HR)			
	AM MAX	PM MAX	1-HR MAX	8-HR MAX
18th St. From North	350	134	350	245
W St. From SW	102	94	102	71
Montana Ave From NW	324	371	371	260
Montana Ave From SE	663	754	754	528
W St. From East	108	90	108	76
W St. From West	106	51	106	74
16th Street From North	25	25	25	18
Bryant St. From East	39	24	39	27
17th St. From North	24	13	24	17
Montana Ave From NW	395	372	395	277
Montana Ave From SE	467	516	516	361
Edwin St. From East	4	9	9	6
Driveway From West	0	6	6	4
Montana Ave From NW	697	472	697	488
Montana Ave From SE	659	762	762	533

3.0 Emissions Assessment

Vehicle emission rates were computed using the latest version of the state-of-the-art EPA computer model MOVES2014a (U.S. EPA, 2015). All data concerning inspection and maintenance, anti-tampering program, and vehicle fleet mix were set to match current recommendations established by the District of Columbia Council of Governments (DC COG).

Worst-case emission rates were determined by applying the most conservative (highest) emission rates from a simulated winter run (20^{o} F). Based on the DC modeling guidance (DC AQD, 2007) and the draft MOVES guidance (DC DOEE, 2018), the vehicle speeds on the major roadways and access roads were assumed to be 10 mph for purposes of conservatively estimating emissions. For idling emissions for road queues, a zero vehicle speed was used in MOVES modeling in accordance on the draft DC DOEE MOVES guidance. The bus terminal parking lot emissions were estimated through MOVES by using the draft DOEE guidance recommended 2.5 mph vehicle speed and average parking distance of 245 feet for buses and 220 feet for cars. The resulting conservative average year 2019 and 2021 emission rates were summarized and applied in the modeling. The resulting emissions were then distributed to the appropriate road segments representing the intersections, parking garage, and roadways (see Table 3). Screenshots of MOVES model input and output files are provided in Appendix B.

Table 3. MOVES Estimated 2019 and 2021 Vehicle CO Emission Rates

TRAFFIC YEAR	IDLE (QUEUE @ INTERSECTION)	BUS TERMINAL (BUSES) (2.5 MPH)	BUS TERMINAL (CARS) (2.5 MPH)	ROADS (10 MPH)
	(grams/vehicle-hour)	(grams/vehicle-mile)		
2019 (EXISTING)	9.98			4.96
2021 (FUTURE)	7.32	21.35	6.68	4.39

4.0 Dispersion Models used in this Assessment

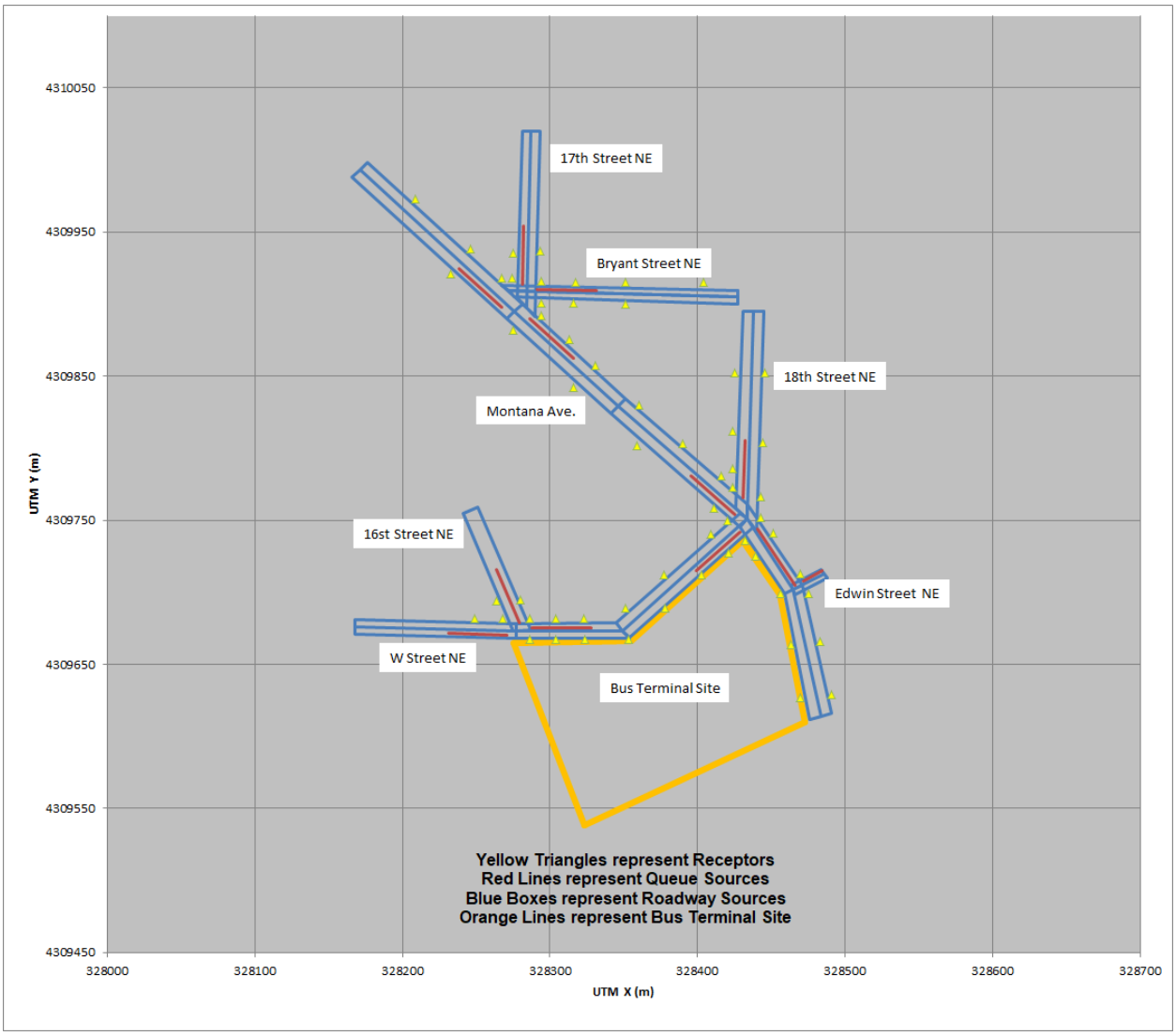
The CAL3QHC model (Version 2.0 dated 95221) was used for the roadway model analysis. 1-hour (60-minute) and 8-hour (480 minute) averaging times and a surface roughness of 85 cm (centers of major cities 65-110 cm; Atmospheric Turbulence, 1984) are some of the variables that were used in the model run. A total of 25 line sources were used to reflect the traffic flows on the surrounding streets including queue sources (see Figure 2). Modeling of the parking lot CO emissions was conducted using the AERMOD model (version 18081) as recommended by the Air Quality Guidance Document (DC AQD, 2007).

5.0 Source Release Specifications

The roadways, intersections, and idling zones were modeled as individual line sources. The idling line source and moving vehicle line source heights were set to 1.0 meters to conservatively account for initial mixing zones created by the passing vehicles, with varying lengths and widths depending on the widths of each road segment. Emission rates were input as grams/mile-vehicle (based on MOVES results). Idling zone queue lengths were determined by matching results from a spreadsheet following Volume 9 guidance with the actual output in the CAL3QHC runs.

The parking lot emissions were modeled as a AREAPOLY source at-grade that combines both the bus and car emissions (see Figure 2). The CO emission rates for the parking lot sources were estimated to be 0.033 grams/second based on peak hourly traffic of 115 buses/hour and 24 cars/hour, a MOVES emission rate of 21.35 grams/vehicle-hour for buses and 6.68 grams/vehicle-hour for cars (see Table 3), and an average parking distance of 245 feet (0.046 miles) for buses and 220 feet (0.042 miles) for cars.

Figure 2. Road Layout and Model Receptor Map of the OSSE DOT Bus Terminal Project Region

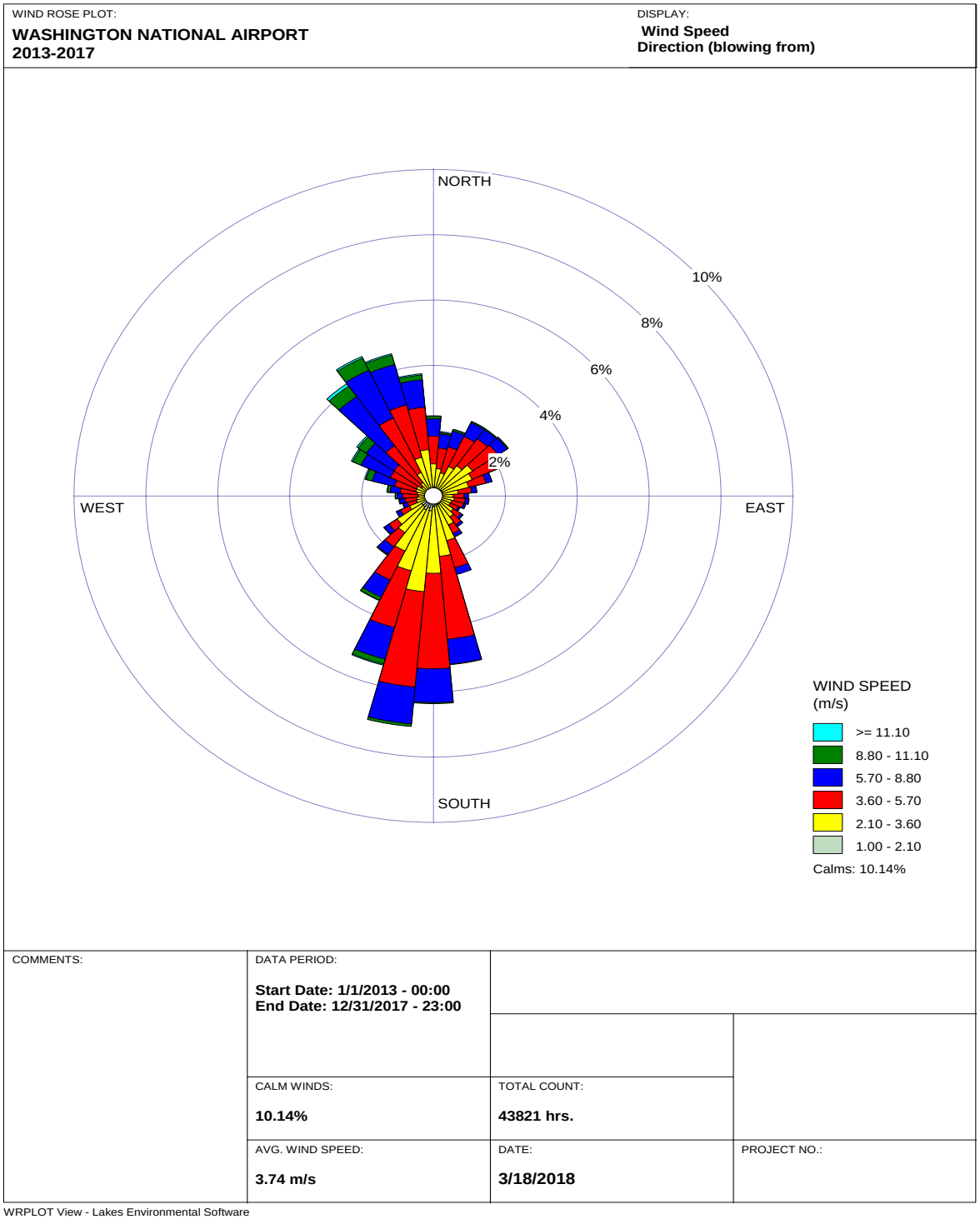


6.0 Meteorological Data

Wind directions used in the CAL3QHC model were based on an analysis of the primary wind directions in the DC metro area from the south to southwest (see Figure 3). The majority of lighter wind speeds also occur from these directions (therefore more appropriate for the 1 mph analysis) (DC AQD, 2007). Considering the orientation of the roads in and around the bus terminal, this predominant south-to-southwesterly wind flow was expected to produce the most probable worst-case concentrations at the Montana Ave & W Street intersection with the highest traffic flows. Modeling was conducted using a range of wind speeds of 1, 2, 3, and 4 meters/second and neutral stability to get a worst-case scenario run for this urban area.

The AERMOD modeling analysis used for the proposed parking lot was conducted using a five-year (2000-2004) hourly processed meteorological data set for Washington National Airport, as required by EPA modeling guidelines (U.S. EPA, 2003). This 5-year data set was processed with the AERMET meteorological pre-processor that is required for AERMOD modeling. In order to be representative of the urban environment in and around the bus terminal, a surface roughness of 85 cm was applied. This is the same surface roughness value used in the CAL3QHC model.

Figure 3. Five-Year (2013-2017) Wind Rose for Washington National Airport



7.0 Receptors for Model Analyses

The model runs used a discrete Cartesian grid of receptors located outside of the OSSE DOT Bus Terminal project boundaries at major intersections and along all project access roads (see Figure 2). In accordance with the DC modeling guidance (DC AQD, 2007), the receptors were placed at a distance of at least 3 meters outside of the street lane boundaries with a spacing range of about 15-25 meters for a total of 60 receptors. Terrain heights were not included in this analysis since the terrain surrounding the site is slightly rolling and is not a significant factor for this analysis. CAL3QHC does not utilize terrain heights. The receptors were placed on "flagpole" heights of 1.8 meters as recommended by the Air Quality Guidance Document (DC AQD, 2007). The same 60 model receptors from the CAL3QHC model run were applied in the AERMOD model run for the parking lot. The flagpole height of 1.8 meters was also applied in the AERMOD model runs.

8.0 Background Analysis

The region surrounding the proposed Providence Place Community development has a mix of residential and commercial buildings. The 1-hour and 8-hour averaged CO background concentrations were determined based on the amount of traffic flow in and around the OSSE DOT Bus Terminal project site and guidance from the Air Quality Guidance Requirement document from the DC Government (DC AQD, 2007). Traffic along New York Ave is around 68,700 vehicles per day (see Appendix C); therefore, a maximum 1-hour and 8-hour CO background concentration of 3.7 ppm and 2.3 ppm, respectively, were used in accordance with the DC Government guidance (see Tables 4 and 5).

Table 4. Measured 1-Hour CO Concentrations (ppm) for the Last Three Years Used to Determine the Background CO Concentration

Monitor Site	2nd High 1-Hour CO Concentration (ppm)			1-Hour Background CO Concentration (ppm)
	2016	2017	2018	
Verizon Phone	2.1	-	-	
1st Street	-	1.8	1.6	
34th & Dix	2.7	-	-	
Benning Road	2.0	2.7	2.1	
Arlington	3.7	2.0	1.6	
Alexandria	2.5	-	-	
Highest[1]	3.7	2.7	2.1	3.7
Lowest[2]	2.0	1.8	1.6	2.0

Table 5. Measured 8-Hour CO Concentrations (ppm) for the Last Three Years Used to Determine the Background CO Concentration

Monitor Site	2nd High 8-Hour CO Concentration (ppm)			8-Hour Background CO Concentration (ppm)
	2016	2017	2018	
Verizon Phone	1.8	-	-	
1st Street	-	1.3	1.1	
34th & Dix	2.3	-	-	
Benning Road	1.7	2.3	1.9	
Arlington	1.6	1.2	1.2	
Alexandria	1.5	-	-	
Highest[1]	2.3	2.3	1.9	2.3
Lowest[2]	1.5	1.2	1.1	1.5

1 The highest concentration is used for studies having traffic greater than 20,000 vehicles/day
2 The lowest concentration is used for studies having traffic less than 20,000 vehicles/day

9.0 Calculations Used in this Analysis

In accordance with the DC Air Quality guidance (DC AQD, 2007), all critical calculations used in the processing of this analysis are presented below:

8-Hour Traffic Flow:

The peak 8-hour traffic flow volume was based on the factoring of the peak 1-hour traffic flow volume by 0.7 based on previous studies of hourly traffic counts.

1-hour traffic volume x 0.7 = 8-hour traffic volume

Emission Rate for Future Parking Lot:

The future parking lot emission rate was based on a peak 1-hour traffic count of 115 buses/hour and 24 cars/hour applied to the MOVES emission rate of 21.35 grams/vehicle-mile for buses and 6.68 grams/vehicle-mile for cars (see Table 3). The average parking distance within the parking lot is conservatively estimated as 245 feet (0.046 miles) for buses and 220 feet (0.042 miles) for cars. The total parking lot emissions calculations are summarized below.

0.033 g/sec = (21.35 g/vehicle-mile x 0.046 miles x 115 buses/hr x 1hr/3600 sec) +
(6.68 g/vehicle-mile x 0.042 miles x 24 cars/hr x 1hr/3600 sec)

Factoring of Modeled Receptor Concentrations:

The estimation of the 1 mph wind speed concentration required a polynomial best-fit curve of the 1, 2, 3, and 4 m/sec wind speed analyses for the modeled receptor with the highest predicted concentration for the 1-m/sec wind speed run (see Appendix E). The receptor with the highest

resulting 1 mph concentration was then used to create a concentration factor based on the ratio of the 1 mph concentration over the 1-m/sec concentration. The resultant concentration factor was then applied to the 1-m/sec concentration to estimate the 1 mph concentration for all modeled receptors. The factors varied by averaging period in a range of 0.16 - 0.45 (see ratios at the bottom of Tables 6-9). These factors are then applied across all road receptors to derive the 1 mph concentration.

Adjustment factor = Maximum 1 mph CO Conc. / Maximum 1 meter/sec CO Conc.

1.43 = 0.71 (1-hr; 0.447 m/sec; existing; Receptor #10) /
0.495 (1-hr; 1.0 m/sec; existing; Receptor #10)

Conversion of AERMOD Concentration Units:

AERMOD model output concentrations are given in units of ug/m^3, while the CAL3QHC and NAAQS concentrations are in ppm. In order to convert the AERMOD ug/m^3 concentrations into proper ppm units, the following conversion was used:

Concentration (ppm) = Concentration (ug/m^3) x (0.02447 / 28.01 [CO Molecular Weight])

For example:

*0.27 ppm = 309.03 ug/m^3 (Max AERMOD 1-hour conc.) *(.02447/28.01)*

10.0 Model Results

The predicted CAL3QHC 1-hour and 8-hour concentrations for all modeled receptors are presented in Tables 6 through 9. Per the Air Quality Guidance Requirement Document (DC AQD, 2007), modeled CO concentrations were converted to 1 mph (0.447 m/s) concentration values by using a polynomial best-fit curve from the data produced from model runs at 1, 2, 3, and 4 m/sec (see Appendix E). From this analysis, the highest modeled 1-hour and 8-hour CO concentrations resulting from existing roadway sources and a 1 mph wind were calculated to be 0.71 ppm and 0.13 ppm, respectively (see Tables 6 and 7). The highest modeled 1-hour and 8-hour CO concentrations resulting from future roadway sources and a 1 mph wind were calculated to be 0.58 ppm and 0.13 ppm, respectively (see Tables 8 and 9). The maximum 1-hour and 8-hour CO concentrations resulting from future parking facility emissions and five-years of hourly meteorological data were calculated to be 0.27 ppm and 0.10 ppm, respectively (see Tables 8 & 9). The future parking lot concentrations were multiplied by a factor of 2 to adjust for the 1 mph wind speed analyses required by DC guidance (DC AQD, 2007). This conservative factor of 2 was derived from the results provided in Appendix E when comparing the results for 1 mph (0.447 m/sec) to those for the minimum wind speed used in the five-year AERMOD data set of 1.5 m/sec. The adjusted AERMOD parking lot results were then added to the CAL3QHC results for the roadways for a total combined concentration for each receptor. The maximum combined future traffic1-hour and 8-hour CO concentrations were calculated to be 1.09 ppm and 0.31 ppm, respectively (see Tables 8 & 9). The total combined maximum predicted 1-hour and 8-hour CO concentrations, including background, are compared to the NAAQS in Table 10. The existing and future source results demonstrate that attainment of the 1-hour and 8-hour CO NAAQS (35.0 ppm and 9.0 ppm, respectively) will be maintained with the proposed project operating at maximum capacity and under worst-case conditions. Full CAL3QHC model input and output files are provided in Appendix D. The AERMOD model output file for the parking garage is provided in Appendix F.

Table 6. CAL3QHC Model Predicted 1-Hour CO Concentrations (ppm) for All Modeled Receptors for 0.447, 1, 2, 3, and 4 m/sec Wind Speeds (Existing Roadway Sources)

Receptors	UTM X (m)	UTM Y (m)	Modeled Wind Speeds (meters/second)				
			4.0	3.0	2.0	1.0	0.447
1	328249	4309682	0.00	0.00	0.00	0.00	0.00
2	328268	4309682	0.00	0.00	0.00	0.00	0.00
3	328264	4309694	0.00	0.00	0.00	0.00	0.00
4	328304	4309682	0.00	0.00	0.00	0.00	0.00
5	328286	4309682	0.00	0.00	0.00	0.00	0.00
6	328280	4309695	0.00	0.00	0.00	0.00	0.00
7	328432	4309736	0.00	0.00	0.00	0.00	0.00
8	328420	4309750	0.00	0.00	0.00	0.00	0.00
9	328424	4309773	0.00	0.00	0.10	0.20	0.29
10	328443	4309752	0.10	0.10	0.20	0.50	0.71
11	328409	4309740	0.00	0.00	0.00	0.00	0.00
12	328411	4309758	0.00	0.00	0.00	0.00	0.00
13	328416	4309781	0.00	0.00	0.10	0.10	0.14
14	328424	4309786	0.00	0.00	0.00	0.20	0.29
15	328443	4309766	0.00	0.10	0.10	0.30	0.43
16	328451	4309741	0.10	0.10	0.20	0.40	0.57
17	328421	4309727	0.00	0.00	0.00	0.00	0.00
18	328439	4309725	0.00	0.00	0.00	0.00	0.00
19	328323	4309682	0.00	0.00	0.00	0.00	0.00
20	328377	4309712	0.00	0.00	0.00	0.00	0.00
21	328470	4309713	0.10	0.10	0.20	0.30	0.43
22	328351	4309689	0.00	0.00	0.00	0.00	0.00
23	328267	4309918	0.00	0.00	0.10	0.10	0.14
24	328274	4309918	0.00	0.00	0.00	0.10	0.14
25	328246	4309938	0.00	0.10	0.10	0.10	0.14
26	328275	4309935	0.00	0.00	0.00	0.10	0.14
27	328294	4309916	0.00	0.00	0.00	0.20	0.29
28	328293	4309937	0.00	0.00	0.00	0.00	0.00
29	328317	4309915	0.00	0.00	0.00	0.00	0.00
30	328294	4309901	0.00	0.00	0.10	0.10	0.14
31	328294	4309892	0.00	0.10	0.10	0.20	0.29
32	328313	4309875	0.00	0.10	0.10	0.10	0.14
33	328316	4309901	0.00	0.00	0.00	0.10	0.14
34	328286	4309667	0.00	0.00	0.00	0.00	0.00
35	328304	4309667	0.00	0.00	0.00	0.00	0.00
36	328324	4309667	0.00	0.00	0.00	0.00	0.00
37	328353	4309667	0.00	0.00	0.00	0.00	0.00
38	328378	4309689	0.00	0.00	0.00	0.00	0.00
39	328403	4309712	0.00	0.00	0.00	0.00	0.00
40	328331	4309857	0.00	0.00	0.10	0.10	0.14
41	328360	4309830	0.00	0.10	0.10	0.10	0.14
42	328390	4309803	0.00	0.10	0.10	0.10	0.14
43	328456	4309699	0.00	0.00	0.10	0.10	0.14
44	328463	4309664	0.00	0.00	0.00	0.10	0.14
45	328470	4309627	0.00	0.00	0.00	0.00	0.00
46	328491	4309629	0.00	0.10	0.10	0.20	0.29
47	328483	4309666	0.10	0.10	0.10	0.20	0.29
48	328475	4309699	0.10	0.10	0.20	0.30	0.43
49	328359	4309802	0.00	0.00	0.00	0.00	0.00
50	328316	4309842	0.00	0.00	0.00	0.00	0.00
51	328275	4309882	0.00	0.00	0.00	0.00	0.00
52	328233	4309921	0.00	0.00	0.00	0.00	0.00
53	328444	4309804	0.00	0.00	0.10	0.20	0.29
54	328446	4309852	0.00	0.00	0.10	0.10	0.14
55	328424	4309812	0.00	0.00	0.00	0.30	0.43
56	328425	4309852	0.00	0.00	0.00	0.10	0.14
57	328351	4309915	0.00	0.00	0.00	0.00	0.00
58	328351	4309900	0.00	0.00	0.00	0.00	0.00
59	328404	4309915	0.00	0.00	0.00	0.00	0.00
60	328209	4309973	0.00	0.10	0.10	0.10	0.14
		MAX =>	0.10	0.10	0.20	0.50	0.71
						RATIO =>	1.43

Table 7. CAL3QHC Model Predicted 8-Hour CO Concentrations (ppm) for All Modeled Receptors for 0.447, 1, 2, 3, and 4 m/sec Wind Speeds (Existing Roadway Sources)

Receptors	UTM X (m)	UTM Y (m)	Modeled Wind Speeds (meters/second)				
			4	3	2	1	0.447
1	328249	4309682	0.00	0.00	0.00	0.00	0.00
2	328268	4309682	0.00	0.00	0.00	0.00	0.00
3	328264	4309694	0.00	0.00	0.00	0.00	0.00
4	328304	4309682	0.00	0.00	0.00	0.00	0.00
5	328286	4309682	0.00	0.00	0.00	0.00	0.00
6	328280	4309695	0.00	0.00	0.00	0.00	0.00
7	328432	4309736	0.00	0.00	0.00	0.00	0.00
8	328420	4309750	0.00	0.00	0.00	0.00	0.00
9	328424	4309773	0.00	0.00	0.00	0.10	0.13
10	328443	4309752	0.00	0.00	0.10	0.10	0.13
11	328409	4309740	0.00	0.00	0.00	0.00	0.00
12	328411	4309758	0.00	0.00	0.00	0.00	0.00
13	328416	4309781	0.00	0.00	0.00	0.10	0.13
14	328424	4309786	0.00	0.00	0.00	0.00	0.00
15	328443	4309766	0.00	0.00	0.00	0.10	0.13
16	328451	4309741	0.00	0.00	0.10	0.10	0.13
17	328421	4309727	0.00	0.00	0.00	0.00	0.00
18	328439	4309725	0.00	0.00	0.00	0.00	0.00
19	328323	4309682	0.00	0.00	0.00	0.00	0.00
20	328377	4309712	0.00	0.00	0.00	0.00	0.00
21	328470	4309713	0.00	0.00	0.10	0.10	0.13
22	328351	4309689	0.00	0.00	0.00	0.00	0.00
23	328267	4309918	0.00	0.00	0.00	0.10	0.13
24	328274	4309918	0.00	0.00	0.00	0.00	0.00
25	328246	4309938	0.00	0.00	0.00	0.10	0.13
26	328275	4309935	0.00	0.00	0.00	0.00	0.00
27	328294	4309916	0.00	0.00	0.00	0.00	0.00
28	328293	4309937	0.00	0.00	0.00	0.00	0.00
29	328317	4309915	0.00	0.00	0.00	0.00	0.00
30	328294	4309901	0.00	0.00	0.00	0.00	0.00
31	328294	4309892	0.00	0.00	0.00	0.10	0.13
32	328313	4309875	0.00	0.00	0.00	0.10	0.13
33	328316	4309901	0.00	0.00	0.00	0.00	0.00
34	328286	4309667	0.00	0.00	0.00	0.00	0.00
35	328304	4309667	0.00	0.00	0.00	0.00	0.00
36	328324	4309667	0.00	0.00	0.00	0.00	0.00
37	328353	4309667	0.00	0.00	0.00	0.00	0.00
38	328378	4309689	0.00	0.00	0.00	0.00	0.00
39	328403	4309712	0.00	0.00	0.00	0.00	0.00
40	328331	4309857	0.00	0.00	0.00	0.10	0.13
41	328360	4309830	0.00	0.00	0.00	0.10	0.13
42	328390	4309803	0.00	0.00	0.00	0.10	0.13
43	328456	4309699	0.00	0.00	0.00	0.10	0.13
44	328463	4309664	0.00	0.00	0.00	0.00	0.00
45	328470	4309627	0.00	0.00	0.00	0.00	0.00
46	328491	4309629	0.00	0.00	0.00	0.10	0.13
47	328483	4309666	0.00	0.00	0.10	0.10	0.13
48	328475	4309699	0.00	0.00	0.10	0.10	0.13
49	328359	4309802	0.00	0.00	0.00	0.00	0.00
50	328316	4309842	0.00	0.00	0.00	0.00	0.00
51	328275	4309882	0.00	0.00	0.00	0.00	0.00
52	328233	4309921	0.00	0.00	0.00	0.00	0.00
53	328444	4309804	0.00	0.00	0.00	0.00	0.00
54	328446	4309852	0.00	0.00	0.00	0.00	0.00
55	328424	4309812	0.00	0.00	0.00	0.00	0.00
56	328425	4309852	0.00	0.00	0.00	0.00	0.00
57	328351	4309915	0.00	0.00	0.00	0.00	0.00
58	328351	4309900	0.00	0.00	0.00	0.00	0.00
59	328404	4309915	0.00	0.00	0.00	0.00	0.00
60	328209	4309973	0.00	0.00	0.00	0.10	0.13
		MAX =>	0.00	0.00	0.10	0.10	0.13
						RATIO =>	1.32

Table 8. CAL3QHC Model Predicted 1-Hour CO Concentrations (ppm) for All Modeled Receptors for 0.447, 1, 2, 3, and 4 m/sec Wind Speeds (Future Roadway Sources)

Receptors	UTM X (m)	UTM Y (m)	Modeled Wind Speeds (meters/second)					AERMOD Maximums for Parking Lot	Parking Lot Maximums Adjusted to 1 mph (AERMOD Max x 2)	Combined Roadway and Parking Lot Adj. Maximums
			4	3	2	1	0.447			
1	328249	4309682	0.00	0.00	0.00	0.00	0.00	0.21	0.42	0.42
2	328268	4309682	0.00	0.00	0.00	0.00	0.00	0.20	0.39	0.39
3	328264	4309694	0.00	0.00	0.00	0.00	0.00	0.17	0.35	0.35
4	328304	4309682	0.00	0.00	0.00	0.00	0.00	0.17	0.34	0.34
5	328286	4309682	0.00	0.00	0.00	0.00	0.00	0.18	0.37	0.37
6	328280	4309695	0.00	0.00	0.00	0.00	0.00	0.16	0.32	0.32
7	328432	4309736	0.00	0.00	0.00	0.00	0.00	0.26	0.53	0.53
8	328420	4309750	0.00	0.00	0.00	0.00	0.00	0.21	0.43	0.43
9	328424	4309773	0.00	0.00	0.10	0.20	0.29	0.20	0.40	0.69
10	328443	4309752	0.10	0.10	0.10	0.40	0.58	0.26	0.51	1.09
11	328409	4309740	0.00	0.00	0.00	0.00	0.00	0.20	0.40	0.40
12	328411	4309758	0.00	0.00	0.00	0.00	0.00	0.19	0.38	0.38
13	328416	4309781	0.00	0.00	0.10	0.10	0.15	0.18	0.36	0.51
14	328424	4309786	0.00	0.00	0.00	0.20	0.29	0.19	0.38	0.67
15	328443	4309766	0.00	0.10	0.10	0.20	0.29	0.24	0.48	0.77
16	328451	4309741	0.10	0.10	0.10	0.30	0.44	0.27	0.53	0.97
17	328421	4309727	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.50
18	328439	4309725	0.00	0.00	0.00	0.00	0.00	0.27	0.54	0.54
19	328323	4309682	0.00	0.00	0.00	0.00	0.00	0.16	0.31	0.31
20	328377	4309712	0.00	0.00	0.00	0.00	0.00	0.16	0.32	0.32
21	328470	4309713	0.10	0.10	0.10	0.30	0.44	0.23	0.45	0.89
22	328351	4309689	0.00	0.00	0.00	0.00	0.00	0.15	0.29	0.29
23	328267	4309918	0.00	0.00	0.10	0.10	0.15	0.11	0.23	0.38
24	328274	4309918	0.00	0.00	0.00	0.10	0.15	0.11	0.23	0.37
25	328246	4309938	0.00	0.00	0.10	0.10	0.15	0.11	0.23	0.37
26	328275	4309935	0.00	0.00	0.00	0.10	0.15	0.11	0.22	0.36
27	328294	4309916	0.00	0.00	0.00	0.20	0.29	0.11	0.22	0.51
28	328293	4309937	0.00	0.00	0.00	0.00	0.00	0.11	0.22	0.22
29	328317	4309915	0.00	0.00	0.00	0.00	0.00	0.12	0.23	0.23
30	328294	4309901	0.00	0.00	0.10	0.10	0.15	0.11	0.23	0.37
31	328294	4309892	0.00	0.00	0.10	0.20	0.29	0.12	0.23	0.52
32	328313	4309875	0.00	0.00	0.10	0.10	0.15	0.11	0.23	0.37
33	328316	4309901	0.00	0.00	0.00	0.10	0.15	0.12	0.23	0.38
34	328286	4309667	0.00	0.00	0.00	0.00	0.00	0.23	0.45	0.45
35	328304	4309667	0.00	0.00	0.00	0.00	0.00	0.21	0.42	0.42
36	328324	4309667	0.00	0.00	0.00	0.00	0.00	0.19	0.38	0.38
37	328353	4309667	0.00	0.00	0.00	0.00	0.00	0.16	0.32	0.32
38	328378	4309689	0.00	0.00	0.00	0.00	0.00	0.19	0.38	0.38
39	328403	4309712	0.00	0.00	0.00	0.00	0.00	0.22	0.44	0.44
40	328331	4309857	0.00	0.00	0.10	0.10	0.15	0.13	0.25	0.40
41	328360	4309830	0.00	0.00	0.10	0.10	0.15	0.14	0.27	0.42
42	328390	4309803	0.00	0.00	0.10	0.10	0.15	0.15	0.31	0.45
43	328456	4309699	0.00	0.00	0.10	0.10	0.15	0.24	0.48	0.62
44	328463	4309664	0.00	0.00	0.00	0.10	0.15	0.23	0.46	0.61
45	328470	4309627	0.00	0.00	0.00	0.00	0.00	0.22	0.45	0.45
46	328491	4309629	0.00	0.10	0.10	0.20	0.29	0.22	0.44	0.73
47	328483	4309666	0.10	0.10	0.10	0.20	0.29	0.23	0.46	0.75
48	328475	4309699	0.10	0.10	0.10	0.20	0.29	0.23	0.45	0.74
49	328359	4309802	0.00	0.00	0.00	0.00	0.00	0.14	0.28	0.28
50	328316	4309842	0.00	0.00	0.00	0.00	0.00	0.12	0.24	0.24
51	328275	4309882	0.00	0.00	0.00	0.00	0.00	0.12	0.23	0.23
52	328233	4309921	0.00	0.00	0.00	0.00	0.00	0.11	0.22	0.22
53	328444	4309804	0.00	0.00	0.10	0.10	0.15	0.21	0.41	0.56
54	328446	4309852	0.00	0.00	0.10	0.10	0.15	0.18	0.36	0.50
55	328424	4309812	0.00	0.00	0.00	0.10	0.15	0.17	0.34	0.49
56	328425	4309852	0.00	0.00	0.00	0.10	0.15	0.16	0.33	0.47
57	328351	4309915	0.00	0.00	0.00	0.00	0.00	0.13	0.26	0.26
58	328351	4309900	0.00	0.00	0.00	0.00	0.00	0.13	0.26	0.26
59	328404	4309915	0.00	0.00	0.00	0.00	0.00	0.15	0.30	0.30
60	328209	4309973	0.00	0.00	0.10	0.10	0.15	0.11	0.22	0.36
		MAX =>	0.10	0.10	0.10	0.40	0.58	0.27	0.54	1.09
						RATIO =>	1.46			

Table 9. CAL3QHC Model Predicted 8-Hour CO Concentrations (ppm) for All Modeled Receptors for 0.447, 1, 2, 3, and 4 m/sec Wind Speeds (Future Roadway Sources)

Receptors	UTM X (m)	UTM Y (m)	Modeled Wind Speeds (meters/second)					AERMOD Maximums for Parking Lot	Parking Lot Maximums Adjusted to 1 mph (AERMOD Max x 2)	Combined Roadway and Parking Lot Adj. Maximums
			4	3	2	1	0.447			
1	328249	4309682	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
2	328268	4309682	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
3	328264	4309694	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.10
4	328304	4309682	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
5	328286	4309682	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
6	328280	4309695	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.10
7	328432	4309736	0.00	0.00	0.00	0.00	0.00	**0.10**	**0.21**	0.21
8	328420	4309750	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.16
9	328424	4309773	0.00	0.00	0.00	0.10	0.13	0.07	0.14	0.27
10	328443	4309752	0.00	0.00	**0.10**	**0.10**	**0.13**	0.09	0.17	0.30
11	328409	4309740	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.16
12	328411	4309758	0.00	0.00	0.00	0.00	0.00	0.07	0.14	0.14
13	328416	4309781	0.00	0.00	0.00	0.10	0.13	0.06	0.13	0.26
14	328424	4309786	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
15	328443	4309766	0.00	0.00	0.00	0.10	0.13	0.08	0.16	0.29
16	328451	4309741	0.00	0.00	0.10	0.10	0.13	0.09	0.18	**0.31**
17	328421	4309727	0.00	0.00	0.00	0.00	0.00	0.10	0.20	0.20
18	328439	4309725	0.00	0.00	0.00	0.00	0.00	**0.10**	**0.21**	0.21
19	328323	4309682	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
20	328377	4309712	0.00	0.00	0.00	0.00	0.00	0.07	0.13	0.13
21	328470	4309713	0.00	0.00	0.00	0.10	0.13	0.07	0.14	0.27
22	328351	4309689	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
23	328267	4309918	0.00	0.00	0.00	0.10	0.13	0.03	0.07	0.20
24	328274	4309918	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
25	328246	4309938	0.00	0.00	0.00	0.10	0.13	0.03	0.07	0.20
26	328275	4309935	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.06
27	328294	4309916	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
28	328293	4309937	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.06
29	328317	4309915	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
30	328294	4309901	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
31	328294	4309892	0.00	0.00	0.00	0.10	0.13	0.03	0.07	0.20
32	328313	4309875	0.00	0.00	0.00	0.10	0.13	0.03	0.07	0.20
33	328316	4309901	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
34	328286	4309667	0.00	0.00	0.00	0.00	0.00	0.07	0.15	0.15
35	328304	4309667	0.00	0.00	0.00	0.00	0.00	0.07	0.15	0.15
36	328324	4309667	0.00	0.00	0.00	0.00	0.00	0.07	0.15	0.15
37	328353	4309667	0.00	0.00	0.00	0.00	0.00	0.07	0.15	0.15
38	328378	4309689	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.16
39	328403	4309712	0.00	0.00	0.00	0.00	0.00	0.09	0.18	0.18
40	328331	4309857	0.00	0.00	0.00	0.10	0.13	0.04	0.07	0.21
41	328360	4309830	0.00	0.00	0.00	0.10	0.13	0.04	0.08	0.21
42	328390	4309803	0.00	0.00	0.00	0.10	0.13	0.05	0.09	0.22
43	328456	4309699	0.00	0.00	0.00	0.10	0.13	0.08	0.17	0.30
44	328463	4309664	0.00	0.00	0.00	0.00	0.00	0.07	0.15	0.15
45	328470	4309627	0.00	0.00	0.00	0.00	0.00	0.06	0.12	0.12
46	328491	4309629	0.00	0.00	0.00	0.10	0.13	0.05	0.09	0.23
47	328483	4309666	0.00	0.00	0.00	0.10	0.13	0.06	0.13	0.26
48	328475	4309699	0.00	0.00	0.10	0.10	0.13	0.07	0.13	0.26
49	328359	4309802	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.09
50	328316	4309842	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.07
51	328275	4309882	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.07
52	328233	4309921	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07
53	328444	4309804	0.00	0.00	0.00	0.00	0.00	0.06	0.13	0.13
54	328446	4309852	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.10
55	328424	4309812	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.11
56	328425	4309852	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.09
57	328351	4309915	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.08
58	328351	4309900	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.08
59	328404	4309915	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.06
60	328209	4309973	0.00	0.00	0.00	0.10	0.13	0.03	0.07	0.20
		MAX =>	0.00	0.00	0.10	0.10	**0.13**	0.10	0.21	**0.31**
						RATIO =>	1.32			

Table 10. Predicted 1-Hour and 8-Hour CO Concentrations (ppm) Plus the Background CO Concentration in Comparison to the National Ambient Air Quality Standards NAAQS)

Model Scenarios	Predicted CO Concentrations (ppm)			
	Existing 1-Hour	Existing 8-Hour	Future 1-Hour	Future 8-Hour
Max Modeled Concentrations for Roadway Sources Only (Tables 6 & 7)	0.71	0.13	-	-
Max Modeled Concentrations for Roadway and Parking Lot Combined (Tables 8 & 9)	-	-	1.09	0.31
Background Concentrations (Tables 4 & 5)	3.70	2.30	3.70	2.30
Total Concentration [Background + Max Modeled]	**4.41**	**2.43**	**4.79**	**2.61**
NAAQS	35.00	9.00	35.00	9.00
Meets Standards?	YES	YES	YES	YES

11.0 References

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12.0 Appendices

Appendix A. Volume 9 Traffic Analysis

Existing (2019) Traffic Analysis

		Intersection of Montana Ave., W St., & 18th St.				Intersection of W Street & 16th Street				Intersection of Montana Ave., Bryant St., & 17th St.				Intersection of Montana Ave. & Edwin St.			
		18th St. From North	W St. From SW	Montana Ave From NW	Montana Ave From SE	W St. From East	W St. From West	16th Street From North	0 From South	Bryant St. From East	17th St. From North	Montana Ave From NW	Montana Ave From SE	Edwin St. From East	Driveway From West	Montana Ave From NW	Montana Ave From SE
Demand Volume (vph)	V	350	102	342	725	108	106	25	0	39	24	343	515	9	6	697	733
Free-Flow Capacity (vph)	C	3,960	3,960	3,960	3,960	3,960	3,960	3,960	0	3,960	3,960	3,960	3,960	1,980	1,980	3,960	3,960
Cruise Speed (mph)	S	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Number of Lanes in Approach	M	2	2	2	2	2	2	2	0	2	2	2	2	1	1	2	2
Capacity Service Volume	Cs	14,850	26,400	8,054	6,887	7,920	7,920	7,920	0	17,600	23,760	7,093	7,093	3,960	3,960	7,920	7,920
Signal Cyle Length (s)	Cy	120	120	120	120	60	60	60	60	120	120	120	120	60	60	60	60
Green Phase Length (s)	G	32	18	59	69	30	30	30	30	27	20	67	67	30	30	30	30
Proportion of Vehicles that Stop	P	0.75	0.85	0.53	0.48	0.51	0.51	0.50	#DIV/0!	0.78	0.83	0.46	0.48	0.50	0.50	0.55	0.55
Number of Vehicles that Stop	Ni	9	3	6	11	1	1	0	#DIV/0!	1	1	5	8	0	0	6	7
Percent Idling		75%	85%	53%	48%	51%	51%	50%	#DIV/0!	78%	83%	46%	48%	50%	50%	55%	55%
Average Number of Vehicles in Que	Nj	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0
Length of Vehicle Que (veh-m/lane)	Lq	35	12	25	47	4	4	1	#DIV/0!	4	3	22	33	1	0	26	28
Average Excess Running Time (s/veh)	Rq	33	44	16	12	8	8	8	#DIV/0!	36	42	12	13	8	8	8	8
Length over which Excess Emissions Apply (m)	Le	40	40	40	47	40	40	40	#DIV/0!	40	40	40	40	15	40	40	40
Width of Road (m)	Wr	6.1	6.1	6.1	6.1	6.1	6.1	12.2	0.0	9.3	12.2	6.1	6.1	3.7	3.7	6.1	6.1
Total Road Width	Wr2				12.2		12.2		12.2				12.2				12.2

Future (2021) Traffic Analysis

		Intersection of Montana Ave., W St., & 18th St.				Intersection of W Street & 16th Street				Intersection of Montana Ave., Bryant St., & 17th St.				Intersection of Montana Ave. & Edwin St.			
		18th St. From North	W St. From SW	Montana Ave From NW	Montana Ave From SE	W St. From East	W St. From West	16th Street From North	0 From South	Bryant St. From East	17th St. From North	Montana Ave From NW	Montana Ave From SE	Edwin St. From East	Driveway From West	Montana Ave From NW	Montana Ave From SE
Demand Volume (vph)	V	350	102	371	754	108	106	25	0	39	24	395	516	9	6	697	762
Free-Flow Capacity (vph)	C	3,960	3,960	3,960	3,960	3,960	3,960	3,960	0	3,960	3,960	3,960	3,960	1,980	1,980	3,960	3,960
Cruise Speed (mph)	S	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Number of Lanes in Approach	M	2	2	2	2	2	2	2	0	2	2	2	2	1	1	2	2
Capacity Service Volume	Cs	14,850	26,400	8,054	6,887	7,920	7,920	7,920	0	17,600	23,760	7,093	7,093	3,960	3,960	7,920	7,920
Signal Cyle Length (s)	Cy	120	120	120	120	60	60	60	60	120	120	120	120	60	60	60	60
Green Phase Length (s)	G	32	18	59	69	30	30	30	30	27	20	67	67	30	30	30	30
Proportion of Vehicles that Stop	P	0.75	0.85	0.53	0.48	0.51	0.51	0.50	#DIV/0!	0.78	0.83	0.47	0.48	0.50	0.50	0.55	0.55
Number of Vehicles that Stop	Ni	9	3	7	12	1	1	0	#DIV/0!	1	1	6	8	0	0	6	7
Percent Idling		75%	85%	53%	48%	51%	51%	50%	#DIV/0!	78%	83%	47%	48%	50%	50%	55%	55%
Average Number of Vehicles in Que	Nj	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0
Length of Vehicle Que (veh-m/lane)	Lq	35	12	27	49	4	4	1	#DIV/0!	4	3	25	33	1	0	26	29
Average Excess Running Time (s/veh)	Rq	33	44	16	12	8	8	8	#DIV/0!	36	42	12	13	8	8	8	9
Length over which Excess Emissions Apply (m)	Le	40	40	40	49	40	40	40	#DIV/0!	40	40	40	40	15	40	40	40
Width of Road (m)	Wr	6.1	6.1	6.1	6.1	6.1	6.1	12.2	0.0	9.3	12.2	6.1	6.1	3.7	3.7	6.1	6.1
Total Road Width	Wr2				12.2		12.2		12.2				12.2				12.2

Appendix B. MOVES Input and Output Files

Moves was run at the project level for the DC area using the parameters set forth by the Draft DOEE Guidance on using MOVES (DC DOEE, 2018). The MOVES Project Data Manager was configured to use the fleet age based on the "age-distribution-projection-tool-moves2014.xls" worksheet obtained from the EPA website. The fleet age was adjusted for years 2019 and 2021. The Fuel use tab defaults were exported for years 2019 and 2021 and each year's fuel formulation mix was used in the respective runs for that year. Meteorological data for a peak hour was set at 20 degrees F (a conservative estimate) in order to replicate worst case CO emission temperature conditions. The Links were prepared in accordance with the Draft DOEE Guidance on using MOVES (DC DOEE, 2018) as shown in the links input in Table B-1.

Table B-1. Link Input Data for Existing (2019) and Future (2021 Traffic

		EXISTING TRAFFIC	EXISTING TRAFFIC	FUTURE TRAFFIC	FUTURE TRAFFIC
	Total Length (miles)	Average MAX Vehicle Count (veh/hr)	Average Percent of Idling	Average MAX Vehicle Count (veh/hr)	Average Percent of Idling
Montana Ave NE	0.31	1,053	51%	1,073	51%
W Street NE	0.18	214	51%	227	52%
Edwin Street NE	0.01	19	50%	19	50%
Bryant Street NE	0.10	61	78%	61	78%
16th Street NE	0.06	25	50%	25	50%
17th Street NE	0.07	36	83%	36	83%
18th Street NE	0.09	541	75%	541	75%

Moves output runs were post-processed using the CO_CAL3QHC_EF.sql script then processed into tables using MySQL Workbench. The resulting emission rates were then processed into the AERMOD model. The Tables B-2 through B-5 provide the MOVES input and output summary traffic and emissions data for years 2019 and 2021 respectively. Links 1-7 represent the streets near the location of concern at the 20 mph speeds, links 8-14 were used to determine the idling emissions used for these roads at the intersections. Links 15-21 represent the streets near the location of concern at the 2.5 mph speeds, links 22-28 represent the streets near the location of concern at the 10 mph speeds, and links 29-32 represent the bus terminal parking lot buses and cars only.

[2] Note that the parking lot was not modeled for year 2019 because it has not yet been built.

Table B-2 MOVES Input for Existing (2019) Traffic Road Links and Bus Terminal Parking Lot

linkID	countyID	zoneID	roadTypeID	linkLength	linkVolume	linkAvgSpeed	linkDescription
1	11001	110010	5	0.31	1053	20	Montana Ave
2	11001	110010	5	0.18	214	20	W Street NE
3	11001	110010	5	0.01	19	20	Edwin Street NE
4	11001	110010	5	0.1	61	20	Bryant Street NE
5	11001	110010	5	0.06	25	20	16th Street NE
6	11001	110010	5	0.07	36	20	17th Street NE
7	11001	110010	5	0.09	541	20	18th Street NE
8	11001	110010	5	0.31	1	0	Montana Ave
9	11001	110010	5	0.18	1	0	W Street NE
10	11001	110010	5	0.01	1	0	Edwin Street NE
11	11001	110010	5	0.1	1	0	Bryant Street NE
12	11001	110010	5	0.06	1	0	16th Street NE
13	11001	110010	5	0.07	1	0	17th Street NE
14	11001	110010	5	0.09	1	0	18th Street NE
15	11001	110010	5	0.31	1053	2.5	Montana Ave
16	11001	110010	5	0.18	214	2.5	W Street NE
17	11001	110010	5	0.01	19	2.5	Edwin Street NE
18	11001	110010	5	0.1	61	2.5	Bryant Street NE
19	11001	110010	5	0.06	25	2.5	16th Street NE
20	11001	110010	5	0.07	36	2.5	17th Street NE
21	11001	110010	5	0.09	541	2.5	18th Street NE
22	11001	110010	5	0.31	1053	10	Montana Ave
23	11001	110010	5	0.18	214	10	W Street NE
24	11001	110010	5	0.01	19	10	Edwin Street NE
25	11001	110010	5	0.1	61	10	Bryant Street NE
26	11001	110010	5	0.06	25	10	16th Street NE
27	11001	110010	5	0.07	36	10	17th Street NE
28	11001	110010	5	0.09	541	10	18th Street NE
29	11001	110010	5	0.046	115	2.5	AM Buses
30	11001	110010	5	0.042	24	2.5	AM Cars
31	11001	110010	5	0.046	115	2.5	PM Buses
32	11001	110010	5	0.042	23	2.5	PM Cars

Table B-3 MOVES Input for Future (2021) Traffic Road Links and Bus Terminal Parking Lot

linkID	countyID	zoneID	roadTypeID	linkLength	linkVolume	linkAvgSpeed	linkDescription
1	11001	110010	5	0.31	1073	20	Montana Ave
2	11001	110010	5	0.18	227	20	W Street NE
3	11001	110010	5	0.01	19	20	Edwin Street NE
4	11001	110010	5	0.1	61	20	Bryant Street NE
5	11001	110010	5	0.06	25	20	16th Street NE
6	11001	110010	5	0.07	36	20	17th Street NE
7	11001	110010	5	0.09	541	20	18th Street NE
8	11001	110010	5	0.31	1	0	Montana Ave
9	11001	110010	5	0.18	1	0	W Street NE
10	11001	110010	5	0.01	1	0	Edwin Street NE
11	11001	110010	5	0.1	1	0	Bryant Street NE
12	11001	110010	5	0.06	1	0	16th Street NE
13	11001	110010	5	0.07	1	0	17th Street NE
14	11001	110010	5	0.09	1	0	18th Street NE
15	11001	110010	5	0.31	1073	2.5	Montana Ave
16	11001	110010	5	0.18	227	2.5	W Street NE
17	11001	110010	5	0.01	19	2.5	Edwin Street NE
18	11001	110010	5	0.1	61	2.5	Bryant Street NE
19	11001	110010	5	0.06	25	2.5	16th Street NE
20	11001	110010	5	0.07	36	2.5	17th Street NE
21	11001	110010	5	0.09	541	2.5	18th Street NE
22	11001	110010	5	0.31	1073	10	Montana Ave
23	11001	110010	5	0.18	227	10	W Street NE
24	11001	110010	5	0.01	19	10	Edwin Street NE
25	11001	110010	5	0.1	61	10	Bryant Street NE
26	11001	110010	5	0.06	25	10	16th Street NE
27	11001	110010	5	0.07	36	10	17th Street NE
28	11001	110010	5	0.09	541	10	18th Street NE
29	11001	110010	5	0.046	115	2.5	AM Buses
30	11001	110010	5	0.042	24	2.5	AM Cars
31	11001	110010	5	0.046	115	2.5	PM Buses
32	11001	110010	5	0.042	23	2.5	PM Cars

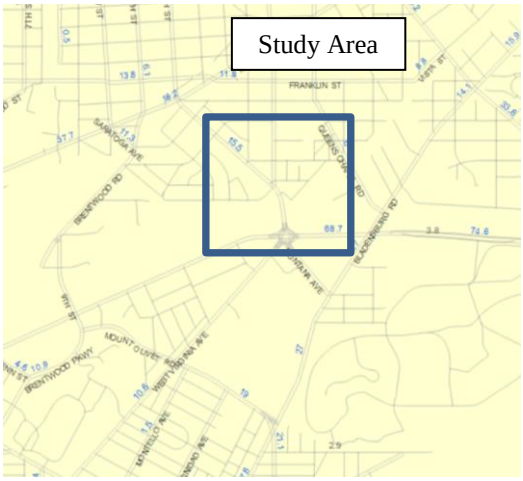
Table B-4 MOVES Output for Existing (2019) Traffic Road Links
and Bus Terminal Parking Lot

linkDescription	linkAvgGrade		grams_Veh_Mile	grams_Veh_Hour (Idle Rate)
Montana Ave	0	CO	3.784486636	
W Street NE	0	CO	3.784484827	
Edwin Street NE	0	CO	3.784485599	
Bryant Street NE	0	CO	3.784482338	
16th Street NE	0	CO	3.784482694	
17th Street NE	0	CO	3.784484488	
18th Street NE	0	CO	3.784483769	
Montana Ave	0	CO		9.979242182
W Street NE	0	CO		9.979242182
Edwin Street NE	0	CO		9.979242182
Bryant Street NE	0	CO		9.979242182
16th Street NE	0	CO		9.979242182
17th Street NE	0	CO		9.979242182
18th Street NE	0	CO		9.979242182
Montana Ave	0	CO	11.13060023	
W Street NE	0	CO	11.13059345	
Edwin Street NE	0	CO	11.13059612	
Bryant Street NE	0	CO	11.13058368	
16th Street NE	0	CO	11.13058955	
17th Street NE	0	CO	11.130589	
18th Street NE	0	CO	11.13058869	
Montana Ave	0	CO	4.963273545	
W Street NE	0	CO	4.963272157	
Edwin Street NE	0	CO	4.963272926	
Bryant Street NE	0	CO	4.963271048	
16th Street NE	0	CO	4.963271811	
17th Street NE	0	CO	4.96327149	
18th Street NE	0	CO	4.963271818	
AM Buses	0	CO	21.34687512	
AM Cars	0	CO	6.676190224	
PM Buses	0	CO	21.34687512	
PM Cars	0	CO	6.676189669	

Table B-5 MOVES Output for Future (2021) Traffic Road Links
and Bus Terminal Parking Lot

linkDescription	linkAvgGrade		grams_Veh_Mile	grams_Veh_Hour (Idle Rate)
Montana Ave	0	CO	3.380329944	
W Street NE	0	CO	3.380330445	
Edwin Street NE	0	CO	3.380329992	
Bryant Street NE	0	CO	3.380331617	
16th Street NE	0	CO	3.380332843	
17th Street NE	0	CO	3.380331415	
18th Street NE	0	CO	3.380331151	
Montana Ave	0	CO		7.319121128
W Street NE	0	CO		7.319121128
Edwin Street NE	0	CO		7.319121128
Bryant Street NE	0	CO		7.319121128
16th Street NE	0	CO		7.319121128
17th Street NE	0	CO		7.319121128
18th Street NE	0	CO		7.319121128
Montana Ave	0	CO	9.638344742	
W Street NE	0	CO	9.638346174	
Edwin Street NE	0	CO	9.63834423	
Bryant Street NE	0	CO	9.638347341	
16th Street NE	0	CO	9.638353795	
17th Street NE	0	CO	9.638345639	
18th Street NE	0	CO	9.638346387	
Montana Ave	0	CO	4.394292315	
W Street NE	0	CO	4.394292127	
Edwin Street NE	0	CO	4.394292271	
Bryant Street NE	0	CO	4.394293624	
16th Street NE	0	CO	4.394292839	
17th Street NE	0	CO	4.394292807	
18th Street NE	0	CO	4.394292055	
AM Buses	0	CO	17.99854871	
AM Cars	0	CO	5.852371739	
PM Buses	0	CO	17.99854871	
PM Cars	0	CO	5.852374452	

Appendix C. District Department of Transportation (2015 TRAFFIC VOLUME MAP)



https://ddot.dc.gov/sites/default/files/dc/sites/ddot/publication/attachments/6.DDOT_2015_TrafficMap.pdf

Appendix D. CAL3QHC Input and Output Files

1-Hour Existing Traffic CAL3QHC Input File

```
'OSSE DOT BUS TERMINAL NE WASHINGTON DC'      60.  85.  0. 0.  60  1.0 0 1
'Receptor 1'   328249  309682    1.80
'Receptor 2'   328268  309682    1.80
'Receptor 3'   328264  309694    1.80
'Receptor 4'   328304  309682    1.80
'Receptor 5'   328286  309682    1.80
'Receptor 6'   328280  309695    1.80
'Receptor 7'   328432  309736    1.80
'Receptor 8'   328420  309750    1.80
'Receptor 9'   328424  309773    1.80
'Receptor 10'  328443  309752    1.80
'Receptor 11'  328409  309740    1.80
'Receptor 12'  328411  309758    1.80
'Receptor 13'  328416  309781    1.80
'Receptor 14'  328424  309786    1.80
'Receptor 15'  328443  309766    1.80
'Receptor 16'  328451  309741    1.80
'Receptor 17'  328421  309727    1.80
'Receptor 18'  328439  309725    1.80
'Receptor 19'  328323  309682    1.80
'Receptor 20'  328377  309712    1.80
'Receptor 21'  328470  309713    1.80
'Receptor 22'  328351  309689    1.80
'Receptor 23'  328267  309918    1.80
'Receptor 24'  328274  309918    1.80
'Receptor 25'  328246  309938    1.80
'Receptor 26'  328275  309935    1.80
'Receptor 27'  328294  309916    1.80
'Receptor 28'  328293  309937    1.80
'Receptor 29'  328317  309915    1.80
'Receptor 30'  328294  309901    1.80
'Receptor 31'  328294  309892    1.80
'Receptor 32'  328313  309875    1.80
'Receptor 33'  328316  309901    1.80
'Receptor 34'  328286  309667    1.80
'Receptor 35'  328304  309667    1.80
'Receptor 36'  328324  309667    1.80
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'Receptor 37'  328353  309667    1.80
'Receptor 38'  328378  309689    1.80
'Receptor 39'  328403  309712    1.80
'Receptor 40'  328331  309857    1.80
'Receptor 41'  328360  309830    1.80
'Receptor 42'  328390  309803    1.80
'Receptor 43'  328456  309699    1.80
'Receptor 44'  328463  309664    1.80
'Receptor 45'  328470  309627    1.80
'Receptor 46'  328491  309629    1.80
'Receptor 47'  328483  309666    1.80
'Receptor 48'  328475  309699    1.80
'Receptor 49'  328359  309802    1.80
'Receptor 50'  328316  309842    1.80
'Receptor 51'  328275  309882    1.80
'Receptor 52'  328233  309921    1.80
'Receptor 53'  328444  309804    1.80
'Receptor 54'  328446  309852    1.80
'Receptor 55'  328424  309812    1.80
'Receptor 56'  328425  309852    1.80
'Receptor 57'  328351  309915    1.80
'Receptor 58'  328351  309900    1.80
'Receptor 59'  328404  309915    1.80
'Receptor 60'  328209  309973    1.80
'FOUR MET SCENARIOS'                 25 4  0  'c'
1
'MONT1'             'AG'  328465  309702  328484  309614  1358  4.96 1.0 12.2
1
'MONT2'             'AG'  328434  309751  328465  309702  1368  4.96 1.0 12.2
1
'MONT3'             'AG'  328346  309829  328434  309751   834  4.96 1.0 12.2
1
'MONT4'             'AG'  328276  309895  328346  309829   843  4.96 1.0 12.2
1
'MONT5'             'AG'  328171  309993  328276  309895   863  4.96 1.0 12.2
1
'WST1'              'AG'  328168  309676  328277  309673   215  4.96 1.0 12.2
1
'WST2'              'AG'  328277  309673  328349  309673   231  4.96 1.0 12.2
```

```
1
'WST3'              'AG'  328349  309673  328434  309751   195  4.96 1.0 12.2
1
'18TH'              'AG'  328438  309895  328434  309751   541  4.96 1.0 12.2
1
'16TH'              'AG'  328281  309674  328246  309757    25  4.96 1.0 12.2
1
'EDWIN'             'AG'  328465  309702  328486  309713    19  4.96 1.0  7.4
1
'17TH'              'AG'  328278  309904  328281  310020    36  4.96 1.0 12.2
1
'BRYANT'            'AG'  328272  309909  328427  309905    61  4.96 1.0  9.3
2
'MONT2_NB'          'AG'  328441  309744  328466  309705   1.0   6.1   2
                 120  51     1.0     725    9.98    1600     1     3
2
'MONT3_SB'          'AG'  328426  309754  328396  309781   1.0   6.1   2
                 120  61     1.0     342    9.98    1600     1     3
2
'MONT4_NB'          'AG'  328287  309890  328316  309862   1.0   6.1   2
                 120  53     1.0     515    9.98    1600     1     3
2
'MONT5_SB'          'AG'  328268  309898  328238  309925   1.0   6.1   2
                 120  53     1.0     343    9.98    1600     1     3
2
'WST1_EB'           'AG'  328271  309671  328231  309672   1.0   6.1   2
                  60  30     1.0     106    9.98    1600     1     3
2
'WST2_WB'           'AG'  328288  309676  328328  309676   1.0   6.1   2
                  60  30     1.0     108    9.98    1600     1     3
2
'WST3_EB'           'AG'  328429  309742  328399  309715   1.0   6.1   2
                 120 102     1.0     102    9.98    1600     1     3
2
'18TH1_SB'          'AG'  328431  309766  328432  309805   1.0   6.1   2
                 120  88     1.0     350    9.98    1600     1     3
2
'16TH1_SB'          'AG'  328279  309679  328263  309715   1.0  12.2   2
                  60  30     1.0      25    9.98    1600     1     3
```

```
2
'EDWN_WB'            'AG'  328472  309708  328485  309715   1.0   3.7   2
                  60  30     1.0       9    9.98    1600     1     3
2
'17TH1_SB'           'AG'  328281  309914  328282  309954   1.0  12.2   2
                 120 100     1.0      24    9.98    1600     1     3
2
BRYAN_WB'            'AG'  328292  309910  328331  309909   1.0   9.3   2
                 120  93     1.0      39    9.98    1600     1     3
1.0  00. 4 1000. 0.  'Y' 10 17 23
2.0  00. 4 1000. 0.  'Y' 10 17 23
3.0  00. 4 1000. 0.  'Y' 10 17 23
4.0  00. 4 1000. 0.  'Y' 10 17 23
```

1-Hour Existing Traffic CAL3QHC Output File

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221 PAGE 1

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

The MODE flag has been set to c for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 85. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	LENGTH (M)	BRG TYPE (DEG)	VPH	EF (G/MI)	H (M)	W (M)	V/C	QUEUE (VEH)
1. MONT1	328465.0	309702.0	328484.0	309614.0	90.	168. AG	1358.	4.4	1.0	12.2		
2. MONT2	328434.0	309751.0	328465.0	309702.0	58.	148. AG	1368.	4.4	1.0	12.2		
3. MONT3	328346.0	309829.0	328434.0	309751.0	118.	132. AG	864.	4.4	1.0	12.2		
4. MONT4	328276.0	309895.0	328346.0	309829.0	96.	133. AG	873.	4.4	1.0	12.2		
5. MONT5	328171.0	309993.0	328276.0	309895.0	144.	133. AG	902.	4.4	1.0	12.2		
6. WST1	328168.0	309676.0	328277.0	309673.0	109.	92. AG	215.	4.4	1.0	12.2		
7. WST2	328277.0	309673.0	328349.0	309673.0	72.	90. AG	231.	4.4	1.0	12.2		
8. WST3	328349.0	309673.0	328434.0	309751.0	115.	47. AG	235.	4.4	1.0	12.2		
9. 18TH	328438.0	309895.0	328434.0	309751.0	144.	182. AG	541.	4.4	1.0	12.2		
10. 16TH	328281.0	309674.0	328246.0	309757.0	90.	337. AG	25.	4.4	1.0	12.2		
11. EDWIN	328465.0	309702.0	328486.0	309713.0	24.	62. AG	19.	4.4	1.0	7.4		
12. 17TH	328278.0	309904.0	328281.0	310020.0	116.	1. AG	36.	4.4	1.0	12.2		
13. BRYANT	328272.0	309909.0	328427.0	309905.0	155.	91. AG	61.	4.4	1.0	9.3		
14. MONT2_NB	328441.0	309744.0	328458.3	309717.0	32.	147. AG	17.	100.0	1.0	6.1	0.43	5.3
15. MONT3_SB	328426.0	309754.0	328412.0	309766.6	19.	312. AG	20.	100.0	1.0	6.1	0.25	3.1
16. MONT4_NB	328287.0	309890.0	328303.4	309874.2	23.	134. AG	17.	100.0	1.0	6.1	0.30	3.8
17. MONT5_SB	328268.0	309898.0	328255.1	309909.7	17.	312. AG	17.	100.0	1.0	6.1	0.23	2.9
18. WST1_EB	328271.0	309671.0	328268.3	309671.1	3.	270. AG	20.	100.0	1.0	6.1	0.07	0.4

19. WST2_WB	*	328288.0	309676.0	328290.7	309676.0	*	3.	84.	AG	20.	100.0	1.0	6.1	0.08	0.4
20. WST3_EB	*	328429.0	309742.0	328422.6	309736.2	*	9.	228.	AG	33.	100.0	1.0	6.1	0.26	1.4
21. 18TH1_SB	*	328431.0	309766.0	328431.7	309791.7	*	26.	1.	AG	29.	100.0	1.0	6.1	0.45	4.3
22. 16TH1_SB	*	328279.0	309679.0	328278.8	309679.6	*	1.	335.	AG	20.	100.0	1.0	12.2	0.02	0.1
23. EDWN_WB	*	328472.0	309708.0	328472.2	309708.1	*	0.	70.	AG	20.	100.0	1.0	3.7	0.01	0.0
24. 17TH1_SB	*	328281.0	309914.0	328281.1	309916.0	*	2.	2.	AG	33.	100.0	1.0	12.2	0.05	0.3
25. BRYAN_WB'	*	328292.0	309910.0	328294.9	309909.9	*	3.	94.	AG	30.	100.0	1.0	9.3	0.06	0.5

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
14. MONT2_NB	*	120	51	1.0	754	1600	7.32	1	3
15. MONT3_SB	*	120	61	1.0	371	1600	7.32	1	3
16. MONT4_NB	*	120	53	1.0	516	1600	7.32	1	3
17. MONT5_SB	*	120	53	1.0	395	1600	7.32	1	3
18. WST1_EB	*	60	30	1.0	106	1600	7.32	1	3
19. WST2_WB	*	60	30	1.0	108	1600	7.32	1	3
20. WST3_EB	*	120	102	1.0	102	1600	7.32	1	3
21. 18TH1_SB	*	120	88	1.0	350	1600	7.32	1	3
22. 16TH1_SB	*	60	30	1.0	25	1600	7.32	1	3
23. EDWN_WB	*	60	30	1.0	9	1600	7.32	1	3
24. 17TH1_SB	*	120	100	1.0	24	1600	7.32	1	3
25. BRYAN_WB'	*	120	93	1.0	39	1600	7.32	1	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor 1	328249.0	309682.0	1.8
2. Receptor 2	328268.0	309682.0	1.8
3. Receptor 3	328264.0	309694.0	1.8
4. Receptor 4	328304.0	309682.0	1.8
5. Receptor 5	328286.0	309682.0	1.8
6. Receptor 6	328280.0	309695.0	1.8
7. Receptor 7	328432.0	309736.0	1.8
8. Receptor 8	328420.0	309750.0	1.8
9. Receptor 9	328424.0	309773.0	1.8
10. Receptor 10	328443.0	309752.0	1.8
11. Receptor 11	328409.0	309740.0	1.8
12. Receptor 12	328411.0	309758.0	1.8
13. Receptor 13	328416.0	309781.0	1.8
14. Receptor 14	328424.0	309786.0	1.8
15. Receptor 15	328443.0	309766.0	1.8
16. Receptor 16	328451.0	309741.0	1.8
17. Receptor 17	328421.0	309727.0	1.8
18. Receptor 18	328439.0	309725.0	1.8
19. Receptor 19	328323.0	309682.0	1.8
20. Receptor 20	328377.0	309712.0	1.8
21. Receptor 21	328470.0	309713.0	1.8
22. Receptor 22	328351.0	309689.0	1.8
23. Receptor 23	328267.0	309918.0	1.8
24. Receptor 24	328274.0	309918.0	1.8
25. Receptor 25	328246.0	309938.0	1.8
26. Receptor 26	328275.0	309935.0	1.8
27. Receptor 27	328294.0	309916.0	1.8
28. Receptor 28	328293.0	309937.0	1.8
29. Receptor 29	328317.0	309915.0	1.8
30. Receptor 30	328294.0	309901.0	1.8
31. Receptor 31	328294.0	309892.0	1.8
32. Receptor 32	328313.0	309875.0	1.8
33. Receptor 33	328316.0	309901.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
34. Receptor 34	328286.0	309667.0	1.8
35. Receptor 35	328304.0	309667.0	1.8
36. Receptor 36	328324.0	309667.0	1.8
37. Receptor 37	328353.0	309667.0	1.8
38. Receptor 38	328378.0	309689.0	1.8
39. Receptor 39	328403.0	309712.0	1.8
40. Receptor 40	328331.0	309857.0	1.8
41. Receptor 41	328360.0	309830.0	1.8
42. Receptor 42	328390.0	309803.0	1.8
43. Receptor 43	328456.0	309699.0	1.8
44. Receptor 44	328463.0	309664.0	1.8
45. Receptor 45	328470.0	309627.0	1.8
46. Receptor 46	328491.0	309629.0	1.8
47. Receptor 47	328483.0	309666.0	1.8
48. Receptor 48	328475.0	309699.0	1.8
49. Receptor 49	328359.0	309802.0	1.8
50. Receptor 50	328316.0	309842.0	1.8
51. Receptor 51	328275.0	309882.0	1.8
52. Receptor 52	328233.0	309921.0	1.8
53. Receptor 53	328444.0	309804.0	1.8
54. Receptor 54	328446.0	309852.0	1.8
55. Receptor 55	328424.0	309812.0	1.8
56. Receptor 56	328425.0	309852.0	1.8
57. Receptor 57	328351.0	309915.0	1.8
58. Receptor 58	328351.0	309900.0	1.8
59. Receptor 59	328404.0	309915.0	1.8
60. Receptor 60	328209.0	309973.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																				
	* REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	* 0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	* 0.2	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	* 0.3	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	* 0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	* 0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	* 0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	* 0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	* 0.3	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	* 190	170	170	170	170	200	180	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
180.	*	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
200.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
210.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
220.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
230.	*	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
MAX	*	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
DEGR.	*	170	170	170	170	170	230	180	180	170	170	170	170	180	190	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.40 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 2.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	*	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	*	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
210.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
220.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	*	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	*	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	*	170	170	170	170	170	200	180	170	170	170	170	170	200	200	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC9 .

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 3.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	*	170	170	170	170	170	220	180	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 4.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	190	180	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

8-Hour Existing Traffic CAL3QHC Input File

```
'OSSE DOT BUS TERMINAL NE WASHINGTON DC'     480.  85.  0. 0.  60  1.0 0 1
'Receptor 1'   328249  309682    1.80
'Receptor 2'   328268  309682    1.80
'Receptor 3'   328264  309694    1.80
'Receptor 4'   328304  309682    1.80
'Receptor 5'   328286  309682    1.80
'Receptor 6'   328280  309695    1.80
'Receptor 7'   328432  309736    1.80
'Receptor 8'   328420  309750    1.80
'Receptor 9'   328424  309773    1.80
'Receptor 10'  328443  309752    1.80
'Receptor 11'  328409  309740    1.80
'Receptor 12'  328411  309758    1.80
'Receptor 13'  328416  309781    1.80
'Receptor 14'  328424  309786    1.80
'Receptor 15'  328443  309766    1.80
'Receptor 16'  328451  309741    1.80
'Receptor 17'  328421  309727    1.80
'Receptor 18'  328439  309725    1.80
'Receptor 19'  328323  309682    1.80
'Receptor 20'  328377  309712    1.80
'Receptor 21'  328470  309713    1.80
'Receptor 22'  328351  309689    1.80
'Receptor 23'  328267  309918    1.80
'Receptor 24'  328274  309918    1.80
'Receptor 25'  328246  309938    1.80
'Receptor 26'  328275  309935    1.80
'Receptor 27'  328294  309916    1.80
'Receptor 28'  328293  309937    1.80
'Receptor 29'  328317  309915    1.80
'Receptor 30'  328294  309901    1.80
'Receptor 31'  328294  309892    1.80
'Receptor 32'  328313  309875    1.80
'Receptor 33'  328316  309901    1.80
'Receptor 34'  328286  309667    1.80
'Receptor 35'  328304  309667    1.80
'Receptor 36'  328324  309667    1.80
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```
'Receptor 37'  328353  309667    1.80
'Receptor 38'  328378  309689    1.80
'Receptor 39'  328403  309712    1.80
'Receptor 40'  328331  309857    1.80
'Receptor 41'  328360  309830    1.80
'Receptor 42'  328390  309803    1.80
'Receptor 43'  328456  309699    1.80
'Receptor 44'  328463  309664    1.80
'Receptor 45'  328470  309627    1.80
'Receptor 46'  328491  309629    1.80
'Receptor 47'  328483  309666    1.80
'Receptor 48'  328475  309699    1.80
'Receptor 49'  328359  309802    1.80
'Receptor 50'  328316  309842    1.80
'Receptor 51'  328275  309882    1.80
'Receptor 52'  328233  309921    1.80
'Receptor 53'  328444  309804    1.80
'Receptor 54'  328446  309852    1.80
'Receptor 55'  328424  309812    1.80
'Receptor 56'  328425  309852    1.80
'Receptor 57'  328351  309915    1.80
'Receptor 58'  328351  309900    1.80
'Receptor 59'  328404  309915    1.80
'Receptor 60'  328209  309973    1.80
'FOUR MET SCENARIOS'                 25 4  0  'c'
1
'MONT1'             'AG'  328465  309702  328484  309614   951  4.96 1.0 12.2
1
'MONT2'             'AG'  328434  309751  328465  309702   958  4.96 1.0 12.2
1
'MONT3'             'AG'  328346  309829  328434  309751   584  4.96 1.0 12.2
1
'MONT4'             'AG'  328276  309895  328346  309829   590  4.96 1.0 12.2
1
'MONT5'             'AG'  328171  309993  328276  309895   604  4.96 1.0 12.2
1
'WST1'              'AG'  328168  309676  328277  309673   151  4.96 1.0 12.2
1
'WST2'              'AG'  328277  309673  328349  309673   162  4.96 1.0 12.2
```

```
1
'WST3'              'AG'  328349  309673  328434  309751   137  4.96 1.0 12.2
1
'18TH'              'AG'  328438  309895  328434  309751   379  4.96 1.0 12.2
1
'16TH'              'AG'  328281  309674  328246  309757    18  4.96 1.0 12.2
1
'EDWIN'             'AG'  328465  309702  328486  309713    13  4.96 1.0  7.4
1
'17TH'              'AG'  328278  309904  328281  310020    25  4.96 1.0 12.2
1
'BRYANT'            'AG'  328272  309909  328427  309905    43  4.96 1.0  9.3
2
'MONT2_NB'          'AG'  328441  309744  328466  309705   1.0   6.1   2
                 120  51     1.0     508    9.98    1600     1     3
2
'MONT3_SB'          'AG'  328426  309754  328396  309781   1.0   6.1   2
                 120  61     1.0     239    9.98    1600     1     3
2
'MONT4_NB'          'AG'  328287  309890  328316  309862   1.0   6.1   2
                 120  53     1.0     361    9.98    1600     1     3
2
'MONT5_SB'          'AG'  328268  309898  328238  309925   1.0   6.1   2
                 120  53     1.0     240    9.98    1600     1     3
2
'WST1_EB'           'AG'  328271  309671  328231  309672   1.0   6.1   2
                  60  30     1.0      74    9.98    1600     1     3
2
'WST2_WB'           'AG'  328288  309676  328328  309676   1.0   6.1   2
                  60  30     1.0      76    9.98    1600     1     3
2
'WST3_EB'           'AG'  328429  309742  328399  309715   1.0   6.1   2
                 120 102     1.0      71    9.98    1600     1     3
2
'18TH1_SB'          'AG'  328431  309766  328432  309805   1.0   6.1   2
                 120  88     1.0     245    9.98    1600     1     3
2
'16TH1_SB'          'AG'  328279  309679  328263  309715   1.0  12.2   2
                  60  30     1.0      18    9.98    1600     1     3
```

```
2
'EDWN_WB'            'AG'  328472  309708  328485  309715   1.0   3.7   2
                  60  30     1.0       6    9.98    1600     1     3
2
'17TH1_SB'           'AG'  328281  309914  328282  309954   1.0  12.2   2
                 120 100     1.0      17    9.98    1600     1     3
2
BRYAN_WB'            'AG'  328292  309910  328331  309909   1.0   9.3   2
                 120  93     1.0      27    9.98    1600     1     3
1.0  00. 4 1000. 0.  'Y' 10 17 23
2.0  00. 4 1000. 0.  'Y' 10 17 23
3.0  00. 4 1000. 0.  'Y' 10 17 23
4.0  00. 4 1000. 0.  'Y' 10 17 23
```

8-Hour Existing Traffic CAL3QHC Output File

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221 PAGE 1

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

The MODE flag has been set to c for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 85. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	LENGTH (M)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (M)	W (M)	V/C	QUEUE (VEH)
1. MONT1	328465.0	309702.0	328484.0	309614.0	90.	168.	AG	951.	5.0	1.0	12.2		
2. MONT2	328434.0	309751.0	328465.0	309702.0	58.	148.	AG	958.	5.0	1.0	12.2		
3. MONT3	328346.0	309829.0	328434.0	309751.0	118.	132.	AG	584.	5.0	1.0	12.2		
4. MONT4	328276.0	309895.0	328346.0	309829.0	96.	133.	AG	590.	5.0	1.0	12.2		
5. MONT5	328171.0	309993.0	328276.0	309895.0	144.	133.	AG	604.	5.0	1.0	12.2		
6. WST1	328168.0	309676.0	328277.0	309673.0	109.	92.	AG	151.	5.0	1.0	12.2		
7. WST2	328277.0	309673.0	328349.0	309673.0	72.	90.	AG	162.	5.0	1.0	12.2		
8. WST3	328349.0	309673.0	328434.0	309751.0	115.	47.	AG	137.	5.0	1.0	12.2		
9. 18TH	328438.0	309895.0	328434.0	309751.0	144.	182.	AG	379.	5.0	1.0	12.2		
10. 16TH	328281.0	309674.0	328246.0	309757.0	90.	337.	AG	18.	5.0	1.0	12.2		
11. EDWIN	328465.0	309702.0	328486.0	309713.0	24.	62.	AG	13.	5.0	1.0	7.4		
12. 17TH	328278.0	309904.0	328281.0	310020.0	116.	1.	AG	25.	5.0	1.0	12.2		
13. BRYANT	328272.0	309909.0	328427.0	309905.0	155.	91.	AG	43.	5.0	1.0	9.3		
14. MONT2_NB	328441.0	309744.0	328452.7	309725.8	22.	147.	AG	23.	100.0	1.0	6.1	0.29	3.6
15. MONT3_SB	328426.0	309754.0	328417.0	309762.1	12.	312.	AG	27.	100.0	1.0	6.1	0.16	2.0
16. MONT4_NB	328287.0	309890.0	328298.4	309879.0	16.	134.	AG	24.	100.0	1.0	6.1	0.21	2.7
17. MONT5_SB	328268.0	309898.0	328260.1	309905.1	11.	312.	AG	24.	100.0	1.0	6.1	0.14	1.8

18. WST1_EB	*	328271.0	309671.0	328269.2	309671.0	*	2.	275.	AG	27.	100.0	1.0	6.1	0.05	0.3
19. WST2_WB	*	328288.0	309676.0	328289.9	309676.0	*	2.	90.	AG	27.	100.0	1.0	6.1	0.05	0.3
20. WST3_EB	*	328429.0	309742.0	328424.6	309738.0	*	6.	228.	AG	46.	100.0	1.0	6.1	0.18	1.0
21. 18TH1_SB	*	328431.0	309766.0	328431.5	309783.9	*	18.	2.	AG	39.	100.0	1.0	6.1	0.32	3.0
22. 16TH1_SB	*	328279.0	309679.0	328278.8	309679.4	*	0.	335.	AG	27.	100.0	1.0	12.2	0.01	0.1
23. EDWN_WB	*	328472.0	309708.0	328472.1	309708.1	*	0.	56.	AG	27.	100.0	1.0	3.7	0.00	0.0
24. 17TH1_SB	*	328281.0	309914.0	328281.0	309915.3	*	1.	1.	AG	45.	100.0	1.0	12.2	0.04	0.2
25. BRYAN_WB'	*	328292.0	309910.0	328294.0	309909.9	*	2.	97.	AG	41.	100.0	1.0	9.3	0.04	0.3

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
14. MONT2_NB	*	120	51	1.0	508	1600	9.98	1	3
15. MONT3_SB	*	120	61	1.0	239	1600	9.98	1	3
16. MONT4_NB	*	120	53	1.0	361	1600	9.98	1	3
17. MONT5_SB	*	120	53	1.0	240	1600	9.98	1	3
18. WST1_EB	*	60	30	1.0	74	1600	9.98	1	3
19. WST2_WB	*	60	30	1.0	76	1600	9.98	1	3
20. WST3_EB	*	120	102	1.0	71	1600	9.98	1	3
21. 18TH1_SB	*	120	88	1.0	245	1600	9.98	1	3
22. 16TH1_SB	*	60	30	1.0	18	1600	9.98	1	3
23. EDWN_WB	*	60	30	1.0	6	1600	9.98	1	3
24. 17TH1_SB	*	120	100	1.0	17	1600	9.98	1	3
25. BRYAN_WB'	*	120	93	1.0	27	1600	9.98	1	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor 1	328249.0	309682.0	1.8
2. Receptor 2	328268.0	309682.0	1.8
3. Receptor 3	328264.0	309694.0	1.8
4. Receptor 4	328304.0	309682.0	1.8
5. Receptor 5	328286.0	309682.0	1.8
6. Receptor 6	328280.0	309695.0	1.8
7. Receptor 7	328432.0	309736.0	1.8
8. Receptor 8	328420.0	309750.0	1.8
9. Receptor 9	328424.0	309773.0	1.8
10. Receptor 10	328443.0	309752.0	1.8
11. Receptor 11	328409.0	309740.0	1.8
12. Receptor 12	328411.0	309758.0	1.8
13. Receptor 13	328416.0	309781.0	1.8
14. Receptor 14	328424.0	309786.0	1.8
15. Receptor 15	328443.0	309766.0	1.8
16. Receptor 16	328451.0	309741.0	1.8
17. Receptor 17	328421.0	309727.0	1.8
18. Receptor 18	328439.0	309725.0	1.8
19. Receptor 19	328323.0	309682.0	1.8
20. Receptor 20	328377.0	309712.0	1.8
21. Receptor 21	328470.0	309713.0	1.8
22. Receptor 22	328351.0	309689.0	1.8
23. Receptor 23	328267.0	309918.0	1.8
24. Receptor 24	328274.0	309918.0	1.8
25. Receptor 25	328246.0	309938.0	1.8
26. Receptor 26	328275.0	309935.0	1.8
27. Receptor 27	328294.0	309916.0	1.8
28. Receptor 28	328293.0	309937.0	1.8
29. Receptor 29	328317.0	309915.0	1.8
30. Receptor 30	328294.0	309901.0	1.8
31. Receptor 31	328294.0	309892.0	1.8
32. Receptor 32	328313.0	309875.0	1.8
33. Receptor 33	328316.0	309901.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
34. Receptor 34	328286.0	309667.0	1.8
35. Receptor 35	328304.0	309667.0	1.8
36. Receptor 36	328324.0	309667.0	1.8
37. Receptor 37	328353.0	309667.0	1.8
38. Receptor 38	328378.0	309689.0	1.8
39. Receptor 39	328403.0	309712.0	1.8
40. Receptor 40	328331.0	309857.0	1.8
41. Receptor 41	328360.0	309830.0	1.8
42. Receptor 42	328390.0	309803.0	1.8
43. Receptor 43	328456.0	309699.0	1.8
44. Receptor 44	328463.0	309664.0	1.8
45. Receptor 45	328470.0	309627.0	1.8
46. Receptor 46	328491.0	309629.0	1.8
47. Receptor 47	328483.0	309666.0	1.8
48. Receptor 48	328475.0	309699.0	1.8
49. Receptor 49	328359.0	309802.0	1.8
50. Receptor 50	328316.0	309842.0	1.8
51. Receptor 51	328275.0	309882.0	1.8
52. Receptor 52	328233.0	309921.0	1.8
53. Receptor 53	328444.0	309804.0	1.8
54. Receptor 54	328446.0	309852.0	1.8
55. Receptor 55	328424.0	309812.0	1.8
56. Receptor 56	328425.0	309852.0	1.8
57. Receptor 57	328351.0	309915.0	1.8
58. Receptor 58	328351.0	309900.0	1.8
59. Receptor 59	328404.0	309915.0	1.8
60. Receptor 60	328209.0	309973.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	170	170	180	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																				
	* REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	* 0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	* 170	170	170	170	170	200	170	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC9 .

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 2.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	180	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	*	170	170	170	170	170	170	190	180	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 3.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	*	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.00 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 4.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.00 PPM OCCURRED AT RECEPTOR REC10.

1-Hour Future Traffic CAL3QHC Input File

```
'OSSE DOT BUS TERMINAL NE WASHINGTON DC'      60.  85.  0. 0.  60  1.0 0 1
'Receptor 1'   328249  309682    1.80
'Receptor 2'   328268  309682    1.80
'Receptor 3'   328264  309694    1.80
'Receptor 4'   328304  309682    1.80
'Receptor 5'   328286  309682    1.80
'Receptor 6'   328280  309695    1.80
'Receptor 7'   328432  309736    1.80
'Receptor 8'   328420  309750    1.80
'Receptor 9'   328424  309773    1.80
'Receptor 10'  328443  309752    1.80
'Receptor 11'  328409  309740    1.80
'Receptor 12'  328411  309758    1.80
'Receptor 13'  328416  309781    1.80
'Receptor 14'  328424  309786    1.80
'Receptor 15'  328443  309766    1.80
'Receptor 16'  328451  309741    1.80
'Receptor 17'  328421  309727    1.80
'Receptor 18'  328439  309725    1.80
'Receptor 19'  328323  309682    1.80
'Receptor 20'  328377  309712    1.80
'Receptor 21'  328470  309713    1.80
'Receptor 22'  328351  309689    1.80
'Receptor 23'  328267  309918    1.80
'Receptor 24'  328274  309918    1.80
'Receptor 25'  328246  309938    1.80
'Receptor 26'  328275  309935    1.80
'Receptor 27'  328294  309916    1.80
'Receptor 28'  328293  309937    1.80
'Receptor 29'  328317  309915    1.80
'Receptor 30'  328294  309901    1.80
'Receptor 31'  328294  309892    1.80
'Receptor 32'  328313  309875    1.80
'Receptor 33'  328316  309901    1.80
'Receptor 34'  328286  309667    1.80
'Receptor 35'  328304  309667    1.80
'Receptor 36'  328324  309667    1.80
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'Receptor 37'  328353  309667    1.80
'Receptor 38'  328378  309689    1.80
'Receptor 39'  328403  309712    1.80
'Receptor 40'  328331  309857    1.80
'Receptor 41'  328360  309830    1.80
'Receptor 42'  328390  309803    1.80
'Receptor 43'  328456  309699    1.80
'Receptor 44'  328463  309664    1.80
'Receptor 45'  328470  309627    1.80
'Receptor 46'  328491  309629    1.80
'Receptor 47'  328483  309666    1.80
'Receptor 48'  328475  309699    1.80
'Receptor 49'  328359  309802    1.80
'Receptor 50'  328316  309842    1.80
'Receptor 51'  328275  309882    1.80
'Receptor 52'  328233  309921    1.80
'Receptor 53'  328444  309804    1.80
'Receptor 54'  328446  309852    1.80
'Receptor 55'  328424  309812    1.80
'Receptor 56'  328425  309852    1.80
'Receptor 57'  328351  309915    1.80
'Receptor 58'  328351  309900    1.80
'Receptor 59'  328404  309915    1.80
'Receptor 60'  328209  309973    1.80
'FOUR MET SCENARIOS'                25 4  0  'c'
1
'MONT1'             'AG'  328465  309702  328484  309614  1358  4.39 1.0 12.2
1
'MONT2'             'AG'  328434  309751  328465  309702  1368  4.39 1.0 12.2
1
'MONT3'             'AG'  328346  309829  328434  309751   864  4.39 1.0 12.2
1
'MONT4'             'AG'  328276  309895  328346  309829   873  4.39 1.0 12.2
1
'MONT5'             'AG'  328171  309993  328276  309895   902  4.39 1.0 12.2
1
'WST1'              'AG'  328168  309676  328277  309673   215  4.39 1.0 12.2
1
'WST2'              'AG'  328277  309673  328349  309673   231  4.39 1.0 12.2
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1
'WST3'              'AG'  328349  309673  328434  309751   235  4.39 1.0 12.2
1
'18TH'              'AG'  328438  309895  328434  309751   541  4.39 1.0 12.2
1
'16TH'              'AG'  328281  309674  328246  309757    25  4.39 1.0 12.2
1
'EDWIN'             'AG'  328465  309702  328486  309713    19  4.39 1.0  7.4
1
'17TH'              'AG'  328278  309904  328281  310020    36  4.39 1.0 12.2
1
'BRYANT'            'AG'  328272  309909  328427  309905    61  4.39 1.0  9.3
2
'MONT2_NB'          'AG'  328441  309744  328466  309705   1.0   6.1   2
                 120  51     1.0     754    7.32    1600     1     3
2
'MONT3_SB'          'AG'  328426  309754  328396  309781   1.0   6.1   2
                 120  61     1.0     371    7.32    1600     1     3
2
'MONT4_NB'          'AG'  328287  309890  328316  309862   1.0   6.1   2
                 120  53     1.0     516    7.32    1600     1     3
2
'MONT5_SB'          'AG'  328268  309898  328238  309925   1.0   6.1   2
                 120  53     1.0     395    7.32    1600     1     3
2
'WST1_EB'           'AG'  328271  309671  328231  309672   1.0   6.1   2
                  60  30     1.0     106    7.32    1600     1     3
2
'WST2_WB'           'AG'  328288  309676  328328  309676   1.0   6.1   2
                  60  30     1.0     108    7.32    1600     1     3
2
'WST3_EB'           'AG'  328429  309742  328399  309715   1.0   6.1   2
                 120 102     1.0     102    7.32    1600     1     3
2
'18TH1_SB'          'AG'  328431  309766  328432  309805   1.0   6.1   2
                 120  88     1.0     350    7.32    1600     1     3
2
'16TH1_SB'          'AG'  328279  309679  328263  309715   1.0  12.2   2
                  60  30     1.0      25    7.32    1600     1     3
```

```
2
'EDWN_WB'           'AG'  328472  309708  328485  309715   1.0   3.7   2
                   60  30     1.0       9    7.32    1600     1     3
2
'17TH1_SB'          'AG'  328281  309914  328282  309954   1.0  12.2   2
                  120 100     1.0      24    7.32    1600     1     3
2
BRYAN_WB'           'AG'  328292  309910  328331  309909   1.0   9.3   2
                  120  93     1.0      39    7.32    1600     1     3
1.0  00. 4 1000. 0.  'Y' 10 17 23
2.0  00. 4 1000. 0.  'Y' 10 17 23
3.0  00. 4 1000. 0.  'Y' 10 17 23
                                        4.0  00. 4 1000. 0.  'Y' 10 17 23
```

1-Hour Future Traffic CAL3QHC Output File

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221 PAGE 1

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

The MODE flag has been set to c for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 85. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	LENGTH (M)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (M)	W (M)	V/C	QUEUE (VEH)
1. MONT1	328465.0	309702.0	328484.0	309614.0	90.	168.	AG	1358.	4.4	1.0	12.2		
2. MONT2	328434.0	309751.0	328465.0	309702.0	58.	148.	AG	1368.	4.4	1.0	12.2		
3. MONT3	328346.0	309829.0	328434.0	309751.0	118.	132.	AG	864.	4.4	1.0	12.2		
4. MONT4	328276.0	309895.0	328346.0	309829.0	96.	133.	AG	873.	4.4	1.0	12.2		
5. MONT5	328171.0	309993.0	328276.0	309895.0	144.	133.	AG	902.	4.4	1.0	12.2		
6. WST1	328168.0	309676.0	328277.0	309673.0	109.	92.	AG	215.	4.4	1.0	12.2		
7. WST2	328277.0	309673.0	328349.0	309673.0	72.	90.	AG	231.	4.4	1.0	12.2		
8. WST3	328349.0	309673.0	328434.0	309751.0	115.	47.	AG	235.	4.4	1.0	12.2		
9. 18TH	328438.0	309895.0	328434.0	309751.0	144.	182.	AG	541.	4.4	1.0	12.2		
10. 16TH	328281.0	309674.0	328246.0	309757.0	90.	337.	AG	25.	4.4	1.0	12.2		
11. EDWIN	328465.0	309702.0	328486.0	309713.0	24.	62.	AG	19.	4.4	1.0	7.4		
12. 17TH	328278.0	309904.0	328281.0	310020.0	116.	1.	AG	36.	4.4	1.0	12.2		
13. BRYANT	328272.0	309909.0	328427.0	309905.0	155.	91.	AG	61.	4.4	1.0	9.3		
14. MONT2_NB	328441.0	309744.0	328458.3	309717.0	32.	147.	AG	17.	100.0	1.0	6.1	0.43	5.3
15. MONT3_SB	328426.0	309754.0	328412.0	309766.6	19.	312.	AG	20.	100.0	1.0	6.1	0.25	3.1
16. MONT4_NB	328287.0	309890.0	328303.4	309874.2	23.	134.	AG	17.	100.0	1.0	6.1	0.30	3.8
17. MONT5_SB	328268.0	309898.0	328255.1	309909.7	17.	312.	AG	17.	100.0	1.0	6.1	0.23	2.9
18. WST1_EB	328271.0	309671.0	328268.3	309671.1	3.	270.	AG	20.	100.0	1.0	6.1	0.07	0.4

19. WST2_WB	*	328288.0	309676.0	328290.7	309676.0	*	3.	84.	AG	20.	100.0	1.0	6.1	0.08	0.4
20. WST3_EB	*	328429.0	309742.0	328422.6	309736.2	*	9.	228.	AG	33.	100.0	1.0	6.1	0.26	1.4
21. 18TH1_SB	*	328431.0	309766.0	328431.7	309791.7	*	26.	1.	AG	29.	100.0	1.0	6.1	0.45	4.3
22. 16TH1_SB	*	328279.0	309679.0	328278.8	309679.6	*	1.	335.	AG	20.	100.0	1.0	12.2	0.02	0.1
23. EDWN_WB	*	328472.0	309708.0	328472.2	309708.1	*	0.	70.	AG	20.	100.0	1.0	3.7	0.01	0.0
24. 17TH1_SB	*	328281.0	309914.0	328281.1	309916.0	*	2.	2.	AG	33.	100.0	1.0	12.2	0.05	0.3
25. BRYAN_WB'	*	328292.0	309910.0	328294.9	309909.9	*	3.	94.	AG	30.	100.0	1.0	9.3	0.06	0.5

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
14. MONT2_NB	*	120	51	1.0	754	1600	7.32	1	3
15. MONT3_SB	*	120	61	1.0	371	1600	7.32	1	3
16. MONT4_NB	*	120	53	1.0	516	1600	7.32	1	3
17. MONT5_SB	*	120	53	1.0	395	1600	7.32	1	3
18. WST1_EB	*	60	30	1.0	106	1600	7.32	1	3
19. WST2_WB	*	60	30	1.0	108	1600	7.32	1	3
20. WST3_EB	*	120	102	1.0	102	1600	7.32	1	3
21. 18TH1_SB	*	120	88	1.0	350	1600	7.32	1	3
22. 16TH1_SB	*	60	30	1.0	25	1600	7.32	1	3
23. EDWN_WB	*	60	30	1.0	9	1600	7.32	1	3
24. 17TH1_SB	*	120	100	1.0	24	1600	7.32	1	3
25. BRYAN_WB'	*	120	93	1.0	39	1600	7.32	1	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor 1	328249.0	309682.0	1.8
2. Receptor 2	328268.0	309682.0	1.8
3. Receptor 3	328264.0	309694.0	1.8
4. Receptor 4	328304.0	309682.0	1.8
5. Receptor 5	328286.0	309682.0	1.8
6. Receptor 6	328280.0	309695.0	1.8
7. Receptor 7	328432.0	309736.0	1.8
8. Receptor 8	328420.0	309750.0	1.8
9. Receptor 9	328424.0	309773.0	1.8
10. Receptor 10	328443.0	309752.0	1.8
11. Receptor 11	328409.0	309740.0	1.8
12. Receptor 12	328411.0	309758.0	1.8
13. Receptor 13	328416.0	309781.0	1.8
14. Receptor 14	328424.0	309786.0	1.8
15. Receptor 15	328443.0	309766.0	1.8
16. Receptor 16	328451.0	309741.0	1.8
17. Receptor 17	328421.0	309727.0	1.8
18. Receptor 18	328439.0	309725.0	1.8
19. Receptor 19	328323.0	309682.0	1.8
20. Receptor 20	328377.0	309712.0	1.8
21. Receptor 21	328470.0	309713.0	1.8
22. Receptor 22	328351.0	309689.0	1.8
23. Receptor 23	328267.0	309918.0	1.8
24. Receptor 24	328274.0	309918.0	1.8
25. Receptor 25	328246.0	309938.0	1.8
26. Receptor 26	328275.0	309935.0	1.8
27. Receptor 27	328294.0	309916.0	1.8
28. Receptor 28	328293.0	309937.0	1.8
29. Receptor 29	328317.0	309915.0	1.8
30. Receptor 30	328294.0	309901.0	1.8
31. Receptor 31	328294.0	309892.0	1.8
32. Receptor 32	328313.0	309875.0	1.8
33. Receptor 33	328316.0	309901.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
34. Receptor 34	328286.0	309667.0	1.8
35. Receptor 35	328304.0	309667.0	1.8
36. Receptor 36	328324.0	309667.0	1.8
37. Receptor 37	328353.0	309667.0	1.8
38. Receptor 38	328378.0	309689.0	1.8
39. Receptor 39	328403.0	309712.0	1.8
40. Receptor 40	328331.0	309857.0	1.8
41. Receptor 41	328360.0	309830.0	1.8
42. Receptor 42	328390.0	309803.0	1.8
43. Receptor 43	328456.0	309699.0	1.8
44. Receptor 44	328463.0	309664.0	1.8
45. Receptor 45	328470.0	309627.0	1.8
46. Receptor 46	328491.0	309629.0	1.8
47. Receptor 47	328483.0	309666.0	1.8
48. Receptor 48	328475.0	309699.0	1.8
49. Receptor 49	328359.0	309802.0	1.8
50. Receptor 50	328316.0	309842.0	1.8
51. Receptor 51	328275.0	309882.0	1.8
52. Receptor 52	328233.0	309921.0	1.8
53. Receptor 53	328444.0	309804.0	1.8
54. Receptor 54	328446.0	309852.0	1.8
55. Receptor 55	328424.0	309812.0	1.8
56. Receptor 56	328425.0	309852.0	1.8
57. Receptor 57	328351.0	309915.0	1.8
58. Receptor 58	328351.0	309900.0	1.8
59. Receptor 59	328404.0	309915.0	1.8
60. Receptor 60	328209.0	309973.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	*	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	*	0.2	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	*	0.3	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	*	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	*	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	*	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	*	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	*	0.3	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	*	190	170	170	170	170	200	180	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
180.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
200.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
210.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
220.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
230.	* 0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
MAX	* 0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
DEGR.	* 170	170	170	170	170	230	180	180	170	170	170	170	180	190	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.40 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 2.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
210.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
220.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
210.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
220.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	* 0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	* 170	170	170	170	170	200	180	170	170	170	170	170	200	200	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC9 .

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 3.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																				
	* REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) *	REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	*	170	170	170	170	170	220	180	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 4.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	190	180	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

8-Hour Future Traffic CAL3QHC Input File

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'OSSE DOT BUS TERMINAL NE WASHINGTON DC'     480.  85.  0. 0.  60  1.0 0 1
'Receptor 1'   328249  309682    1.80
'Receptor 2'   328268  309682    1.80
'Receptor 3'   328264  309694    1.80
'Receptor 4'   328304  309682    1.80
'Receptor 5'   328286  309682    1.80
'Receptor 6'   328280  309695    1.80
'Receptor 7'   328432  309736    1.80
'Receptor 8'   328420  309750    1.80
'Receptor 9'   328424  309773    1.80
'Receptor 10'  328443  309752    1.80
'Receptor 11'  328409  309740    1.80
'Receptor 12'  328411  309758    1.80
'Receptor 13'  328416  309781    1.80
'Receptor 14'  328424  309786    1.80
'Receptor 15'  328443  309766    1.80
'Receptor 16'  328451  309741    1.80
'Receptor 17'  328421  309727    1.80
'Receptor 18'  328439  309725    1.80
'Receptor 19'  328323  309682    1.80
'Receptor 20'  328377  309712    1.80
'Receptor 21'  328470  309713    1.80
'Receptor 22'  328351  309689    1.80
'Receptor 23'  328267  309918    1.80
'Receptor 24'  328274  309918    1.80
'Receptor 25'  328246  309938    1.80
'Receptor 26'  328275  309935    1.80
'Receptor 27'  328294  309916    1.80
'Receptor 28'  328293  309937    1.80
'Receptor 29'  328317  309915    1.80
'Receptor 30'  328294  309901    1.80
'Receptor 31'  328294  309892    1.80
'Receptor 32'  328313  309875    1.80
'Receptor 33'  328316  309901    1.80
'Receptor 34'  328286  309667    1.80
'Receptor 35'  328304  309667    1.80
'Receptor 36'  328324  309667    1.80
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'Receptor 37'  328353  309667    1.80
'Receptor 38'  328378  309689    1.80
'Receptor 39'  328403  309712    1.80
'Receptor 40'  328331  309857    1.80
'Receptor 41'  328360  309830    1.80
'Receptor 42'  328390  309803    1.80
'Receptor 43'  328456  309699    1.80
'Receptor 44'  328463  309664    1.80
'Receptor 45'  328470  309627    1.80
'Receptor 46'  328491  309629    1.80
'Receptor 47'  328483  309666    1.80
'Receptor 48'  328475  309699    1.80
'Receptor 49'  328359  309802    1.80
'Receptor 50'  328316  309842    1.80
'Receptor 51'  328275  309882    1.80
'Receptor 52'  328233  309921    1.80
'Receptor 53'  328444  309804    1.80
'Receptor 54'  328446  309852    1.80
'Receptor 55'  328424  309812    1.80
'Receptor 56'  328425  309852    1.80
'Receptor 57'  328351  309915    1.80
'Receptor 58'  328351  309900    1.80
'Receptor 59'  328404  309915    1.80
'Receptor 60'  328209  309973    1.80
'FOUR MET SCENARIOS'                 25 4  0  'c'
1
'MONT1'             'AG'  328465  309702  328484  309614   951  4.39 1.0 12.2
1
'MONT2'             'AG'  328434  309751  328465  309702   958  4.39 1.0 12.2
1
'MONT3'             'AG'  328346  309829  328434  309751   605  4.39 1.0 12.2
1
'MONT4'             'AG'  328276  309895  328346  309829   611  4.39 1.0 12.2
1
'MONT5'             'AG'  328171  309993  328276  309895   631  4.39 1.0 12.2
1
'WST1'              'AG'  328168  309676  328277  309673   151  4.39 1.0 12.2
1
'WST2'              'AG'  328277  309673  328349  309673   162  4.39 1.0 12.2
```

```
1
'WST3'              'AG'  328349  309673  328434  309751   165  4.39 1.0 12.2
1
'18TH'              'AG'  328438  309895  328434  309751   379  4.39 1.0 12.2
1
'16TH'              'AG'  328281  309674  328246  309757    18  4.39 1.0 12.2
1
'EDWIN'             'AG'  328465  309702  328486  309713    13  4.39 1.0  7.4
1
'17TH'              'AG'  328278  309904  328281  310020    25  4.39 1.0 12.2
1
'BRYANT'            'AG'  328272  309909  328427  309905    43  4.39 1.0  9.3
2
'MONT2_NB'          'AG'  328441  309744  328466  309705   1.0   6.1   2
                 120  51     1.0     528    7.32    1600     1     3
2
'MONT3_SB'          'AG'  328426  309754  328396  309781   1.0   6.1   2
                 120  61     1.0     260    7.32    1600     1     3
2
'MONT4_NB'          'AG'  328287  309890  328316  309862   1.0   6.1   2
                 120  53     1.0     361    7.32    1600     1     3
2
'MONT5_SB'          'AG'  328268  309898  328238  309925   1.0   6.1   2
                 120  53     1.0     277    7.32    1600     1     3
2
'WST1_EB'           'AG'  328271  309671  328231  309672   1.0   6.1   2
                  60  30     1.0      74    7.32    1600     1     3
2
'WST2_WB'           'AG'  328288  309676  328328  309676   1.0   6.1   2
                  60  30     1.0      76    7.32    1600     1     3
2
'WST3_EB'           'AG'  328429  309742  328399  309715   1.0   6.1   2
                 120 102     1.0      71    7.32    1600     1     3
2
'18TH1_SB'          'AG'  328431  309766  328432  309805   1.0   6.1   2
                 120  88     1.0     245    7.32    1600     1     3
2
'16TH1_SB'          'AG'  328279  309679  328263  309715   1.0  12.2   2
                  60  30     1.0      18    7.32    1600     1     3
```

```
2
'EDWN_WB'            'AG'  328472  309708  328485  309715   1.0   3.7   2
                  60  30     1.0       6    7.32    1600     1     3
2
'17TH1_SB'           'AG'  328281  309914  328282  309954   1.0  12.2   2
                 120 100     1.0      17    7.32    1600     1     3
2
BRYAN_WB'            'AG'  328292  309910  328331  309909   1.0   9.3   2
                 120  93     1.0      27    7.32    1600     1     3
1.0  00. 4 1000. 0.  'Y' 10 17 23
2.0  00. 4 1000. 0.  'Y' 10 17 23
3.0  00. 4 1000. 0.  'Y' 10 17 23
4.0  00. 4 1000. 0.  'Y' 10 17 23
```

8-Hour Future Traffic CAL3QHC Output File

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221 PAGE 1

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

The MODE flag has been set to c for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 85. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	LENGTH (M)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (M)	W (M)	V/C	QUEUE (VEH)
1. MONT1	328465.0	309702.0	328484.0	309614.0	90.	168.	AG	951.	4.4	1.0	12.2		
2. MONT2	328434.0	309751.0	328465.0	309702.0	58.	148.	AG	958.	4.4	1.0	12.2		
3. MONT3	328346.0	309829.0	328434.0	309751.0	118.	132.	AG	605.	4.4	1.0	12.2		
4. MONT4	328276.0	309895.0	328346.0	309829.0	96.	133.	AG	611.	4.4	1.0	12.2		
5. MONT5	328171.0	309993.0	328276.0	309895.0	144.	133.	AG	631.	4.4	1.0	12.2		
6. WST1	328168.0	309676.0	328277.0	309673.0	109.	92.	AG	151.	4.4	1.0	12.2		
7. WST2	328277.0	309673.0	328349.0	309673.0	72.	90.	AG	162.	4.4	1.0	12.2		
8. WST3	328349.0	309673.0	328434.0	309751.0	115.	47.	AG	165.	4.4	1.0	12.2		
9. 18TH	328438.0	309895.0	328434.0	309751.0	144.	182.	AG	379.	4.4	1.0	12.2		
10. 16TH	328281.0	309674.0	328246.0	309757.0	90.	337.	AG	18.	4.4	1.0	12.2		
11. EDWIN	328465.0	309702.0	328486.0	309713.0	24.	62.	AG	13.	4.4	1.0	7.4		
12. 17TH	328278.0	309904.0	328281.0	310020.0	116.	1.	AG	25.	4.4	1.0	12.2		
13. BRYANT	328272.0	309909.0	328427.0	309905.0	155.	91.	AG	43.	4.4	1.0	9.3		
14. MONT2_NB	328441.0	309744.0	328453.1	309725.1	22.	147.	AG	17.	100.0	1.0	6.1	0.30	3.7
15. MONT3_SB	328426.0	309754.0	328416.2	309762.8	13.	312.	AG	20.	100.0	1.0	6.1	0.17	2.2
16. MONT4_NB	328287.0	309890.0	328298.4	309879.0	16.	134.	AG	17.	100.0	1.0	6.1	0.21	2.7
17. MONT5_SB	328268.0	309898.0	328258.9	309906.2	12.	312.	AG	17.	100.0	1.0	6.1	0.16	2.0
18. WST1_EB	328271.0	309671.0	328269.2	309671.0	2.	275.	AG	20.	100.0	1.0	6.1	0.05	0.3

19. WST2_WB	*	328288.0	309676.0	328289.9	309676.0	*	2.	90.	AG	20.	100.0	1.0	6.1	0.05	0.3
20. WST3_EB	*	328429.0	309742.0	328424.6	309738.0	*	6.	228.	AG	33.	100.0	1.0	6.1	0.18	1.0
21. 18TH1_SB	*	328431.0	309766.0	328431.5	309783.9	*	18.	2.	AG	29.	100.0	1.0	6.1	0.32	3.0
22. 16TH1_SB	*	328279.0	309679.0	328278.8	309679.4	*	0.	335.	AG	20.	100.0	1.0	12.2	0.01	0.1
23. EDWN_WB	*	328472.0	309708.0	328472.1	309708.1	*	0.	56.	AG	20.	100.0	1.0	3.7	0.00	0.0
24. 17TH1_SB	*	328281.0	309914.0	328281.0	309915.3	*	1.	1.	AG	33.	100.0	1.0	12.2	0.04	0.2
25. BRYAN_WB'	*	328292.0	309910.0	328294.0	309909.9	*	2.	97.	AG	30.	100.0	1.0	9.3	0.04	0.3

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
14. MONT2_NB	*	120	51	1.0	528	1600	7.32	1	3
15. MONT3_SB	*	120	61	1.0	260	1600	7.32	1	3
16. MONT4_NB	*	120	53	1.0	361	1600	7.32	1	3
17. MONT5_SB	*	120	53	1.0	277	1600	7.32	1	3
18. WST1_EB	*	60	30	1.0	74	1600	7.32	1	3
19. WST2_WB	*	60	30	1.0	76	1600	7.32	1	3
20. WST3_EB	*	120	102	1.0	71	1600	7.32	1	3
21. 18TH1_SB	*	120	88	1.0	245	1600	7.32	1	3
22. 16TH1_SB	*	60	30	1.0	18	1600	7.32	1	3
23. EDWN_WB	*	60	30	1.0	6	1600	7.32	1	3
24. 17TH1_SB	*	120	100	1.0	17	1600	7.32	1	3
25. BRYAN_WB'	*	120	93	1.0	27	1600	7.32	1	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor 1	328249.0	309682.0	1.8
2. Receptor 2	328268.0	309682.0	1.8
3. Receptor 3	328264.0	309694.0	1.8
4. Receptor 4	328304.0	309682.0	1.8
5. Receptor 5	328286.0	309682.0	1.8
6. Receptor 6	328280.0	309695.0	1.8
7. Receptor 7	328432.0	309736.0	1.8
8. Receptor 8	328420.0	309750.0	1.8
9. Receptor 9	328424.0	309773.0	1.8
10. Receptor 10	328443.0	309752.0	1.8
11. Receptor 11	328409.0	309740.0	1.8
12. Receptor 12	328411.0	309758.0	1.8
13. Receptor 13	328416.0	309781.0	1.8
14. Receptor 14	328424.0	309786.0	1.8
15. Receptor 15	328443.0	309766.0	1.8
16. Receptor 16	328451.0	309741.0	1.8
17. Receptor 17	328421.0	309727.0	1.8
18. Receptor 18	328439.0	309725.0	1.8
19. Receptor 19	328323.0	309682.0	1.8
20. Receptor 20	328377.0	309712.0	1.8
21. Receptor 21	328470.0	309713.0	1.8
22. Receptor 22	328351.0	309689.0	1.8
23. Receptor 23	328267.0	309918.0	1.8
24. Receptor 24	328274.0	309918.0	1.8
25. Receptor 25	328246.0	309938.0	1.8
26. Receptor 26	328275.0	309935.0	1.8
27. Receptor 27	328294.0	309916.0	1.8
28. Receptor 28	328293.0	309937.0	1.8
29. Receptor 29	328317.0	309915.0	1.8
30. Receptor 30	328294.0	309901.0	1.8
31. Receptor 31	328294.0	309892.0	1.8
32. Receptor 32	328313.0	309875.0	1.8
33. Receptor 33	328316.0	309901.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

DATE : 7/15/19
TIME : 9:19:51

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
34. Receptor 34	328286.0	309667.0	1.8
35. Receptor 35	328304.0	309667.0	1.8
36. Receptor 36	328324.0	309667.0	1.8
37. Receptor 37	328353.0	309667.0	1.8
38. Receptor 38	328378.0	309689.0	1.8
39. Receptor 39	328403.0	309712.0	1.8
40. Receptor 40	328331.0	309857.0	1.8
41. Receptor 41	328360.0	309830.0	1.8
42. Receptor 42	328390.0	309803.0	1.8
43. Receptor 43	328456.0	309699.0	1.8
44. Receptor 44	328463.0	309664.0	1.8
45. Receptor 45	328470.0	309627.0	1.8
46. Receptor 46	328491.0	309629.0	1.8
47. Receptor 47	328483.0	309666.0	1.8
48. Receptor 48	328475.0	309699.0	1.8
49. Receptor 49	328359.0	309802.0	1.8
50. Receptor 50	328316.0	309842.0	1.8
51. Receptor 51	328275.0	309882.0	1.8
52. Receptor 52	328233.0	309921.0	1.8
53. Receptor 53	328444.0	309804.0	1.8
54. Receptor 54	328446.0	309852.0	1.8
55. Receptor 55	328424.0	309812.0	1.8
56. Receptor 56	328425.0	309852.0	1.8
57. Receptor 57	328351.0	309915.0	1.8
58. Receptor 58	328351.0	309900.0	1.8
59. Receptor 59	328404.0	309915.0	1.8
60. Receptor 60	328209.0	309973.0	1.8

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	220	170	170	170	180	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
200.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
230.	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MAX	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	170	170	220	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	180

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																				
	* REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
180.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
190.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DEGR.	* 170	170	170	170	170	210	180	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 2.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	180	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	180	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.10 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 3.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM)																			
	* REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

THE HIGHEST CONCENTRATION OF 0.00 PPM OCCURRED AT RECEPTOR REC10.

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

METEOROLOGICAL VARIABLES

U = 4.0 M/S CLAS = 4 (D) ATIM = 480. MINUTES MIXH = 1000. M AMB = 0.0 PPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 170.-230.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
170.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

JOB: OSSE DOT BUS TERMINAL NE WASHINGTON DC RUN: FOUR MET SCENARIOS

MODEL RESULTS

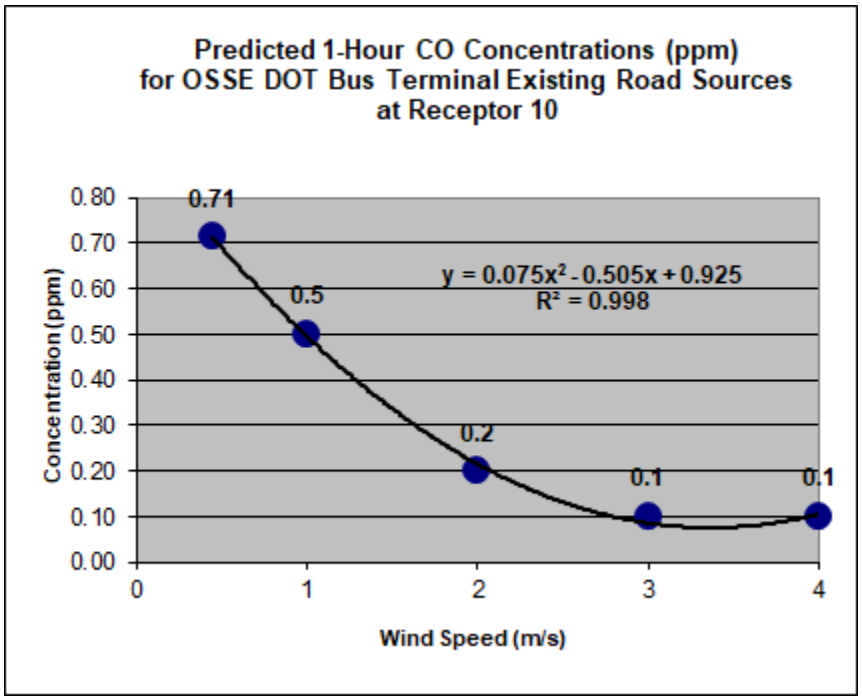
REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

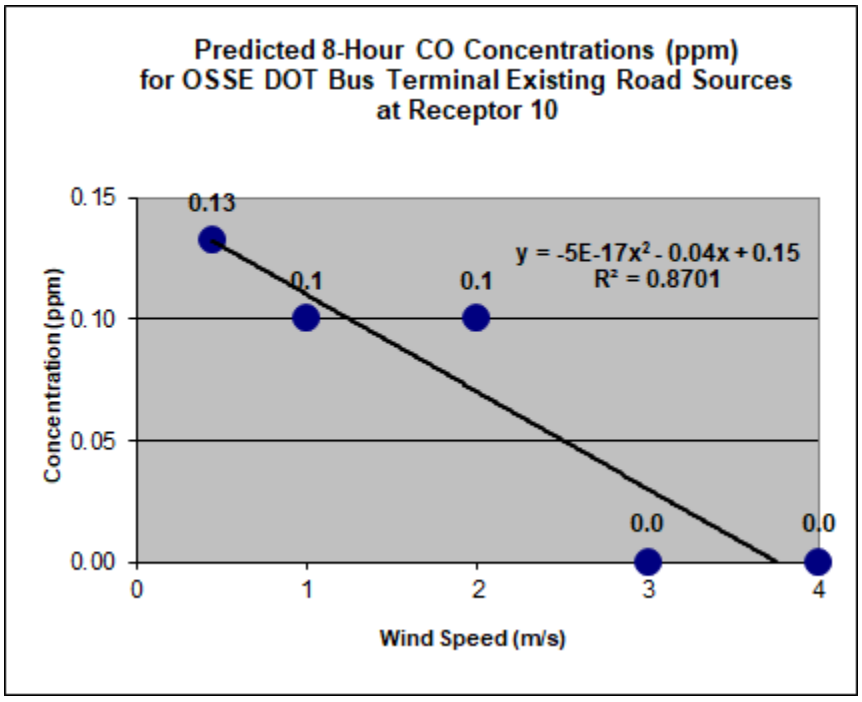
WIND ANGLE RANGE: 170.-230.

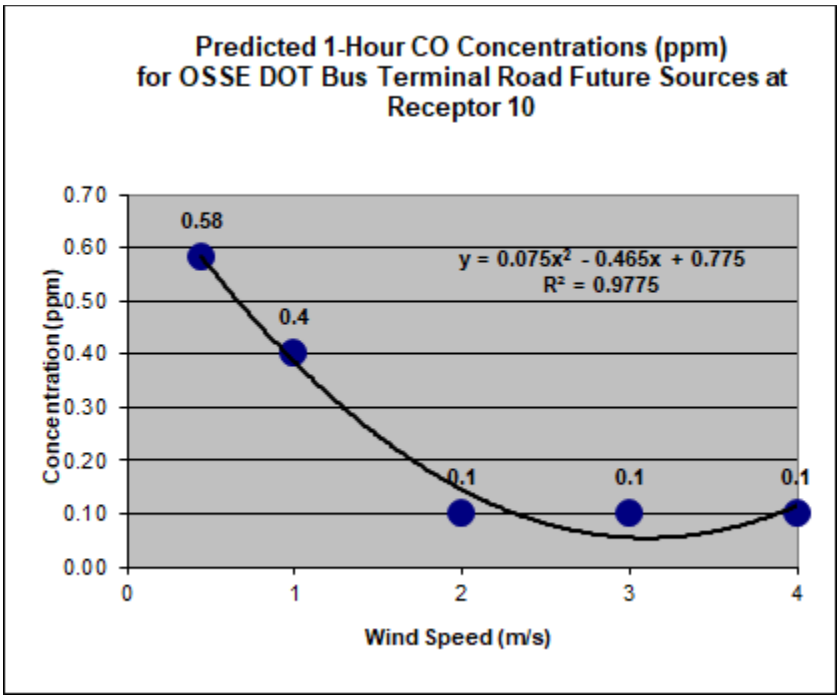
WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC41	REC42	REC43	REC44	REC45	REC46	REC47	REC48	REC49	REC50	REC51	REC52	REC53	REC54	REC55	REC56	REC57	REC58	REC59	REC60
170.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230.	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	* 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEGR.	* 170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

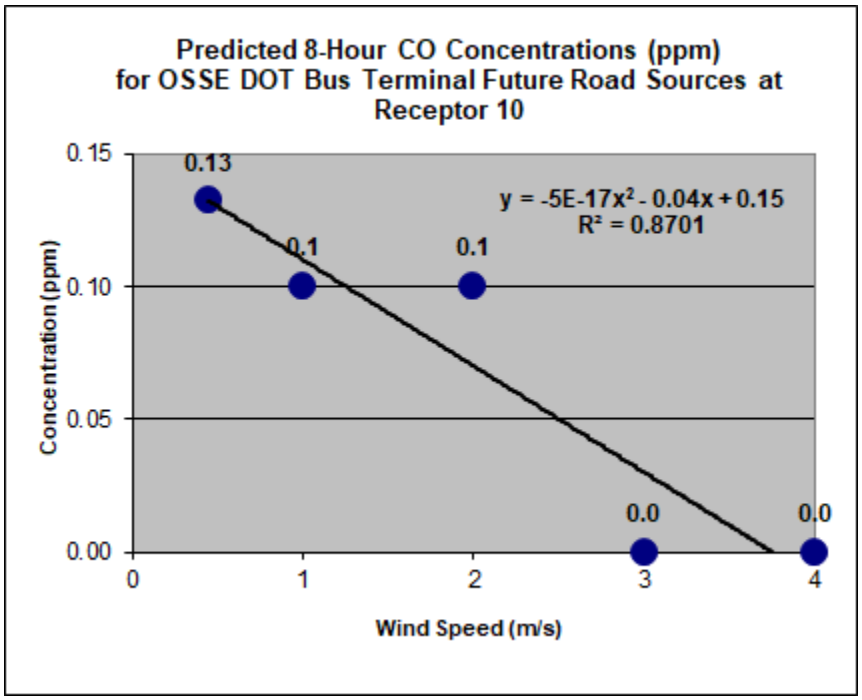
THE HIGHEST CONCENTRATION OF 0.00 PPM OCCURRED AT RECEPTOR REC10.

Appendix E. CO Concentration Best-Fit Curve Analyses


Predicted 1-Hour CO Concentrations (ppm)
for OSSE DOT Bus Terminal Existing Road Sources
at Receptor 10
Concentration (ppm)
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.71
0.5
0.2
0.1
0.1
y = 0.075x² - 0.505x + 0.925
R² = 0.998
0
1
2
3
4
Wind Speed (m/s)


Predicted 8-Hour CO Concentrations (ppm)
for OSSE DOT Bus Terminal Existing Road Sources
at Receptor 10
y = -5E-17x² - 0.04x + 0.15
R² = 0.8701
0.13
0.1
0.1
0.0
0.0
0.15
0.10
0.05
0.00
Concentration (ppm)
0
1
2
3
4
Wind Speed (m/s)


Predicted 1-Hour CO Concentrations (ppm)
for OSSE DOT Bus Terminal Road Future Sources at
Receptor 10
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Concentration (ppm)
0.58
0.4
0.1
0.1
0.1
y = 0.075x² - 0.465x + 0.775
R² = 0.9775
0
1
2
3
4
Wind Speed (m/s)


Predicted 8-Hour CO Concentrations (ppm)
for OSSE DOT Bus Terminal Future Road Sources at
Receptor 10
y = -5E-17x² - 0.04x + 0.15
R² = 0.8701
0.13
0.1
0.1
0.0
0.0
0.15
0.10
0.05
0.00
Concentration (ppm)
0
1
2
3
4
Wind Speed (m/s)

Appendix F. AERMOD Output File for Proposed Parking Lot

AERMOD.OUT

```
CO STARTING
   TITLEONE BUS_TERMINAL_2019
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   POLLUTID CO
   FLAGPOLE 1.80
   RUNORNOT RUN
   ERRORFIL BUS_TERMINAL.err
CO FINISHED

**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION BUSTERMNL    AREAPOLY   328275.000  4309666.000          0.0
** Source Parameters **
   SRCPARAM BUSTERMNL    1.6017E-06     1.600         6     1.490
   AREAVERT BUSTERMNL    328275.000 4309666.000 328323.000 4309538.000
   AREAVERT BUSTERMNL    328473.000 4309610.000 328456.000 4309698.000
   AREAVERT BUSTERMNL    328431.000 4309736.000 328355.000 4309666.000
   SRCGROUP ALL
SO FINISHED

**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
```

```
RE STARTING
   DISCCART    328249.00   4309682.00    0.00    0.00    1.80
   DISCCART    328268.00   4309682.00    0.00    0.00    1.80
   DISCCART    328264.00   4309694.00    0.00    0.00    1.80
   DISCCART    328304.00   4309682.00    0.00    0.00    1.80
   DISCCART    328286.00   4309682.00    0.00    0.00    1.80
   DISCCART    328280.00   4309695.00    0.00    0.00    1.80
   DISCCART    328432.00   4309736.00    0.00    0.00    1.80
   DISCCART    328420.00   4309750.00    0.00    0.00    1.80
   DISCCART    328424.00   4309773.00    0.00    0.00    1.80
   DISCCART    328443.00   4309752.00    0.00    0.00    1.80
   DISCCART    328409.00   4309740.00    0.00    0.00    1.80
   DISCCART    328411.00   4309758.00    0.00    0.00    1.80
   DISCCART    328416.00   4309781.00    0.00    0.00    1.80
   DISCCART    328424.00   4309786.00    0.00    0.00    1.80
   DISCCART    328443.00   4309766.00    0.00    0.00    1.80
   DISCCART    328451.00   4309741.00    0.00    0.00    1.80
   DISCCART    328421.00   4309727.00    0.00    0.00    1.80
   DISCCART    328439.00   4309725.00    0.00    0.00    1.80
   DISCCART    328323.00   4309682.00    0.00    0.00    1.80
   DISCCART    328377.00   4309712.00    0.00    0.00    1.80
   DISCCART    328470.00   4309713.00    0.00    0.00    1.80
   DISCCART    328351.00   4309689.00    0.00    0.00    1.80
   DISCCART    328267.00   4309918.00    0.00    0.00    1.80
   DISCCART    328274.00   4309918.00    0.00    0.00    1.80
   DISCCART    328246.00   4309938.00    0.00    0.00    1.80
   DISCCART    328275.00   4309935.00    0.00    0.00    1.80
   DISCCART    328294.00   4309916.00    0.00    0.00    1.80
   DISCCART    328293.00   4309937.00    0.00    0.00    1.80
   DISCCART    328317.00   4309915.00    0.00    0.00    1.80
   DISCCART    328294.00   4309901.00    0.00    0.00    1.80
   DISCCART    328294.00   4309892.00    0.00    0.00    1.80
   DISCCART    328313.00   4309875.00    0.00    0.00    1.80
   DISCCART    328316.00   4309901.00    0.00    0.00    1.80
   DISCCART    328286.00   4309667.00    0.00    0.00    1.80
   DISCCART    328304.00   4309667.00    0.00    0.00    1.80
   DISCCART    328324.00   4309667.00    0.00    0.00    1.80
   DISCCART    328353.00   4309667.00    0.00    0.00    1.80
   DISCCART    328378.00   4309689.00    0.00    0.00    1.80
```

```
   DISCCART    328403.00   4309712.00    0.00    0.00    1.80
   DISCCART    328331.00   4309857.00    0.00    0.00    1.80
   DISCCART    328360.00   4309830.00    0.00    0.00    1.80
   DISCCART    328390.00   4309803.00    0.00    0.00    1.80
   DISCCART    328456.00   4309699.00    0.00    0.00    1.80
   DISCCART    328463.00   4309664.00    0.00    0.00    1.80
   DISCCART    328470.00   4309627.00    0.00    0.00    1.80
   DISCCART    328491.00   4309629.00    0.00    0.00    1.80
   DISCCART    328483.00   4309666.00    0.00    0.00    1.80
   DISCCART    328475.00   4309699.00    0.00    0.00    1.80
   DISCCART    328359.00   4309802.00    0.00    0.00    1.80
   DISCCART    328316.00   4309842.00    0.00    0.00    1.80
   DISCCART    328275.00   4309882.00    0.00    0.00    1.80
   DISCCART    328233.00   4309921.00    0.00    0.00    1.80
   DISCCART    328444.00   4309804.00    0.00    0.00    1.80
   DISCCART    328446.00   4309852.00    0.00    0.00    1.80
   DISCCART    328424.00   4309812.00    0.00    0.00    1.80
   DISCCART    328425.00   4309852.00    0.00    0.00    1.80
   DISCCART    328351.00   4309915.00    0.00    0.00    1.80
   DISCCART    328351.00   4309900.00    0.00    0.00    1.80
   DISCCART    328404.00   4309915.00    0.00    0.00    1.80
   DISCCART    328209.00   4309973.00    0.00    0.00    1.80
RE FINISHED

**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KDCA-2013-2017.SFC
   PROFFILE KDCA-2013-2017.PFL
   SURFDATA 13743 2013 WASHINGTON_DC/NATIONAL_ARPT
   UAIRDATA 93734 2013 STERLING
   PROFBASE 20.0 METERS
ME FINISHED

**
```

```
************************************
** AERMOD Output Pathway
************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   PLOTFILE 1 ALL 1ST 1HR-PARKING-LOT.PLT 31
   PLOTFILE 8 ALL 1ST 8HR-PARKING-LOT.PLT 32
OU FINISHED

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

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

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

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

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

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

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

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: CO

**Model Calculates 2 Short Term Average(s) of: 1-HR   8-HR

**This Run Includes: 1 Source(s);   1 Source Group(s); and   60 Receptor(s)

               with: 0 POINT(s), including
                          0 POINTCAP(s) and   0 POINTHOR(s)

```
               and:      0 VOLUME source(s)
               and:      1 AREA type source(s)
               and:      0 LINE source(s)
               and:      0 OPENPIT source(s)
               and:      0 BUOYANT LINE source(s) with      0 line(s)

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

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

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

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    20.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                              ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   BUS_TERMINAL.err
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
BUSTERMNL	0	0.16017E-05	328275.0	4309666.0	0.0	1.60	6	1.49	NO	

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	BUSTERMNL ,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

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

(	328249.0,	4309682.0,	0.0,	0.0,	1.8);	(328268.0,	4309682.0,	0.0,	0.0,	1.8);
(	328264.0,	4309694.0,	0.0,	0.0,	1.8);	(328304.0,	4309682.0,	0.0,	0.0,	1.8);
(	328286.0,	4309682.0,	0.0,	0.0,	1.8);	(328280.0,	4309695.0,	0.0,	0.0,	1.8);
(	328432.0,	4309736.0,	0.0,	0.0,	1.8);	(328420.0,	4309750.0,	0.0,	0.0,	1.8);
(	328424.0,	4309773.0,	0.0,	0.0,	1.8);	(328443.0,	4309752.0,	0.0,	0.0,	1.8);
(	328409.0,	4309740.0,	0.0,	0.0,	1.8);	(328411.0,	4309758.0,	0.0,	0.0,	1.8);
(	328416.0,	4309781.0,	0.0,	0.0,	1.8);	(328424.0,	4309786.0,	0.0,	0.0,	1.8);
(	328443.0,	4309766.0,	0.0,	0.0,	1.8);	(328451.0,	4309741.0,	0.0,	0.0,	1.8);
(	328421.0,	4309727.0,	0.0,	0.0,	1.8);	(328439.0,	4309725.0,	0.0,	0.0,	1.8);
(	328323.0,	4309682.0,	0.0,	0.0,	1.8);	(328377.0,	4309712.0,	0.0,	0.0,	1.8);
(	328470.0,	4309713.0,	0.0,	0.0,	1.8);	(328351.0,	4309689.0,	0.0,	0.0,	1.8);
(	328267.0,	4309918.0,	0.0,	0.0,	1.8);	(328274.0,	4309918.0,	0.0,	0.0,	1.8);
(	328246.0,	4309938.0,	0.0,	0.0,	1.8);	(328275.0,	4309935.0,	0.0,	0.0,	1.8);
(	328294.0,	4309916.0,	0.0,	0.0,	1.8);	(328293.0,	4309937.0,	0.0,	0.0,	1.8);
(	328317.0,	4309915.0,	0.0,	0.0,	1.8);	(328294.0,	4309901.0,	0.0,	0.0,	1.8);
(	328294.0,	4309892.0,	0.0,	0.0,	1.8);	(328313.0,	4309875.0,	0.0,	0.0,	1.8);
(	328316.0,	4309901.0,	0.0,	0.0,	1.8);	(328286.0,	4309667.0,	0.0,	0.0,	1.8);
(	328304.0,	4309667.0,	0.0,	0.0,	1.8);	(328324.0,	4309667.0,	0.0,	0.0,	1.8);
(	328353.0,	4309667.0,	0.0,	0.0,	1.8);	(328378.0,	4309689.0,	0.0,	0.0,	1.8);
(	328403.0,	4309712.0,	0.0,	0.0,	1.8);	(328331.0,	4309857.0,	0.0,	0.0,	1.8);
(	328360.0,	4309830.0,	0.0,	0.0,	1.8);	(328390.0,	4309803.0,	0.0,	0.0,	1.8);
(	328456.0,	4309699.0,	0.0,	0.0,	1.8);	(328463.0,	4309664.0,	0.0,	0.0,	1.8);
(	328470.0,	4309627.0,	0.0,	0.0,	1.8);	(328491.0,	4309629.0,	0.0,	0.0,	1.8);
(	328483.0,	4309666.0,	0.0,	0.0,	1.8);	(328475.0,	4309699.0,	0.0,	0.0,	1.8);
(	328359.0,	4309802.0,	0.0,	0.0,	1.8);	(328316.0,	4309842.0,	0.0,	0.0,	1.8);
(	328275.0,	4309882.0,	0.0,	0.0,	1.8);	(328233.0,	4309921.0,	0.0,	0.0,	1.8);
(	328444.0,	4309804.0,	0.0,	0.0,	1.8);	(328446.0,	4309852.0,	0.0,	0.0,	1.8);
(	328424.0,	4309812.0,	0.0,	0.0,	1.8);	(328425.0,	4309852.0,	0.0,	0.0,	1.8);
(	328351.0,	4309915.0,	0.0,	0.0,	1.8);	(328351.0,	4309900.0,	0.0,	0.0,	1.8);
(	328404.0,	4309915.0,	0.0,	0.0,	1.8);	(328209.0,	4309973.0,	0.0,	0.0,	1.8);

```
*** AERMOD - VERSION  18081 ***   *** BUS_TERMINAL_2019                                                                ***        07/16/19
*** AERMET - VERSION  16216 ***   ***                                                                                  ***        02:01:49
                                                                                                                                  PAGE   5
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL

                                                     *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                        (1=YES; 0=NO)

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

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


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

                                                          1.54,   3.09,   5.14,   8.23,  10.80,
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

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

Surface file: KDCA-2013-2017.SFC Met Version: 16216
Profile file: KDCA-2013-2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 13743 Upper air station no.: 93734
Name: WASHINGTON_DC/NATIONAL_ARPT Name: STERLING
Year: 2013 Year: 2013

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
13	01	01	1	01	-4.8	0.083	-9.000	-9.000	-999.	58.	10.9	0.00	1.50	1.00	3.36	201.	10.0	277.0	2.0
13	01	01	1	02	-4.7	0.069	-9.000	-9.000	-999.	43.	6.2	0.00	1.50	1.00	3.36	208.	10.0	277.0	2.0
13	01	01	1	03	-3.1	0.050	-9.000	-9.000	-999.	27.	3.5	0.00	1.50	1.00	2.86	204.	10.0	277.5	2.0
13	01	01	1	04	-2.9	0.050	-9.000	-9.000	-999.	27.	3.8	0.00	1.50	1.00	2.86	193.	10.0	277.0	2.0
13	01	01	1	05	-0.1	0.011	-9.000	-9.000	-999.	4.	1.0	0.00	1.50	1.00	0.64	313.	10.0	277.0	2.0
13	01	01	1	06	-0.2	0.012	-9.000	-9.000	-999.	3.	1.0	0.00	1.50	1.00	0.72	82.	10.0	276.4	2.0
13	01	01	1	07	-1.9	0.039	-9.000	-9.000	-999.	19.	3.0	0.00	1.50	1.00	2.27	272.	10.0	277.5	2.0
13	01	01	1	08	-0.7	0.026	-9.000	-9.000	-999.	10.	2.1	0.00	1.50	1.00	1.48	209.	10.0	277.5	2.0
13	01	01	1	09	-0.3	0.019	-9.000	-9.000	-999.	6.	2.1	0.00	1.50	0.43	1.11	169.	10.0	277.0	2.0
13	01	01	1	10	5.8	0.057	0.139	0.008	17.	32.	-2.8	0.00	1.50	0.30	1.37	260.	10.0	277.5	2.0
13	01	01	1	11	16.2	0.073	0.257	0.005	38.	47.	-2.2	0.00	1.50	0.26	1.74	346.	10.0	277.5	2.0
13	01	01	1	12	22.0	0.108	0.379	0.005	89.	85.	-5.2	0.00	1.50	0.24	2.71	316.	10.0	277.0	2.0
13	01	01	1	13	23.0	0.140	0.444	0.005	137.	126.	-10.8	0.00	1.50	0.24	3.66	317.	10.0	277.0	2.0
13	01	01	1	14	19.2	0.120	0.537	0.005	292.	99.	-8.1	0.00	1.50	0.25	3.08	333.	10.0	278.1	2.0
13	01	01	1	15	10.8	0.139	0.472	0.005	353.	124.	-22.3	0.00	1.50	0.28	3.73	328.	10.0	279.9	2.0
13	01	01	1	16	-1.2	0.127	-9.000	-9.000	-999.	109.	160.0	0.00	1.50	0.37	3.76	334.	10.0	279.9	2.0
13	01	01	1	17	-3.2	0.060	-9.000	-9.000	-999.	36.	6.0	0.00	1.50	0.61	2.96	336.	10.0	279.9	2.0
13	01	01	1	18	-5.1	0.090	-9.000	-9.000	-999.	64.	12.7	0.00	1.50	1.00	3.46	330.	10.0	280.4	2.0
13	01	01	1	19	-7.9	0.139	-9.000	-9.000	-999.	125.	30.9	0.00	1.50	1.00	4.58	346.	10.0	280.4	2.0
13	01	01	1	20	-7.6	0.135	-9.000	-9.000	-999.	118.	28.7	0.00	1.50	1.00	4.46	349.	10.0	280.4	2.0
13	01	01	1	21	-9.4	0.165	-9.000	-9.000	-999.	160.	43.1	0.00	1.50	1.00	5.22	347.	10.0	280.4	2.0

```
13 01 01   1 22   -9.1  0.160 -9.000 -9.000 -999.  154.     40.6  0.00   1.50   1.00    5.10  343.   10.0  279.9    2.0
13 01 01   1 23   -8.1  0.143 -9.000 -9.000 -999.  129.     32.3  0.00   1.50   1.00    4.66  347.   10.0  280.4    2.0
13 01 01   1 24   -5.9  0.103 -9.000 -9.000 -999.   79.     16.7  0.00   1.50   1.00    3.73  348.   10.0  279.2    2.0


First hour of profile data
YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
13 01 01 01   10.0 1  201.    3.36   277.1   99.0  -99.00  -99.00

F indicates top of profile (=1) or below (=0)
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): BUSTERMNL ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
328249.00	4309682.00	239.58699	(15031906)	328268.00	4309682.00	225.40008	(15031906)
328264.00	4309694.00	199.84914	(15031906)	328304.00	4309682.00	192.82067	(15031906)
328286.00	4309682.00	209.50277	(15031906)	328280.00	4309695.00	184.18189	(15031906)
328432.00	4309736.00	303.20641	(14092803)	328420.00	4309750.00	243.35058	(14081006)
328424.00	4309773.00	227.63032	(14081006)	328443.00	4309752.00	293.21272	(14092803)
328409.00	4309740.00	230.43856	(14081006)	328411.00	4309758.00	217.22250	(13100402)
328416.00	4309781.00	206.74546	(13100402)	328424.00	4309786.00	217.17843	(13100402)
328443.00	4309766.00	275.28497	(14110522)	328451.00	4309741.00	303.79932	(14092320)
328421.00	4309727.00	283.93507	(14110522)	328439.00	4309725.00	309.03404	(14092320)
328323.00	4309682.00	177.97847	(15031906)	328377.00	4309712.00	184.33691	(13100402)
328470.00	4309713.00	259.96836	(14092320)	328351.00	4309689.00	168.00740	(14011304)
328267.00	4309918.00	131.35613	(14122808)	328274.00	4309918.00	130.86091	(14122808)
328246.00	4309938.00	129.82302	(14011303)	328275.00	4309935.00	124.89551	(14011303)
328294.00	4309916.00	125.99517	(14011303)	328293.00	4309937.00	126.05589	(14011303)
328317.00	4309915.00	132.73594	(14011303)	328294.00	4309901.00	129.45273	(14122808)
328294.00	4309892.00	132.67463	(14122808)	328313.00	4309875.00	130.50617	(14122808)
328316.00	4309901.00	131.65783	(14011303)	328286.00	4309667.00	259.83385	(13120417)
328304.00	4309667.00	240.46625	(13120417)	328324.00	4309667.00	216.39287	(13120417)
328353.00	4309667.00	184.40301	(15031906)	328378.00	4309689.00	216.70911	(13100402)
328403.00	4309712.00	253.43543	(14110522)	328331.00	4309857.00	145.11911	(14011304)
328360.00	4309830.00	156.03790	(14011304)	328390.00	4309803.00	175.11096	(14011304)
328456.00	4309699.00	274.19689	(14092320)	328463.00	4309664.00	265.95537	(14021818)
328470.00	4309627.00	256.67191	(13051005)	328491.00	4309629.00	252.96749	(13051005)
328483.00	4309666.00	260.46879	(14021818)	328475.00	4309699.00	259.47088	(14092802)
328359.00	4309802.00	157.80356	(14011304)	328316.00	4309842.00	139.31699	(14122808)

328275.00	4309882.00	132.59156	(14122808)	328233.00	4309921.00	125.15027	(14122808)
328444.00	4309804.00	236.80242	(14081006)	328446.00	4309852.00	204.10982	(13100402)
328424.00	4309812.00	195.74554	(13100402)	328425.00	4309852.00	186.02836	(14011304)
328351.00	4309915.00	147.56335	(14011304)	328351.00	4309900.00	148.72704	(14011304)
328404.00	4309915.00	172.76043	(14011304)	328209.00	4309973.00	123.53229	(14122808)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): BUSTERMNL ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
328249.00	4309682.00	66.43062	(13011108)	328268.00	4309682.00	67.60591	(13011108)
328264.00	4309694.00	58.72505	(15101024)	328304.00	4309682.00	66.19222	(13011108)
328286.00	4309682.00	66.74659	(13011108)	328280.00	4309695.00	55.46863	(15101024)
328432.00	4309736.00	119.00968	(13100408)	328420.00	4309750.00	93.46207	(13100408)
328424.00	4309773.00	79.56141	(13100408)	328443.00	4309752.00	98.84708	(13100408)
328409.00	4309740.00	89.11755	(13100408)	328411.00	4309758.00	80.75032	(13100408)
328416.00	4309781.00	72.73236	(13100408)	328424.00	4309786.00	71.38755	(13100408)
328443.00	4309766.00	91.05273	(13100408)	328451.00	4309741.00	103.18729	(13100408)
328421.00	4309727.00	114.87337	(13100408)	328439.00	4309725.00	119.69296	(13100408)
328323.00	4309682.00	66.38204	(13011108)	328377.00	4309712.00	74.71403	(13100408)
328470.00	4309713.00	77.51560	(13100408)	328351.00	4309689.00	65.84873	(13100408)
328267.00	4309918.00	39.31156	(14101308)	328274.00	4309918.00	38.20312	(14101308)
328246.00	4309938.00	39.47956	(14101308)	328275.00	4309935.00	35.87925	(15031024)
328294.00	4309916.00	37.52164	(15031024)	328293.00	4309937.00	36.12857	(15031024)
328317.00	4309915.00	39.47242	(14011308)	328294.00	4309901.00	38.06680	(15031024)
328294.00	4309892.00	38.53006	(14101308)	328313.00	4309875.00	39.99580	(15031024)
328316.00	4309901.00	39.36073	(14011308)	328286.00	4309667.00	85.06736	(13011108)
328304.00	4309667.00	84.91611	(13011108)	328324.00	4309667.00	84.71035	(13011108)
328353.00	4309667.00	84.26797	(13011108)	328378.00	4309689.00	91.38904	(13100408)
328403.00	4309712.00	104.32984	(13100408)	328331.00	4309857.00	42.92077	(14011308)
328360.00	4309830.00	46.31382	(14011308)	328390.00	4309803.00	52.83837	(13100408)
328456.00	4309699.00	95.92601	(14111008)	328463.00	4309664.00	83.60331	(14092808)
328470.00	4309627.00	69.04975	(14092808)	328491.00	4309629.00	53.38994	(14092808)
328483.00	4309666.00	72.94028	(14092808)	328475.00	4309699.00	75.27120	(14092808)
328359.00	4309802.00	48.92289c	(15120524)	328316.00	4309842.00	42.27134	(14101308)

328275.00	4309882.00	41.17218	(14101308)	328233.00	4309921.00	39.70122	(14101308)
328444.00	4309804.00	71.67370	(13100408)	328446.00	4309852.00	58.21706	(13100408)
328424.00	4309812.00	60.10772	(13100408)	328425.00	4309852.00	49.76745	(14111008)
328351.00	4309915.00	44.84241	(14011308)	328351.00	4309900.00	45.06371	(14011308)
328404.00	4309915.00	36.51964	(15011208)	328209.00	4309973.00	38.58513	(14101308)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

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

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	309.03404	ON 14092320: AT (328439.00, 4309725.00, 0.00, 0.00, 1.80)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

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

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	119.69296	ON 13100408: AT (328439.00, 4309725.00, 0.00, 0.00, 1.80)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL

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

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

A Total of   0 Fatal Error Message(s)
A Total of   0 Warning Message(s)
A Total of   1242 Informational Message(s)

A Total of   43824 Hours Were Processed

A Total of   1004 Calm Hours Identified

A Total of   238 Missing Hours Identified (0.54 Percent)

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

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

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