

TITLE: Gateway Plaza Operation

***** AREA PARAMETERS *****

SOURCE EMISSION RATE:	0.288E-03 g/s	0.228E-02 lb/hr
AREA EMISSION RATE:	0.220E-07 g/(s-m2)	0.175E-06 lb/(hr-m2)
AREA HEIGHT:	3.00 meters	9.84 feet
AREA SOURCE LONG SIDE:	161.69 meters	530.48 feet
AREA SOURCE SHORT SIDE:	80.80 meters	265.09 feet
INITIAL VERTICAL DIMENSION:	1.50 meters	4.92 feet
RURAL OR URBAN:	URBAN	
POPULATION:	227514	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

***** BUILDING DOWNWASH PARAMETERS *****

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

***** FLOW SECTOR ANALYSIS *****

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

MAXIMUM IMPACT RECEPTOR

Zo	SURFACE	1-HR CONC	RADIAL	DIST	TEMPORAL
SECTOR	ROUGHNESS	(ug/m3)	(deg)	(m)	PERIOD
1*	1.000	0.6413	0	75.0	WIN

* = worst case diagonal

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

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
 DOMINANT CLIMATE TYPE: Average Moisture
 DOMINANT SEASON: Winter

ALBEDO: 0.35
 BOWEN RATIO: 1.50
 ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

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H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	

HT	REF TA	HT
10.0	310.0	2.0

***** AERSCREEN AUTOMATED DISTANCES *****
 OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.4939	2525.00	0.5636E-02

25.00	0.5514	2550.00	0.5560E-02
50.00	0.5969	2575.00	0.5487E-02
75.00	0.6413	2600.00	0.5415E-02
100.00	0.5034	2625.00	0.5344E-02
125.00	0.3391	2650.00	0.5275E-02
150.00	0.2641	2675.00	0.5208E-02
175.00	0.2138	2700.00	0.5142E-02
200.00	0.1781	2725.00	0.5077E-02
225.00	0.1516	2750.00	0.5014E-02
250.00	0.1312	2775.00	0.4953E-02
275.00	0.1153	2800.00	0.4892E-02
300.00	0.1024	2825.00	0.4833E-02
325.00	0.9178E-01	2850.00	0.4775E-02
350.00	0.8298E-01	2875.00	0.4718E-02
375.00	0.7561E-01	2900.00	0.4663E-02
400.00	0.6920E-01	2925.00	0.4608E-02
425.00	0.6370E-01	2950.00	0.4555E-02
450.00	0.5895E-01	2975.00	0.4503E-02
475.00	0.5479E-01	3000.00	0.4451E-02
500.00	0.5108E-01	3025.00	0.4401E-02
525.00	0.4781E-01	3050.00	0.4352E-02
550.00	0.4487E-01	3074.99	0.4303E-02
575.00	0.4224E-01	3100.00	0.4256E-02
600.00	0.3986E-01	3125.00	0.4209E-02
625.00	0.3771E-01	3150.00	0.4164E-02
650.00	0.3575E-01	3174.99	0.4119E-02
675.00	0.3395E-01	3199.99	0.4075E-02
700.00	0.3230E-01	3225.00	0.4032E-02
725.00	0.3079E-01	3250.00	0.3989E-02
750.00	0.2940E-01	3275.00	0.3948E-02
775.00	0.2812E-01	3300.00	0.3907E-02
800.00	0.2693E-01	3325.00	0.3867E-02
825.00	0.2583E-01	3350.00	0.3827E-02
850.00	0.2480E-01	3375.00	0.3789E-02
875.00	0.2384E-01	3400.00	0.3750E-02
900.00	0.2295E-01	3425.00	0.3713E-02
925.00	0.2211E-01	3450.00	0.3676E-02
950.00	0.2132E-01	3475.00	0.3640E-02
975.00	0.2057E-01	3500.00	0.3605E-02
1000.00	0.1987E-01	3525.00	0.3570E-02
1025.00	0.1921E-01	3550.00	0.3535E-02
1050.00	0.1859E-01	3575.00	0.3502E-02
1075.00	0.1800E-01	3600.00	0.3468E-02
1100.00	0.1745E-01	3625.00	0.3436E-02
1125.00	0.1692E-01	3650.00	0.3403E-02
1150.00	0.1642E-01	3675.00	0.3372E-02
1175.00	0.1595E-01	3700.00	0.3341E-02
1200.00	0.1550E-01	3725.00	0.3310E-02
1225.00	0.1507E-01	3750.00	0.3280E-02
1250.00	0.1466E-01	3775.00	0.3250E-02

1275.00	0.1427E-01	3800.00	0.3221E-02
1300.00	0.1390E-01	3825.00	0.3192E-02
1325.00	0.1354E-01	3850.00	0.3164E-02
1350.00	0.1320E-01	3875.00	0.3136E-02
1375.00	0.1288E-01	3900.00	0.3108E-02
1400.00	0.1256E-01	3925.00	0.3081E-02
1425.00	0.1227E-01	3950.00	0.3055E-02
1450.00	0.1198E-01	3975.00	0.3029E-02
1475.00	0.1171E-01	4000.00	0.3003E-02
1500.00	0.1150E-01	4025.00	0.2977E-02
1525.00	0.1125E-01	4050.00	0.2952E-02
1550.00	0.1100E-01	4075.00	0.2927E-02
1575.00	0.1076E-01	4100.00	0.2903E-02
1600.00	0.1053E-01	4125.00	0.2879E-02
1625.00	0.1031E-01	4150.00	0.2855E-02
1650.00	0.1010E-01	4175.00	0.2832E-02
1675.00	0.9889E-02	4200.00	0.2809E-02
1700.00	0.9691E-02	4225.00	0.2786E-02
1725.00	0.9499E-02	4250.00	0.2764E-02
1750.00	0.9313E-02	4275.00	0.2742E-02
1775.00	0.9134E-02	4300.00	0.2720E-02
1800.00	0.8960E-02	4325.00	0.2698E-02
1825.00	0.8793E-02	4350.00	0.2677E-02
1850.00	0.8630E-02	4375.00	0.2656E-02
1875.00	0.8473E-02	4400.00	0.2636E-02
1900.00	0.8320E-02	4425.00	0.2615E-02
1924.99	0.8173E-02	4450.00	0.2595E-02
1950.00	0.8030E-02	4475.00	0.2575E-02
1975.00	0.7891E-02	4500.00	0.2556E-02
2000.00	0.7756E-02	4525.00	0.2536E-02
2025.00	0.7625E-02	4550.00	0.2517E-02
2050.00	0.7498E-02	4575.00	0.2499E-02
2075.00	0.7374E-02	4600.00	0.2480E-02
2100.00	0.7254E-02	4625.00	0.2462E-02
2125.00	0.7138E-02	4650.00	0.2444E-02
2150.00	0.7024E-02	4675.00	0.2426E-02
2175.00	0.6914E-02	4700.00	0.2408E-02
2200.00	0.6806E-02	4725.00	0.2391E-02
2224.99	0.6702E-02	4750.00	0.2374E-02
2250.00	0.6600E-02	4775.00	0.2357E-02
2275.00	0.6501E-02	4800.00	0.2340E-02
2300.00	0.6404E-02	4825.00	0.2323E-02
2325.00	0.6310E-02	4850.00	0.2307E-02
2350.00	0.6219E-02	4875.00	0.2291E-02
2375.00	0.6129E-02	4900.00	0.2275E-02
2400.00	0.6042E-02	4924.99	0.2259E-02
2425.00	0.5957E-02	4950.00	0.2243E-02
2450.00	0.5874E-02	4975.00	0.2228E-02
2475.00	0.5792E-02	5000.00	0.2213E-02
2500.00	0.5713E-02		

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

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

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.6499	0.6499	0.6499	0.6499	N/A
DISTANCE FROM SOURCE	82.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	0.4939	0.4939	0.4939	0.4939	N/A
DISTANCE FROM SOURCE	1.00 meters				