

HAMS-GPS : EIA Module

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Date : Sunday, August 21, 2016

Data Entered for Stack - Plume

Reference No. : Stack A	Sulpher dioxide (SOXs as SO2) : : 100000 micro gm/m3
Name of Pollutant : Stack gas	Carbon dioxide (CO2) : : 10000 micro gm/m3
Scenario : Stack at PI 1a	Nitrogen dioxide (NOXs as NO2) : : 1000 micro gm/m3
Height of release (m) : 105.69	Carbon monoxide (CO) : : 1000 micro gm/m3
Height of simulation (m) : 1.50	Hydrocarbons as (CH4) : : 1000 micro gm/m3
Atmospheric stability class : A	SPM : : 1000 micro gm/m3
Wind velocity : 3.90 m/s	
Terrain : Semi-Urban	
Rate of Released (micro gm/Sec) : 475182.29	
Stack Tip Diameter (m):1.50	
Stack exit Velocity. (m/s) :2.50	
Ambient Temp at stack height (deg.C) :80.00	
Stack exit temp (deg.C):100.00	
Mixing Height (m) : 20.00	
Percent Humidity (%) : 52.37	

Results

Max Isop conc (micro gm/m3) : 3.28 Max. Isop Conc. Distance (m) : 422.50
MGC (micro gm/m3) : 3.30 MGC Distance (m) : 385.00
Time for stabilization concentration zones of dispersion (Mins) 8.38

Concentration for Isopleth	Concentration (micro gm/m3)	-----Isopleth (X- Axis)		Isopleth length (Y- Axis) [m]	Distance of Max. ISOP from source [m]	Isopleth angle (deg.)	Isopleth Area (Ha)		
		Begin point	End point						
Concentration for Isopleth 1:	2	319.00	639.08	163.93	320.08	135.04	466.50	8.23	3.395
Concentration for Isopleth 2:	1	282.50	854.03	219.06	571.53	215.41	541.50	11.25	9.669
Concentration for Isopleth 3:	0.5	250.00	1107.93	284.19	857.93	288.30	648.50	12.53	19.426
Concentration for Isopleth 4:	0.25	228.00	1421.73	364.68	1193.73	365.06	797.50	12.89	34.226
Concentration for Isopleth 5:	0.15	216.00	1701.99	436.57	1485.99	427.76	938.50	12.84	49.924
Concentration for Isopleth 6:	0.1	208.00	1959.95	502.74	1751.95	482.71	1072.50	12.68	66.420

NOTE:Please check for latest emission standards of concentration of each gas.

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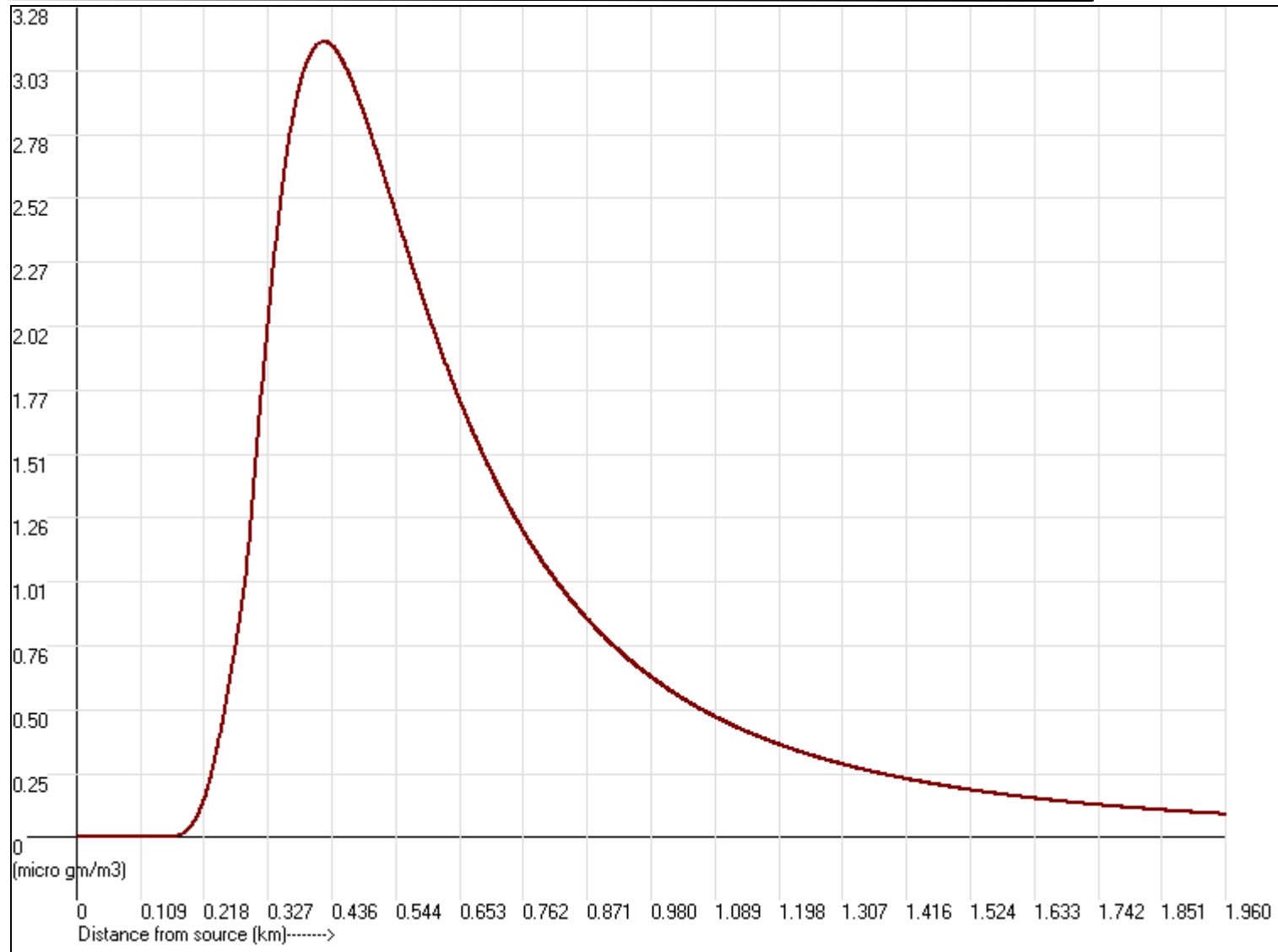
Results

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MGC (micro gm/m3) : 3.30 MGC Distance (m) : 385.00
Time for stabilization concentration zones of dispersion (Mins) 8.38

Concentration for Isopleth:	Sulphur dioxide (SOXs as SO2):	Carbon dioxide (CO2):	Nitrogen dioxide (NOXs as NO2):	Carbon monoxide (CO):	Hydrocarbons as (CH4):	SPM:
2	1.754	0.175	0.018	0.018	0.018	0.018
1	0.877	0.088	0.009	0.009	0.009	0.009
0.5	0.439	0.044	0.004	0.004	0.004	0.004
0.25	0.219	0.022	0.002	0.002	0.002	0.002
0.15	0.132	0.013	0.001	0.001	0.001	0.001
0.1	0.088	0.009	0.001	0.001	0.001	0.001

NOTE:Please check for latest emission standards of concentration of each gas.

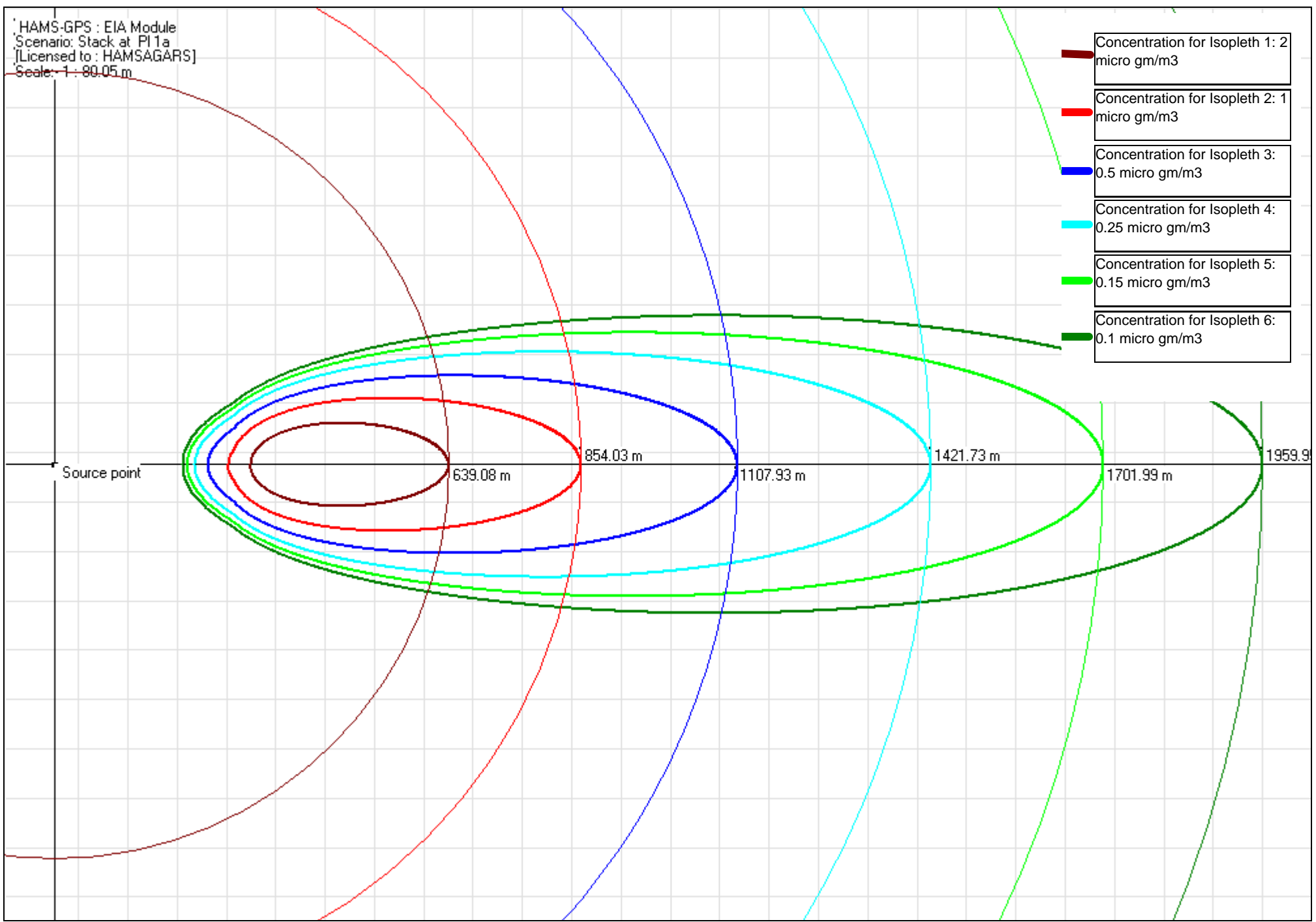
Concentration profile (ISOELEVET)









Concentration 0.04 micro gm/m3 At Distance 0.190 Km
Concentration 3.15 micro gm/m3 At Distance 0.418 Km
Concentration 1.74 micro gm/m3 At Distance 0.645 Km
Concentration 0.49 micro gm/m3 At Distance 1.078 Km

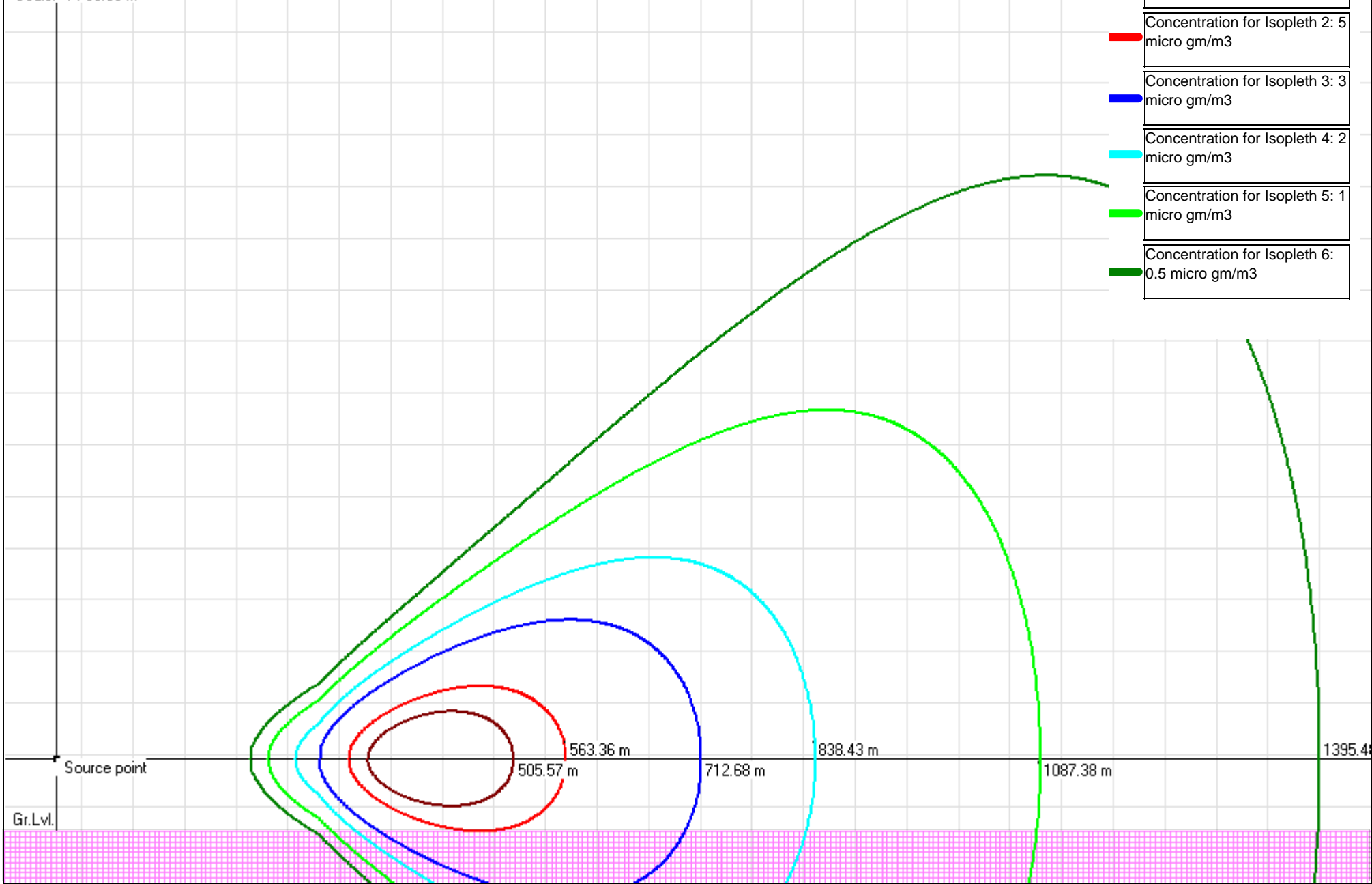
HAMS-GPS : EIA Module
Scenario: Stack at PI1a
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Scale: 1 : 80.05 m

- Concentration for Isoleth 1: 2 micro gm/m³
- Concentration for Isoleth 2: 1 micro gm/m³
- Concentration for Isoleth 3: 0.5 micro gm/m³
- Concentration for Isoleth 4: 0.25 micro gm/m³
- Concentration for Isoleth 5: 0.15 micro gm/m³
- Concentration for Isoleth 6: 0.1 micro gm/m³

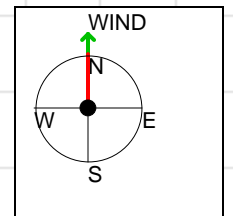
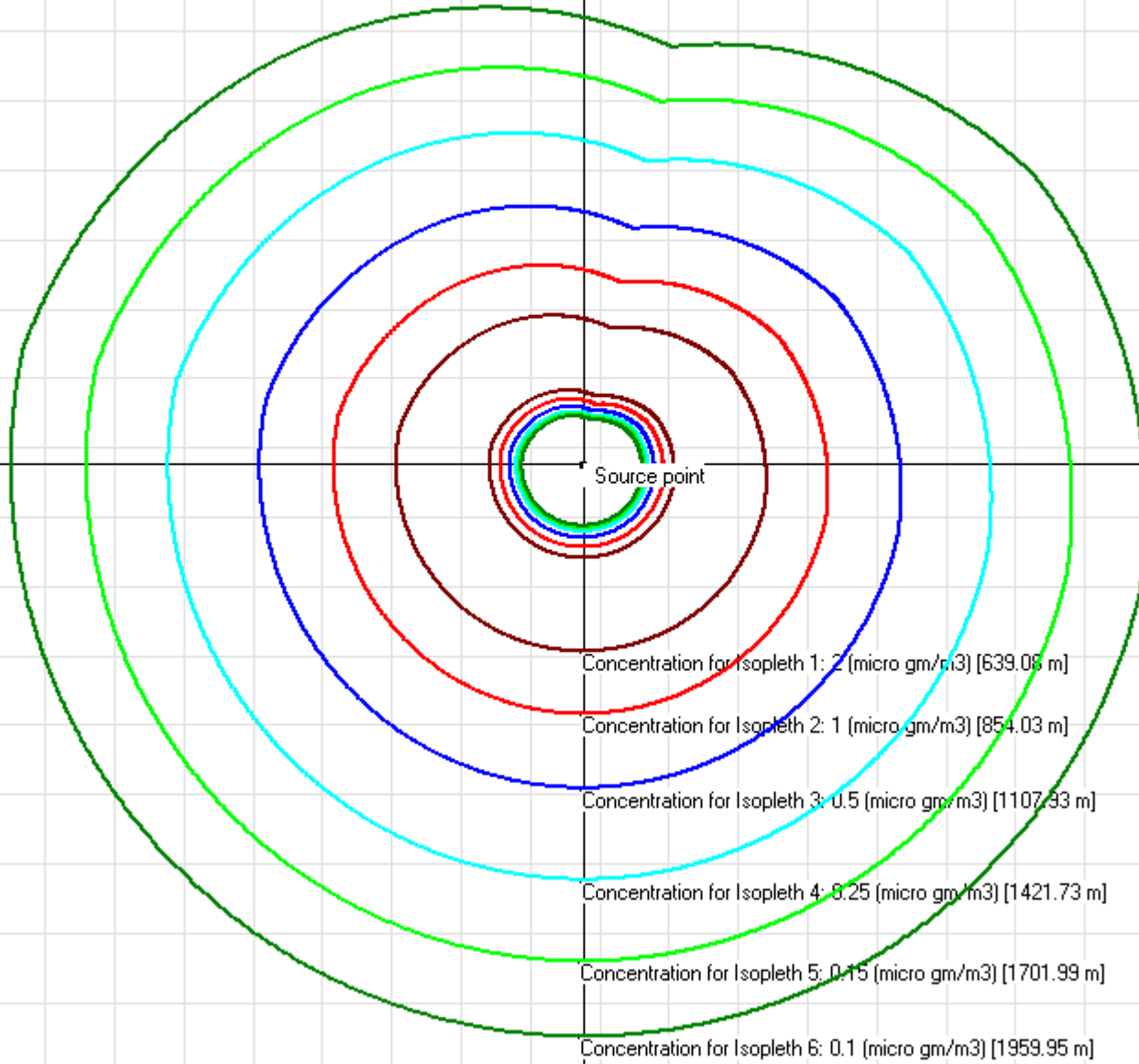
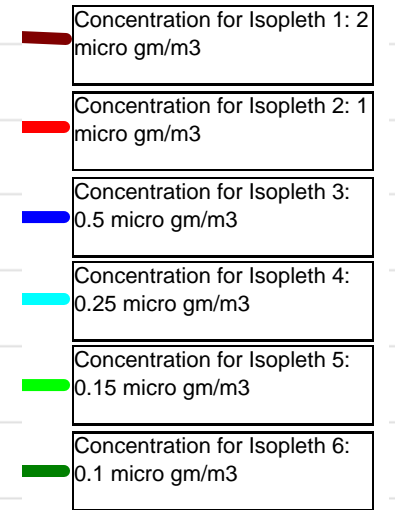


HAMS-GPS : Stack Dispersion Module(Isoelevate)
Scenario: At 1a
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Scale: 1 : 56.99 m

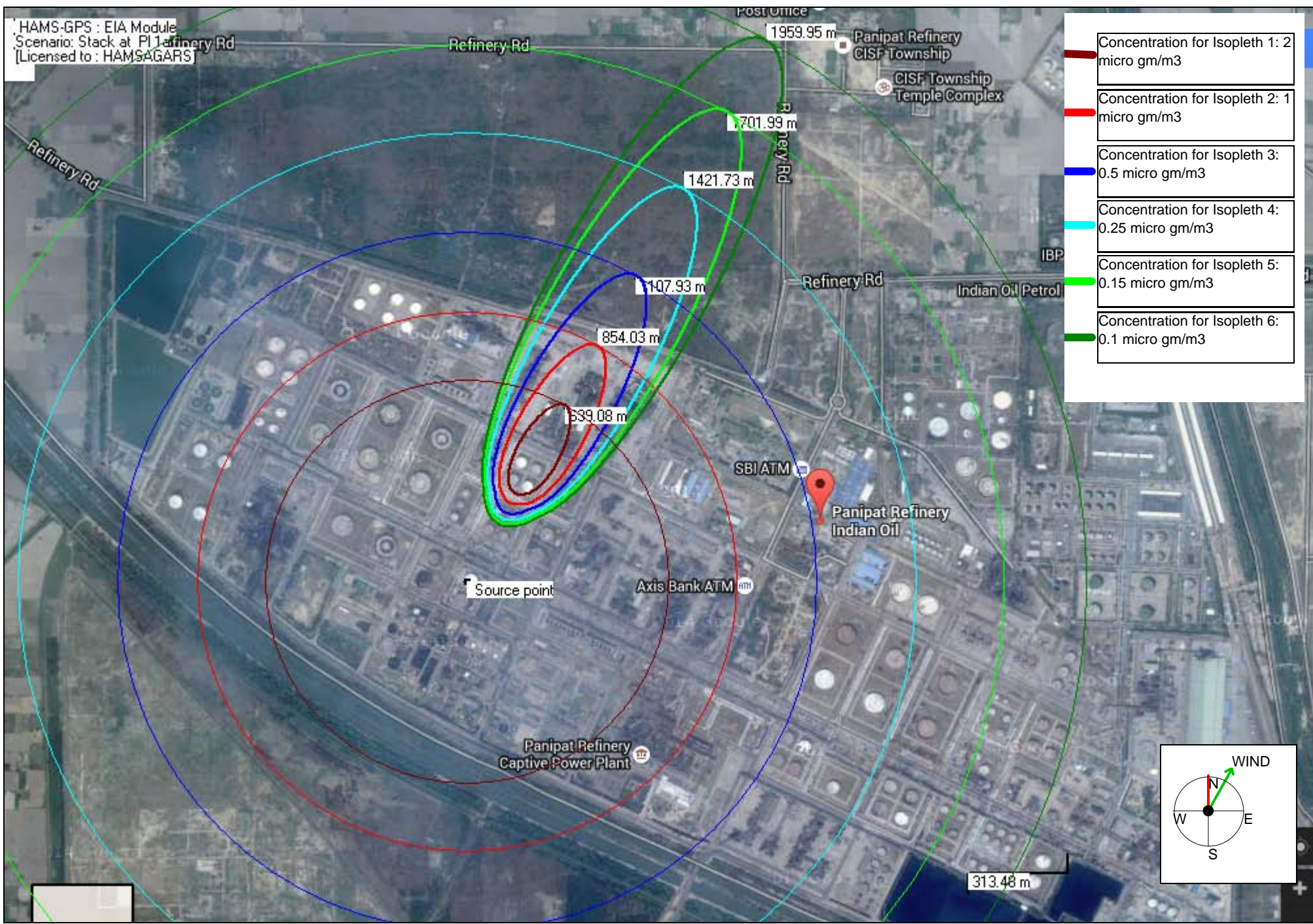
	Concentration for Isopleth 1: 6 micro gm/m3
	Concentration for Isopleth 2: 5 micro gm/m3
	Concentration for Isopleth 3: 3 micro gm/m3
	Concentration for Isopleth 4: 2 micro gm/m3
	Concentration for Isopleth 5: 1 micro gm/m3
	Concentration for Isopleth 6: 0.5 micro gm/m3



HAMS-GPS : EIA Module
Scenario: Stack at PI1a
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Scale: 1 : 237.65 m



HAMS-GPS : EIA Module
Scenario: Stack at PI1 Refinery Rd
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HAMS-GPS : EIA Module
Scenario: Stack at PI1 Refinery Rd
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