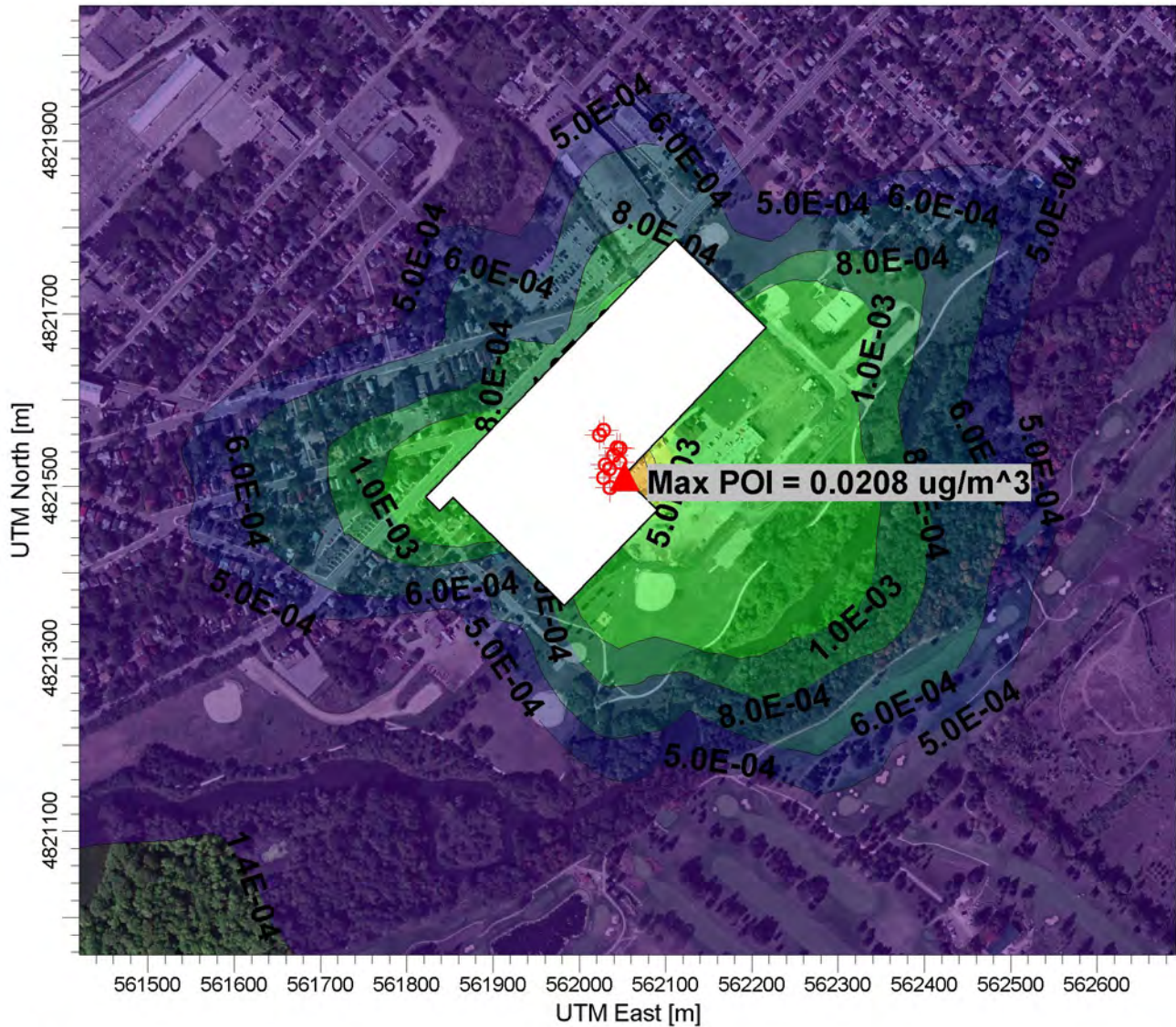


Appendix K Current Annual Modeling (hexavalent chromium)

PROJECT TITLE:

**Annual Average Hexavalent Chromium Concentration
Current Operations**



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

MICROGRAMS/M3

Max: 2.1E-02 [MICROGRAMS/M3] at (562050.10, 4821511.55)



COMMENTS: Reg. 419 Grid Met Year 4	SOURCES: 10	COMPANY NAME: Owens Corning Guelph Glass Plant		
	RECEPTORS: 2062	MODELER: C. MacKay, LEHDER		
	OUTPUT TYPE: Concentration	SCALE: 1:8,000 0 0.3 km		
	MAX: 2.1E-02 MICROGRAMS/M3	DATE: 3/23/2015			PROJECT NO.: 144539

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	B01	562035.79	4821498.75	312.00	32.03	0.00004	597.00	19.85	0.58
		107 Furnace Stack (West)							
POINT	B11	562034.66	4821520.18	312.00	15.09	0.00015	401.00	6.31	0.68
		107B Forehearth Stack							
POINT	B38	562043.48	4821544.79	312.00	16.46	0.00003	379.00	5.43	0.75
		105 Forehearth Stack							
POINT	B08	562028.15	4821510.37	312.00	14.45	2.05E-6	321.90	12.59	1.22
		General Exhaust Above Furnace							
POINT	B10	562030.25	4821525.28	312.00	14.45	2.39E-6	321.90	12.10	1.24
		General Exhaust Above T107B F/H							
POINT	B32	562047.16	4821528.02	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above T106							
POINT	B34	562039.70	4821535.65	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above T107A F/H							
POINT	B35	562047.03	4821543.82	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above CFM Main Channel							
POINT	C79	562023.15	4821559.58	312.00	11.64	2.04E-6	310.80	9.59	1.41
		General Exhaust West CFM F/H							
POINT	C80	562028.25	4821564.97	312.00	11.64	2.04E-6	310.80	9.59	1.41
		General Exhaust East CFM F/H							

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** 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 Allows User-Specified Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. BETA Option for Capped & Horiz Stacks Selected With:

5 Capped Stack(s); and 0 Horiz Stack(s)

**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: HCR

**Model Calculates ANNUAL Averages Only

**This Run Includes: 10 Source(s); 15 Source Group(s); and 2062 Receptor(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 325.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/S ; Emission Rate Unit Factor = 0.10000E+10
Output Units = NANOGRAMS/M3

**Approximate Storage Requirements of Model = 4.6 MB of RAM.

**File for Saving Result Arrays: Ann_Current_R1_Metyr4.sv1

**File for Summary of Results: Ann_Current_R1_Metyr4.sum

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

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

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
B01	1ST HIGHEST VALUE IS 0.28970 AT (562063.51, 4821498.60, 310.62, 310.62, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.28957 AT (562063.51, 4821498.61, 310.62, 310.62, 0.00)	DC		
	3RD HIGHEST VALUE IS 0.28251 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	4TH HIGHEST VALUE IS 0.28251 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	5TH HIGHEST VALUE IS 0.26671 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.26671 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.23766 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	8TH HIGHEST VALUE IS 0.23766 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.23461 AT (562076.93, 4821485.66, 310.19, 310.19, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.23461 AT (562076.93, 4821485.66, 310.19, 310.19, 0.00)	DC		
B08	1ST HIGHEST VALUE IS 0.23974 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.23974 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	3RD HIGHEST VALUE IS 0.19347 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	4TH HIGHEST VALUE IS 0.19347 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	5TH HIGHEST VALUE IS 0.16882 AT (562063.51, 4821498.60, 310.62, 310.62, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.16880 AT (562063.51, 4821498.61, 310.62, 310.62, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.14504 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		
	8TH HIGHEST VALUE IS 0.14504 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.14236 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.14236 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
B10	1ST HIGHEST VALUE IS 0.14165 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.14165 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	3RD HIGHEST VALUE IS 0.09906 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC		
	4TH HIGHEST VALUE IS 0.09906 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC		
	5TH HIGHEST VALUE IS 0.09774 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.09774 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.09682 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC		
	8TH HIGHEST VALUE IS 0.09682 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.08777 AT (562077.84, 4821540.29, 311.01, 311.01, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.08777 AT (562077.84, 4821540.29, 311.01, 311.01, 0.00)	DC		
B11	1ST HIGHEST VALUE IS 18.24625 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 18.24625 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC		
	3RD HIGHEST VALUE IS 16.56909 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	4TH HIGHEST VALUE IS 16.56909 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC		
	5TH HIGHEST VALUE IS 14.35418 AT (562063.51, 4821498.60, 310.62, 310.62, 0.00)	DC		
	6TH HIGHEST VALUE IS 14.33612 AT (562063.51, 4821498.61, 310.62, 310.62, 0.00)	DC		
	7TH HIGHEST VALUE IS 11.68386 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
	8TH HIGHEST VALUE IS 11.68386 AT (562070.22, 4821492.13, 310.40, 310.40, 0.00)	DC		
	9TH HIGHEST VALUE IS 11.34534 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		
	10TH HIGHEST VALUE IS 11.34534 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC		

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
----------	--------------	--	---------	-----------------

Ann_Current_R1_Metyr4

B32	1ST	HI	GHEST	VALUE	IS	0.28184	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.28184	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.26607	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.26607	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.24366	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.24366	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.23192	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.23192	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.14619	AT	(	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.14619	AT	(	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC
B34	1ST	HI	GHEST	VALUE	IS	0.21215	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.21215	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.18896	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.18896	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.18148	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.18148	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.17542	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.17542	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.13892	AT	(	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.12505	AT	(	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
B35	1ST	HI	GHEST	VALUE	IS	0.21498	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.21498	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.18532	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.18532	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.17196	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.17196	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.13981	AT	(	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.13747	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.13269	AT	(	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.10966	AT	(	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC
B38	1ST	HI	GHEST	VALUE	IS	3.64655	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	3.64655	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	3.27645	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	3.27645	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	2.71208	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	2.71208	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	2.42202	AT	(	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	2.36533	AT	(	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	2.32195	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	2.07411	AT	(	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC

♀ *** AERMOD - VERSION 14134 ***
 *** AERMET - VERSION 14134 ***

*** OC Guelph Project 144539 - Site Specific Standard
 *** Ann_Current_R1_Metyr4 (using MSP_Stage2_144539_24hr_Ann_Current_R1)

02/04/15
 11:34:03
 PAGE 6

**MODELOPTS: NonDEFAULT CONC

ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID						AVERAGE CONC						RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
C79	1ST	HI	GHEST	VALUE	IS	0.07637	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.07637	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.06762	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.06762	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.06509	AT	(	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.05914	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.05582	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.05582	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.05192	AT	(	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.04549	AT	(	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC

Ann_Current_R1_Metry4

C80	1ST	HI	GHEST	VALUE	IS	0.07384	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.07384	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.07289	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.06843	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.06843	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.05826	AT	(	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.05137	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.05137	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.04549	AT	(	562085.76,	4821492.01,	310.52,	310.52,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.04427	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC

GENEXHTS	1ST	HI	GHEST	VALUE	IS	1.05100	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	1.05100	AT	(	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.99402	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.99402	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.97581	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.97581	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.88724	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.88724	AT	(	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.68644	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.63200	AT	(	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC

HOTSRCS	1ST	HI	GHEST	VALUE	IS	19.81591	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	19.81591	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	17.76578	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	17.76578	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	15.36261	AT	(	562063.51,	4821498.60,	310.62,	310.62,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	15.34489	AT	(	562063.51,	4821498.61,	310.62,	310.62,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	14.18248	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	14.18248	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	13.14045	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	12.58479	AT	(	562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC

♀ *** AERMOD - VERSION 14134 ***
 *** AERMET - VERSION 14134 ***

*** OC Guelph Project 144539 - Site Specific Standard
 *** Ann_Current_R1_Metry4 (using MSP_Stage2_144539_24hr_Ann_Current_R1)

02/04/15
 11:34:03
 PAGE 7

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR I N NANOGRAMS/M3 **

GROUP ID						AVERAGE CONC						RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
FURNACE	1ST	HI	GHEST	VALUE	IS	0.28970	AT	(	562063.51,	4821498.60,	310.62,	310.62,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.28957	AT	(	562063.51,	4821498.61,	310.62,	310.62,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.28251	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.28251	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.26671	AT	(	562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.26671	AT	(	562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.23766	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.23766	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.23461	AT	(	562076.93,	4821485.66,	310.19,	310.19,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.23461	AT	(	562076.93,	4821485.66,	310.19,	310.19,	0.00)	DC
FOREHEAR	1ST	HI	GHEST	VALUE	IS	19.57825	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	19.57825	AT	(	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	17.48327	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	17.48327	AT	(	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	15.07291	AT	(	562063.51,	4821498.60,	310.62,	310.62,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	15.05532	AT	(	562063.51,	4821498.61,	310.62,	310.62,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	14.05742	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	14.05742	AT	(	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	12.98153	AT	(	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	12.31808	AT	(	562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC

Ann_Current_R1_Metyr4

ALL	1ST HIGHEST VALUE IS	20.79172	AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	2ND HIGHEST VALUE IS	20.79172	AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	3RD HIGHEST VALUE IS	18.29420	AT (	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	4TH HIGHEST VALUE IS	18.29420	AT (	562056.81,	4821505.08,	310.84,	310.84,	0.00)	DC
	5TH HIGHEST VALUE IS	15.76776	AT (	562063.51,	4821498.60,	310.62,	310.62,	0.00)	DC
	6TH HIGHEST VALUE IS	15.74987	AT (	562063.51,	4821498.61,	310.62,	310.62,	0.00)	DC
	7TH HIGHEST VALUE IS	15.17650	AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	15.17650	AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	13.82689	AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	12.94562	AT (	562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC

20.79 na/m3 = 0.02079 ua/m3

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

*** AERMOD - VERSION 14134 *** ** OC Guelph Project 144539 - Site Specific Standard ***
 *** AERMET - VERSION 14134 *** ** Ann_Current_R1_Metyr4 (using MSP_Stage2_144539_24hr_Ann_Current_R1) ***

02/04/15
 11:34:03
 PAGE 8

**MODELOPTS: NonDEFAULT CONC ELEV FLGPOL BETA

*** 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 23 Informational Message(s)

 A Total of 8784 Hours Were Processed
 A Total of 8 Calm Hours Identified
 A Total of 9 Missing Hours Identified (0.10 Percent)

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

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

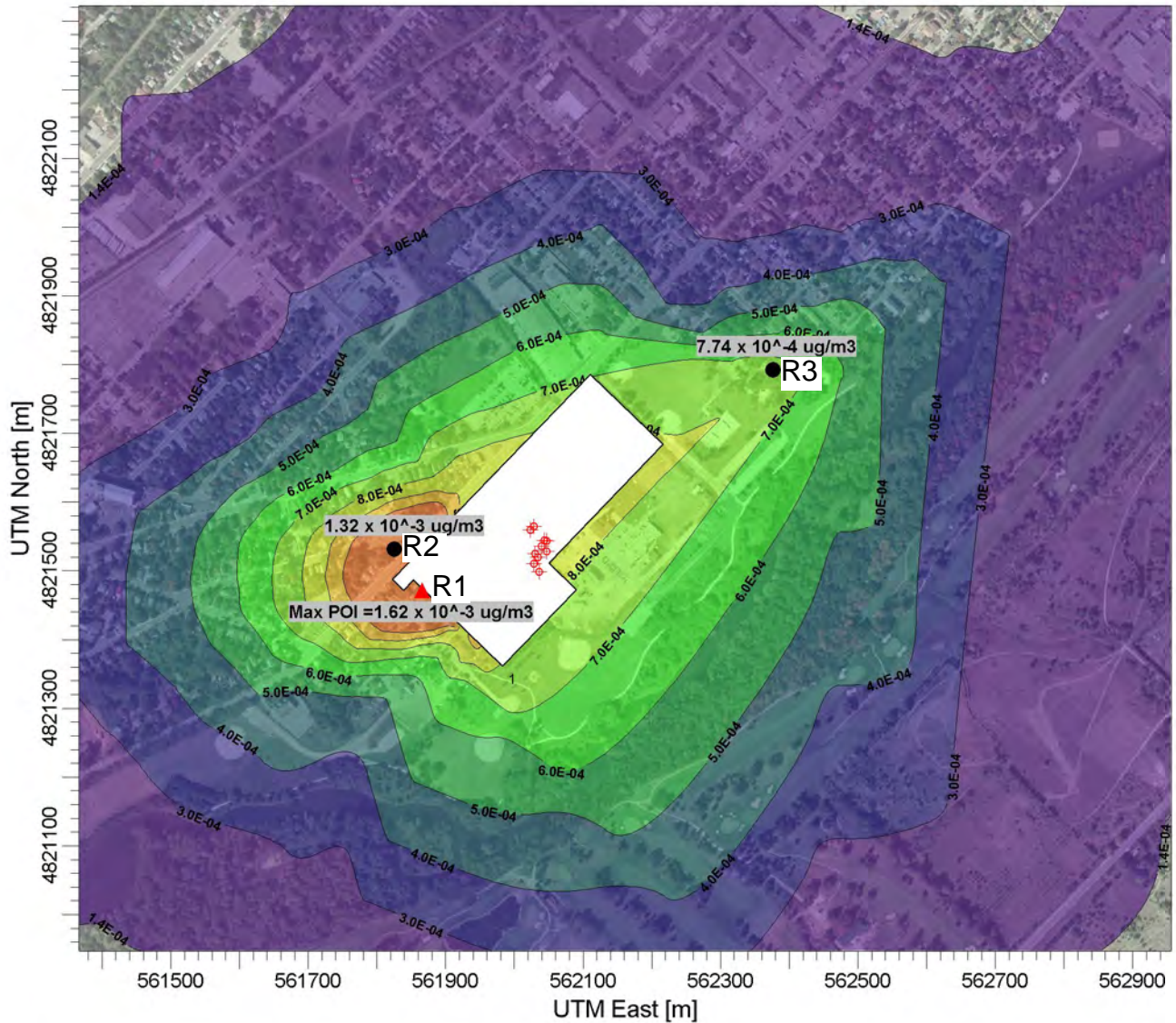
Annual Hexavalent Chromium Results
Current Operations - 5 year data set including median and average

Run (tab) Name:	Ann_Current_R1_Metryr1	Ann_Current_R1_Metryr2	Ann_Current_R1_Metryr3	Ann_Current_R1_Metryr4	Ann_Current_R1_Metryr5	
Run Description:	Current Scn R1, Reg 419 grid, Site Specific Met (2009)	Current Scn R1, Reg 419 grid, Site Specific Met (2010)	Current Scn R1, Reg 419 grid, Site Specific Met (2011)	Current Scn R1, Reg 419 grid, Site Specific Met (2012)	Current Scn R1, Reg 419 grid, Site Specific Met (2013)	MAX
Result Units:	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
ALL	19.8732	19.51729	19.975	20.79172	20.61207	20.79172
B01	0.2867	0.34963	0.27289	0.2897	0.32412	0.34963
B11	17.30664	16.81987	17.44297	18.24625	18.13474	18.24625
B38	3.56491	4.04064	3.38146	3.64655	3.53179	4.04064
B08	0.21464	0.22008	0.22345	0.23974	0.2344	0.23974
B10	0.13599	0.13959	0.14002	0.14165	0.13988	0.14165
B32	0.27755	0.29464	0.27373	0.28184	0.27909	0.29464
B34	0.20638	0.23471	0.20034	0.21215	0.20752	0.23471
B35	0.20605	0.23777	0.20042	0.21498	0.20616	0.23777
C79	0.07197	0.09472	0.06703	0.07637	0.06974	0.09472
C80	0.06863	0.09487	0.06323	0.07384	0.0628	0.09487
FURNACE	0.2867	0.34963	0.27289	0.2897	0.32412	0.34963
FOREHEAR	18.71019	18.30635	18.77949	19.57825	19.38212	19.57825
GENEXHTS	1.01181	1.13015	0.99641	1.051	1.0285	1.13015
HOTSRCS	18.94692	18.58535	19.01234	19.81591	19.65278	19.81591

Run Description:	Current Scn R1, Reg 419 grid, Site Specific Met (2009)	Current Scn R1, Reg 419 grid, Site Specific Met (2010)	Current Scn R1, Reg 419 grid, Site Specific Met (2011)	Current Scn R1, Reg 419 grid, Site Specific Met (2012)	Current Scn R1, Reg 419 grid, Site Specific Met (2013)	MAX	Average	Median
Result Units:	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
ALL	0.0198732	0.01951729	0.019975	0.02079172	0.02061207	0.020792	0.020154	0.019975
B01	0.0002867	0.00034963	0.00027289	0.0002897	0.00032412	0.00035	0.000305	0.00029
B11	0.01730664	0.01681987	0.01744297	0.01824625	0.01813474	0.018246	0.01759	0.017443
B38	0.00356491	0.00404064	0.00338146	0.00364655	0.00353179	0.004041	0.003633	0.003565
B08	0.00021464	0.00022008	0.00022345	0.00023974	0.0002344	0.00024	0.000226	0.000223
B10	0.00013599	0.00013959	0.00014002	0.00014165	0.00013988	0.000142	0.000139	0.00014
B32	0.00027755	0.00029464	0.00027373	0.00028184	0.00027909	0.000295	0.000281	0.000279
B34	0.00020638	0.00023471	0.00020034	0.00021215	0.00020752	0.000235	0.000212	0.000208
B35	0.00020605	0.00023777	0.00020042	0.00021498	0.00020616	0.000238	0.000213	0.000206
C79	0.00007197	0.00009472	0.00006703	0.00007637	0.00006974	9.47E-05	7.6E-05	7.2E-05
C80	0.00006863	0.00009487	0.00006323	0.00007384	0.0000628	9.49E-05	7.27E-05	6.86E-05
FURNACE	0.0002867	0.00034963	0.00027289	0.0002897	0.00032412	0.00035		
FOREHEAR	0.01871019	0.01830635	0.01877949	0.01957825	0.01938212	0.019578		
GENEXHTS	0.00101181	0.00113015	0.00099641	0.001051	0.0010285	0.00113	0.001044	0.001029
HOTSRCS	0.01894692	0.01858535	0.01901234	0.01981591	0.01965278	0.019816	0.019203	0.019012

PROJECT TITLE:

**OC Guelph Glass Plant - Annual Average Hexavalent Chromium Concentration
Current Operations at sensitive receptors only**



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

MICROGRAMS/M3

Max: 1.6E-03 [MICROGRAMS/M3] at (561865.76, 4821472.01)



COMMENTS:

Sensitive Receptor Grid
Met Year 3
Red Triangle = Max POI
concentration
Black Circle = Concentration at
the location

This plot shows max conc at
receptor R1 in met yr 3 See
additional contour plots for
maximums at R2 (yr1) and R3 (yr
5)

SOURCES:

10

RECEPTORS:

801

OUTPUT TYPE:

Concentration

MAX:

1.6E-03 MICROGRAMS/M3

COMPANY NAME:

Owens Corning Guelph Glass Plant

MODELER:

C. MacKay, LEHDER

SCALE:

1:10,000

0 0.3 km

DATE:

3/23/2015



PROJECT NO.:

144539

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	B01	562035.79	4821498.75	312.00	32.03	0.00004	597.00	19.85	0.58
		107 Furnace Stack (West)							
POINT	B11	562034.66	4821520.18	312.00	15.09	0.00015	401.00	6.31	0.68
		107B Forehearth Stack							
POINT	B38	562043.48	4821544.79	312.00	16.46	0.00003	379.00	5.43	0.75
		105 Forehearth Stack							
POINT	B08	562028.15	4821510.37	312.00	14.45	2.05E-6	321.90	12.59	1.22
		General Exhaust Above Furnace							
POINT	B10	562030.25	4821525.28	312.00	14.45	2.39E-6	321.90	12.10	1.24
		General Exhaust Above T107B F/H							
POINT	B32	562047.16	4821528.02	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above T106							
POINT	B34	562039.70	4821535.65	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above T107A F/H							
POINT	B35	562047.03	4821543.82	312.00	14.48	2.39E-6	321.90	19.19	1.24
		General Exhaust Above CFM Main Channel							
POINT	C79	562023.15	4821559.58	312.00	11.64	2.04E-6	310.80	9.59	1.41
		General Exhaust West CFM F/H							
POINT	C80	562028.25	4821564.97	312.00	11.64	2.04E-6	310.80	9.59	1.41
		General Exhaust East CFM F/H							

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** 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 Allows User-Specified Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. BETA Option for Capped & Horiz Stacks Selected With:

5 Capped Stack(s); and 0 Horiz Stack(s)

**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: HCR

**Model Calculates ANNUAL Averages Only

**This Run Includes: 10 Source(s); 15 Source Group(s); and 801 Receptor(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 325.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/S ; Emission Rate Unit Factor = 0.10000E+10
Output Units = NANOGRAMS/M3

**Approximate Storage Requirements of Model = 3.9 MB of RAM.

**File for Saving Result Arrays: Ann_Current_R1_A11SR_R1_yr3.sv1

**File for Summary of Results: Ann_Current_R1_A11SR_R1_yr3.sum

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

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

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA
 *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
B01	1ST HIGHEST VALUE IS 0.05307 AT (561825.76, 4821532.01, 313.47, 313.47, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.05204 AT (561845.76, 4821472.01, 313.00, 313.00, 4.90)	DC		
	3RD HIGHEST VALUE IS 0.05095 AT (561775.76, 4821492.01, 313.49, 313.49, 0.00)	DC		
	4TH HIGHEST VALUE IS 0.05087 AT (561865.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	5TH HIGHEST VALUE IS 0.05001 AT (561825.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.04893 AT (561775.76, 4821542.01, 314.01, 314.01, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.04875 AT (561755.04, 4821468.81, 313.52, 313.52, 7.32)	DC		
	8TH HIGHEST VALUE IS 0.04697 AT (561747.89, 4821460.23, 313.39, 313.39, 7.32)	DC		
	9TH HIGHEST VALUE IS 0.04665 AT (561865.76, 4821452.01, 313.00, 313.00, 4.90)	DC		
	10TH HIGHEST VALUE IS 0.04664 AT (561725.76, 4821492.01, 314.00, 314.00, 0.00)	DC		
B08	1ST HIGHEST VALUE IS 0.01078 AT (561865.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.01038 AT (561885.76, 4821452.01, 312.47, 312.47, 0.00)	DC		
	3RD HIGHEST VALUE IS 0.01022 AT (561845.76, 4821472.01, 313.00, 313.00, 4.90)	DC		
	4TH HIGHEST VALUE IS 0.00998 AT (561865.76, 4821452.01, 313.00, 313.00, 4.90)	DC		
	5TH HIGHEST VALUE IS 0.00984 AT (561825.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.00952 AT (561825.76, 4821532.01, 313.47, 313.47, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.00952 AT (561845.76, 4821452.01, 313.00, 313.00, 0.00)	DC		
	8TH HIGHEST VALUE IS 0.00896 AT (561825.76, 4821452.01, 313.00, 313.00, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.00879 AT (561775.76, 4821492.01, 313.49, 313.49, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.00851 AT (561845.76, 4821432.01, 312.40, 312.40, 0.00)	DC		
B10	1ST HIGHEST VALUE IS 0.01240 AT (561865.76, 4821572.01, 313.00, 313.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 0.01114 AT (561845.76, 4821572.01, 313.00, 313.00, 0.00)	DC		
	3RD HIGHEST VALUE IS 0.01070 AT (561885.76, 4821592.01, 312.47, 312.47, 4.90)	DC		
	4TH HIGHEST VALUE IS 0.01020 AT (561865.76, 4821592.01, 313.00, 313.00, 0.00)	DC		
	5TH HIGHEST VALUE IS 0.01017 AT (561827.79, 4821564.74, 313.41, 313.41, 0.00)	DC		
	6TH HIGHEST VALUE IS 0.00995 AT (561845.76, 4821592.01, 313.00, 313.00, 0.00)	DC		
	7TH HIGHEST VALUE IS 0.00958 AT (561865.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	8TH HIGHEST VALUE IS 0.00946 AT (561885.76, 4821612.01, 312.47, 312.47, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.00939 AT (561825.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.00939 AT (561845.76, 4821472.01, 313.00, 313.00, 4.90)	DC		
B11	1ST HIGHEST VALUE IS 1.30282 AT (561865.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	2ND HIGHEST VALUE IS 1.27670 AT (561885.76, 4821452.01, 312.47, 312.47, 0.00)	DC		
	3RD HIGHEST VALUE IS 1.17758 AT (561865.76, 4821452.01, 313.00, 313.00, 4.90)	DC		
	4TH HIGHEST VALUE IS 1.16193 AT (561845.76, 4821472.01, 313.00, 313.00, 4.90)	DC		
	5TH HIGHEST VALUE IS 1.10099 AT (561845.76, 4821452.01, 313.00, 313.00, 0.00)	DC		
	6TH HIGHEST VALUE IS 1.07162 AT (561825.76, 4821472.01, 313.00, 313.00, 0.00)	DC		
	7TH HIGHEST VALUE IS 1.01292 AT (561825.76, 4821532.01, 313.47, 313.47, 0.00)	DC		
	8TH HIGHEST VALUE IS 1.00680 AT (561865.76, 4821432.01, 312.40, 312.40, 0.00)	DC		
	9TH HIGHEST VALUE IS 0.99313 AT (561825.76, 4821452.01, 313.00, 313.00, 0.00)	DC		
	10TH HIGHEST VALUE IS 0.97424 AT (561845.76, 4821432.01, 312.40, 312.40, 0.00)	DC		

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA
 *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
----------	--------------	--	---------	-----------------

Ann_Current_R1_AI | SR_R1_yr3

B32	1ST	HI	GHEST	VALUE	IS	0.00846	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.00846	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.00796	AT	(	562325.76,	4821842.01,	312.00,	312.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.00794	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.00779	AT	(	561827.79,	4821564.74,	313.41,	313.41,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.00757	AT	(	561885.76,	4821592.01,	312.47,	312.47,	4.90)	DC
	7TH	HI	GHEST	VALUE	IS	0.00740	AT	(	561803.40,	4821564.48,	314.00,	314.00,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.00737	AT	(	561775.76,	4821542.01,	314.01,	314.01,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.00732	AT	(	561865.76,	4821592.01,	313.00,	313.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.00719	AT	(	561775.76,	4821492.01,	313.49,	313.49,	0.00)	DC
B34	1ST	HI	GHEST	VALUE	IS	0.00848	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.00801	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.00790	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.00789	AT	(	561905.76,	4821432.01,	311.88,	311.88,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.00785	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.00773	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.00760	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	8TH	HI	GHEST	VALUE	IS	0.00757	AT	(	561885.76,	4821592.01,	312.47,	312.47,	4.90)	DC
	9TH	HI	GHEST	VALUE	IS	0.00750	AT	(	561827.79,	4821564.74,	313.41,	313.41,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.00746	AT	(	561865.76,	4821592.01,	313.00,	313.00,	0.00)	DC
B35	1ST	HI	GHEST	VALUE	IS	0.00948	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.00887	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.00878	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	4TH	HI	GHEST	VALUE	IS	0.00870	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.00830	AT	(	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.00823	AT	(	561865.76,	4821452.01,	313.00,	313.00,	4.90)	DC
	7TH	HI	GHEST	VALUE	IS	0.00819	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.00805	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.00801	AT	(	561905.76,	4821432.01,	311.88,	311.88,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.00798	AT	(	561865.76,	4821432.01,	312.40,	312.40,	0.00)	DC
B38	1ST	HI	GHEST	VALUE	IS	0.22731	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.21417	AT	(	561885.76,	4821592.01,	312.47,	312.47,	4.90)	DC
	3RD	HI	GHEST	VALUE	IS	0.21183	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.20934	AT	(	561865.76,	4821592.01,	313.00,	313.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.20847	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.20153	AT	(	561845.76,	4821592.01,	313.00,	313.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.20012	AT	(	561827.79,	4821564.74,	313.41,	313.41,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.19556	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.19078	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.18950	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC

♀ *** AERMOD - VERSION 14134 *** *** OC Guelph Project 144539 - Site Specific Standard ***
 *** AERMET - VERSION 14134 *** *** Ann_Current_R1_AI | SR_R1_yr3 (MSP_Stage2_144539_24hr_Ann_Current_R1) ***

03/04/15
 10:58:48
 PAGE 6

**MODELOPTS: NonDEFAULT CONC

ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE NETWORK GRID-ID

C79	1ST	HI	GHEST	VALUE	IS	0.00999	AT	(	561905.76,	4821432.01,	311.88,	311.88,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.00903	AT	(	561925.76,	4821412.01,	311.14,	311.14,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.00889	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.00886	AT	(	561905.76,	4821412.01,	311.81,	311.81,	4.90)	DC
	5TH	HI	GHEST	VALUE	IS	0.00873	AT	(	561885.76,	4821432.01,	312.19,	312.19,	4.90)	DC
	6TH	HI	GHEST	VALUE	IS	0.00869	AT	(	561885.76,	4821412.01,	312.00,	312.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.00866	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.00815	AT	(	561905.76,	4821392.01,	311.81,	311.81,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.00809	AT	(	561885.76,	4821392.01,	312.00,	312.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	0.00800	AT	(	561775.76,	4821542.01,	314.01,	314.01,	0.00)	DC

Ann_Current_R1_AI | SR_R1_yr3

C80	1ST	HI	GHEST	VALUE	IS	0.00833	AT	(	561905.76,	4821432.01,	311.88,	311.88,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.00819	AT	(	561827.79,	4821564.74,	313.41,	313.41,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.00803	AT	(	561803.40,	4821564.48,	314.00,	314.00,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.00802	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.00800	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.00795	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.00786	AT	(	561775.76,	4821542.01,	314.01,	314.01,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.00777	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	0.00771	AT	(	561799.38,	4821589.67,	314.00,	314.00,	4.90)	DC
	10TH	HI	GHEST	VALUE	IS	0.00759	AT	(	561885.76,	4821432.01,	312.19,	312.19,	4.90)	DC

GENEXHTS	1ST	HI	GHEST	VALUE	IS	0.06107	AT	(	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.05868	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	0.05859	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.05828	AT	(	561845.76,	4821572.01,	313.00,	313.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.05817	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.05736	AT	(	561827.79,	4821564.74,	313.41,	313.41,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.05703	AT	(	561905.76,	4821432.01,	311.88,	311.88,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	0.05625	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	9TH	HI	GHEST	VALUE	IS	0.05451	AT	(	561885.76,	4821592.01,	312.47,	312.47,	4.90)	DC
	10TH	HI	GHEST	VALUE	IS	0.05393	AT	(	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC

HOTSRCS	1ST	HI	GHEST	VALUE	IS	1.56215	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	1.51037	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	1.40546	AT	(	561865.76,	4821452.01,	313.00,	313.00,	4.90)	DC
	4TH	HI	GHEST	VALUE	IS	1.40347	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	5TH	HI	GHEST	VALUE	IS	1.31981	AT	(	561845.76,	4821452.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	1.30022	AT	(	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	1.26155	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	1.21305	AT	(	561865.76,	4821432.01,	312.40,	312.40,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	1.20361	AT	(	561825.76,	4821452.01,	313.00,	313.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	1.17582	AT	(	561845.76,	4821432.01,	312.40,	312.40,	0.00)	DC

♀ *** AERMOD - VERSION 14134 *** *** OC Guelph Project 144539 - Site Specific Standard ***
 *** AERMET - VERSION 14134 *** *** Ann_Current_R1_AI | SR_R1_yr3 (MSP_Stage2_144539_24hr_Ann_Current_R1) ***

03/04/15
 10:58:48
 PAGE 7

**MODELOPTs: NonDEFAULT CONC ELEV FLGPOL BETA

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF HCR IN NANOGRAMS/M3 **

GROUP ID						AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID	
FURNACE	1ST	HI	GHEST	VALUE	IS	0.05307	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	0.05204	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	3RD	HI	GHEST	VALUE	IS	0.05095	AT	(	561775.76,	4821492.01,	313.49,	313.49,	0.00)	DC
	4TH	HI	GHEST	VALUE	IS	0.05087	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	5TH	HI	GHEST	VALUE	IS	0.05001	AT	(	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	0.04893	AT	(	561775.76,	4821542.01,	314.01,	314.01,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	0.04875	AT	(	561755.04,	4821468.81,	313.52,	313.52,	7.32)	DC
	8TH	HI	GHEST	VALUE	IS	0.04697	AT	(	561747.89,	4821460.23,	313.39,	313.39,	7.32)	DC
	9TH	HI	GHEST	VALUE	IS	0.04665	AT	(	561865.76,	4821452.01,	313.00,	313.00,	4.90)	DC
	10TH	HI	GHEST	VALUE	IS	0.04664	AT	(	561725.76,	4821492.01,	314.00,	314.00,	0.00)	DC
FOREHEAR	1ST	HI	GHEST	VALUE	IS	1.51128	AT	(	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	2ND	HI	GHEST	VALUE	IS	1.46748	AT	(	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC
	3RD	HI	GHEST	VALUE	IS	1.35881	AT	(	561865.76,	4821452.01,	313.00,	313.00,	4.90)	DC
	4TH	HI	GHEST	VALUE	IS	1.35143	AT	(	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC
	5TH	HI	GHEST	VALUE	IS	1.27555	AT	(	561845.76,	4821452.01,	313.00,	313.00,	0.00)	DC
	6TH	HI	GHEST	VALUE	IS	1.25022	AT	(	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC
	7TH	HI	GHEST	VALUE	IS	1.20848	AT	(	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC
	8TH	HI	GHEST	VALUE	IS	1.17499	AT	(	561865.76,	4821432.01,	312.40,	312.40,	0.00)	DC
	9TH	HI	GHEST	VALUE	IS	1.15876	AT	(	561825.76,	4821452.01,	313.00,	313.00,	0.00)	DC
	10TH	HI	GHEST	VALUE	IS	1.13635	AT	(	561845.76,	4821432.01,	312.40,	312.40,	0.00)	DC

						Ann_Current_R1_AII SR_R1_yr3				
ALL	1ST HIGHEST VALUE IS	1.62083	AT (	561865.76,	4821472.01,	313.00,	313.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	1.56854	AT (	561885.76,	4821452.01,	312.47,	312.47,	0.00)	DC	
	3RD HIGHEST VALUE IS	1.45972	AT (	561845.76,	4821472.01,	313.00,	313.00,	4.90)	DC	
	4TH HIGHEST VALUE IS	1.45889	AT (	561865.76,	4821452.01,	313.00,	313.00,	4.90)	DC	
	5TH HIGHEST VALUE IS	1.37028	AT (	561845.76,	4821452.01,	313.00,	313.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	1.35415	AT (	561825.76,	4821472.01,	313.00,	313.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	1.32014	AT (	561825.76,	4821532.01,	313.47,	313.47,	0.00)	DC	
	8TH HIGHEST VALUE IS	1.26552	AT (	561865.76,	4821432.01,	312.40,	312.40,	0.00)	DC	
	9TH HIGHEST VALUE IS	1.25167	AT (	561825.76,	4821452.01,	313.00,	313.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	1.22753	AT (	561865.76,	4821572.01,	313.00,	313.00,	0.00)	DC	

1.621 ng/m3 = 1.62 x 10⁻³ ug/m3
This occurs at sensitive receptor R1

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

*** AERMOD - VERSION 14134 *** ** OC Guelph Project 144539 - Site Specific Standard ***
*** AERMET - VERSION 14134 *** ** Ann_Current_R1_AII SR_R1_yr3 (MSP_Stage2_144539_24hr_Ann_Current_R1) ***

03/04/15
10:58:48
PAGE 8

**MODELOPTS: NonDEFAULT CONC ELEV FLGPOL BETA

*** 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 6 Informational Message(s)
A Total of 8760 Hours Were Processed
A Total of 3 Calm Hours Identified
A Total of 0 Missing Hours Identified (0.00 Percent)

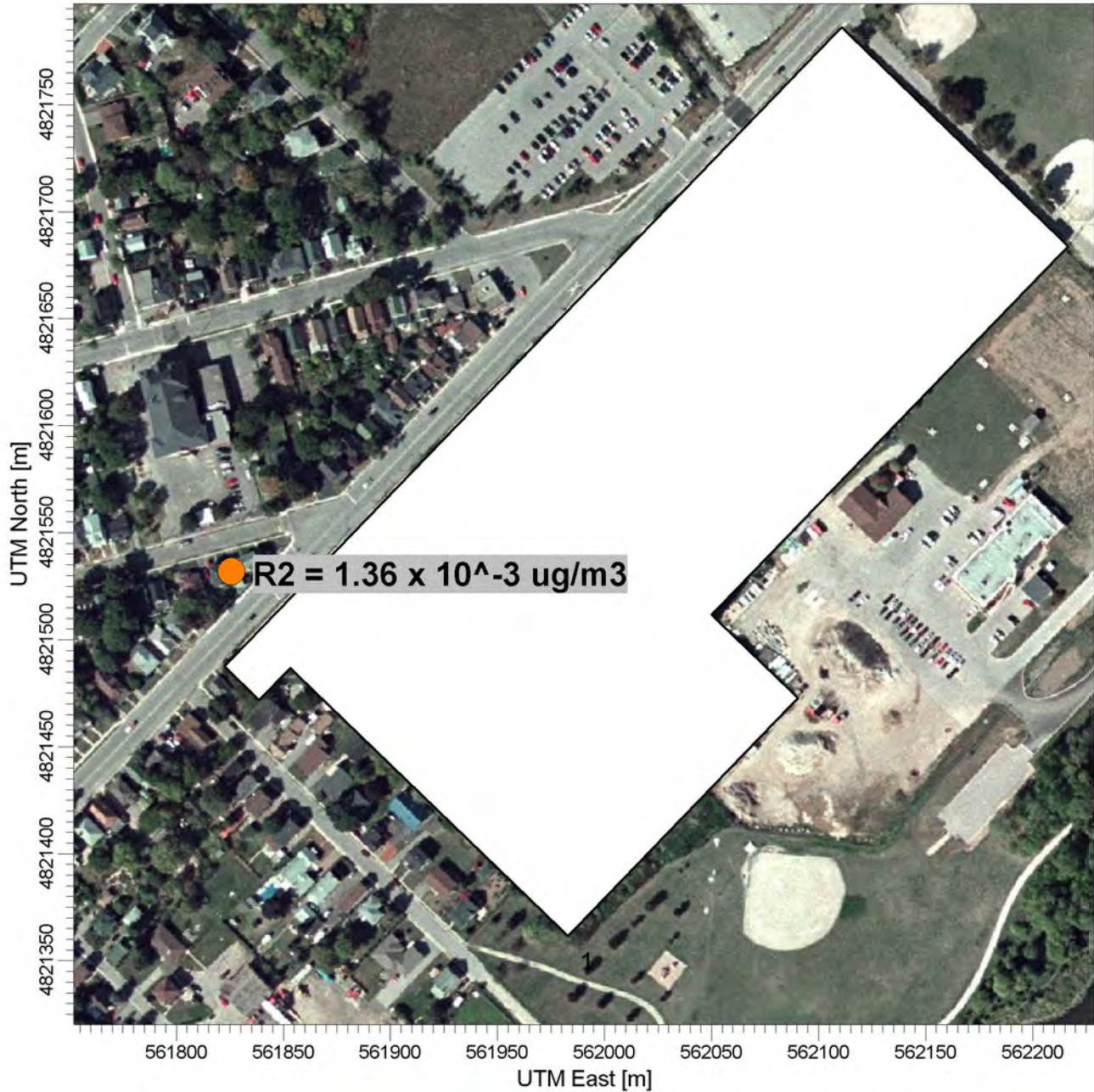
***** FATAL ERROR MESSAGES *****
*** NONE ***

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

PROJECT TITLE:

OC Guelph Glass Plant

Annual Current Hexavalent Chromium Concentration maximum at receptor R2



COMMENTS:

This is the maximum concentration that occurs at a sensitive receptor to the north (R2). Occurs in Met Year 1.

SOURCES:

10

COMPANY NAME:

Owens Corning Guelph Glass Plant

RECEPTORS:

1

MODELER:

C. MacKay, LEHDER

OUTPUT TYPE:

Concentration

SCALE:

1:3,000

0 0.1 km



MAX:

0.0136 ug/m³

DATE:

3/23/2015

PROJECT NO.:

144539

PROJECT TITLE:

OC Guelph Glass Plant

Annual Current Hexavalent Chromium Concentration maximum at Receptor R3



COMMENTS:

This is the maximum concentration that occurs at a sensitive (R3). Occurs in met year 5.

SOURCES:

10

COMPANY NAME:

Owens Corning Guelph Glass Plant

RECEPTORS:

1

MODELER:

C. MacKay, LEHDER

OUTPUT TYPE:

Concentration

SCALE:

1:8,000

0 0.3 km



MAX:

0.000807 ug/m3

DATE:

3/23/2015

PROJECT NO.:

144539

