Scenario: W_R2

Emission Rate Calculations for Modeling

						before RC	after RC	before RC	After RC-CFM only									
		Source	B01	B24	B25	B11current	B11	B38current	B38	B08	B10	B32	B33	B34	B35	C79	C80	Total
		Type	Furnace	Furnace	Furnace	FH	FH	FH	FH	RE1	RE2	RE2	RE1	RE2	RE2	RE1	RE1	
		Current Base Case Emission Rate (g/s)	3.55E-05			1.51E-04		3.32E-05		2.05E-06	2.39E-06	2.39E-06		2.39E-06	2.39E-06	2.04E-06	2.04E-06	2.35E-04
Uncertainty =	1.15	2016 Base RC Emission Rate (g/s) with Uncertainty Factor applied		2.04E-05	2.04E-05		8.66E-05		3.82E-05		1.37E-06	1.37E-06	2.36E-06	1.37E-06	1.37E-06	2.34E-06	2.34E-06	1.78E-04
Combination ID	Option Description		B01	B24	B25	B11	B11	B38current	B38	B08	B10	B32	B33	B34	B35	C79	C80	
W_R1	Facility reconfiguration + Scrubber system on forehearth stack (6,7,8, or 9)	Description of Reduction Component							Scrubber									
		Individual Reduction Description							(6,7,8 or 9)									
		Reduction Efficiency							20%	0%	0%	0%	0%	0%	0%	0%	0%	
		Additional Reduction Efficiency																
		Comments	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	Source ER (g/s)	TotalER (g/s)
		RC+(6,7,8 or 9)		2.04E-05	2.04E-05				9.98E-05		1.37E-06	1.37E-06	2.36E-06	1.37E-06	1.37E-06	2.34E-06	2.34E-06	1.53E-04

Annual Hexavalent Chromium Results
Technical Benchmarking Option W - 5 year data set

Run (tab) Name:	Ann_Opt_W_R1_Metyr1	Ann_Opt_W_R1_Metyr2	Ann_Opt_W_R1_Metyr3	Ann_Opt_W_R1_Metyr4	Ann_Opt_W_R1_Metyr5	
Run Description:	Option W_R1, Reg 419 grid, Site Specific Met (2009)	Option W_R1, Reg 419 grid, Site Specific Met (2010)	Option W_R1, Reg 419 grid, Site Specific Met (2011)	Option W_R1, Reg 419 grid, Site Specific Met (2012)	Option W_R1, Reg 419 grid, Site Specific Met (2013)	**MAX**
Result Units:		**ng/m3**	**ng/m3**	**ng/m3**	**ng/m3**	**ng/m3**
ALL	3.47727	3.90482	3.47507	3.60993	3.78339	**3.90482**
B10	0.07817	0.08024	0.08048	0.08142	0.0804	**0.08142**
B32	0.15957	0.16941	0.15737	0.16204	0.16045	**0.16941**
B34	0.11866	0.13496	0.11519	0.12199	0.11932	**0.13496**
B35	0.11847	0.13671	0.11524	0.12361	0.11854	**0.13671**
C79	0.08277	0.10893	0.07708	0.08782	0.08021	**0.10893**
C80	0.07892	0.1091	0.07271	0.08492	0.07221	**0.1091**
B38	2.43431	2.67592	2.46526	2.63821	2.79467	**2.79467**
B24	0.23591	0.23253	0.24181	0.22825	0.25149	**0.25149**
B25	0.16159	0.17259	0.16251	0.15383	0.1691	**0.17259**
B33	0.08734	0.11193	0.07987	0.08701	0.08128	**0.11193**
FURNACE	0.3975	0.40512	0.40432	0.38208	0.42059	**0.42059**
FOREHEAR	2.43431	2.67592	2.46526	2.63821	2.79467	**2.79467**
GENEXHTS	0.70001	0.82378	0.67353	0.72305	0.69364	**0.82378**

Run Description:	Option W_R1, Reg 419 grid, Site Specific Met (2009)	Option W_R1, Reg 419 grid, Site Specific Met (2010)	Option W_R1, Reg 419 grid, Site Specific Met (2011)	Option W_R1, Reg 419 grid, Site Specific Met (2012)	Option W_R1, Reg 419 grid, Site Specific Met (2013)	**MAX**
Result Units:	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**
ALL	0.00347727	0.00390482	0.00347507	0.00360993	0.00378339	**0.003905**
B10	0.00007817	0.00008024	0.00008048	0.00008142	0.0000804	**8.14E-05**
B32	0.00015957	0.00016941	0.00015737	0.00016204	0.00016045	**0.000169**
B34	0.00011866	0.00013496	0.00011519	0.00012199	0.00011932	**0.000135**
B35	0.00011847	0.00013671	0.00011524	0.00012361	0.00011854	**0.000137**
C79	0.00008277	0.00010893	0.00007708	0.00008782	0.00008021	**0.000109**
C80	0.00007892	0.0001091	0.00007271	0.00008492	0.00007221	**0.000109**
B38	0.00243431	0.00267592	0.00246526	0.00263821	0.00279467	**0.002795**
B24	0.00023591	0.00023253	0.00024181	0.00022825	0.00025149	**0.000251**
B25	0.00016159	0.00017259	0.00016251	0.00015383	0.0001691	**0.000173**
B33	0.00008734	0.00011193	0.00007987	0.00008701	0.00008128	**0.000112**
FURNACE	0.0003975	0.00040512	0.00040432	0.00038208	0.00042059	**0.000421**
FOREHEAR	0.00243431	0.00267592	0.00246526	0.00263821	0.00279467	**0.002795**
GENEXHTS	0.00070001	0.00082378	0.00067353	0.00072305	0.00069364	**0.000824**

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	B10	562030.25	4821525.28	312.00	14.45	1.37E-6	321.90	12.10	1.24
		General Exhaust Above T107B F/H							
POINT	B32	562047.16	4821528.02	312.00	14.48	1.37E-6	321.90	19.19	1.24
		General Exhaust Above T106							
POINT	B34	562039.70	4821535.65	312.00	14.48	1.37E-6	321.90	19.19	1.24
		General Exhaust Above T107A F/H							
POINT	B35	562047.03	4821543.82	312.00	14.48	1.37E-6	321.90	19.19	1.24
		General Exhaust Above CFM Main Channel							
POINT	C79	562023.15	4821559.58	312.00	11.64	2.34E-6	310.80	9.59	1.41
		General Exhaust West CFM F/H							
POINT	C80	562028.25	4821564.97	312.00	11.64	2.34E-6	310.80	9.59	1.41
		General Exhaust East CFM F/H							
POINT	B38	562043.48	4821544.79	312.00	16.46	0.00010	379.00	5.43	0.75
		105 Forehearth Stack							
POINT	B33	562055.21	4821536.35	312.00	14.48	2.36E-6	321.90	12.59	1.22
		Gen Exhaust Above T105							
POINT	B24	562052.59	4821531.65	312.00	27.77	0.00002	597.00	5.89	0.53
		105 Furnace Stack							
POINT	B25	562057.67	4821536.90	312.00	27.77	0.00002	597.00	5.89	0.53
		105 Furnace Stack							

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Source Pathway - Source Inputs

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

No Polygon Area Sources Specified

Flare Sources

No Flare Sources Specified

Line Sources

No Line Sources Specified

Line Volume Sources

No Line Volume Sources Specified

Line Area Sources

No Line Area Sources Specified

♀ *** AERMOD - VERSION 14134 ***   *** OC Guelph Project 144539 - Site Specific Standard *** 02/28/15
*** AERMET - VERSION 14134 ***   *** Ann_Opt_W_R2_Metyr2 *** 06:33:23

**MODELOPTs: NonDFAULT 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);   14 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 =      4.5 MB of RAM.

 **File for Saving Result Arrays: Ann_Opt_W_R2_Metyr2.sv1
 **File for Summary of Results:   Ann_Opt_W_R2_Metyr2.sum
♀ *** AERMOD - VERSION  14134 ***   *** OC Guelph Project 144539 - Site Specific Standard                   ***        02/28/15
 *** AERMET - VERSION  14134 ***   *** Ann_Opt_W_R2_Metyr2                                                 ***        06:33:23
                                                                                                                       PAGE   2
 **MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA

                                              *** 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 1

                          METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 2010   1  1  1
                                                                AND END DATE: 2010  12 31 24

                   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,
♀ *** AERMOD - VERSION  14134 ***   *** OC Guelph Project 144539 - Site Specific Standard                   ***        02/28/15
 *** AERMET - VERSION  14134 ***   *** Ann_Opt_W_R2_Metyr2                                                 ***        06:33:23
                                                                                                                       PAGE   3
 **MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA

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

   Surface file:   E:\_Site Specific Met\OCGuelph_ONLY\V14134\OwensCorning-Guelph-v14134.SFC          Met Version:  14134
   Profile file:   E:\_Site Specific Met\OCGuelph_ONLY\V14134\OwensCorning-Guelph-v14134.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    61430                 Upper air station no.:    14733
                  Name: UNKNOWN                                   Name: BUFFALO/GREATER_BUFFALO_INT'L
                  Year:   2009                                    Year:   2009

 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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 09 01 01   1 01   -8.4  0.105 -9.000 -9.000 -999.   81.     11.8  0.57   0.55   1.00    1.50  291.   10.0  258.1    2.0
 09 01 01   1 02  -16.5  0.147 -9.000 -9.000 -999.  135.     16.6  0.57   0.55   1.00    2.10  308.   10.0  258.1    2.0
 09 01 01   1 03   -8.4  0.105 -9.000 -9.000 -999.   82.     11.8  0.57   0.55   1.00    1.50  294.   10.0  257.5    2.0
 09 01 01   1 04   -7.9  0.100 -9.000 -9.000 -999.   76.     11.0  0.50   0.55   1.00    1.50  233.   10.0  255.9    2.0
 09 01 01   1 05   -3.5  0.067 -9.000 -9.000 -999.   41.      7.3  0.50   0.55   1.00    1.00  223.   10.0  255.3    2.0
```

Ann_Opt_W_R2_Metyr2

09	01	01	1	06	-3.2	0.067	-9.000	-9.000	-999.	41.	8.1	0.50	0.55	1.00	1.00	222.	10.0	254.8	2.0
09	01	01	1	07	-9.5	0.113	-9.000	-9.000	-999.	91.	13.2	0.70	0.55	1.00	1.50	145.	10.0	255.9	2.0
09	01	01	1	08	-8.5	0.109	-9.000	-9.000	-999.	86.	13.0	0.63	0.50	1.00	1.50	243.	10.0	257.5	2.0
09	01	01	1	09	-6.0	0.107	-9.000	-9.000	-999.	84.	17.8	0.61	0.95	0.76	1.50	127.	10.0	258.1	2.0
09	01	01	1	10	-1.6	0.057	-9.000	-9.000	-999.	33.	9.9	0.30	0.95	0.66	1.00	121.	10.0	263.8	2.0
09	01	01	1	11	13.2	0.424	0.253	0.009	42.	662.	-499.8	0.50	0.55	0.54	3.10	224.	10.0	264.2	2.0
09	01	01	1	12	19.8	0.428	0.402	0.008	114.	671.	-342.9	0.50	0.55	0.51	3.10	196.	10.0	265.4	2.0
09	01	01	1	13	22.9	0.367	0.559	0.011	265.	536.	-187.8	0.50	0.55	0.51	2.60	203.	10.0	265.4	2.0
09	01	01	1	14	2.1	0.468	0.256	0.007	275.	768.	-4237.3	0.70	0.55	0.48	3.10	179.	10.0	265.9	2.0
09	01	01	1	15	-4.6	0.538	-9.000	-9.000	-999.	946.	2954.8	0.70	0.55	0.51	3.60	162.	10.0	265.4	2.0
09	01	01	1	16	-20.2	0.526	-9.000	-9.000	-999.	915.	625.4	0.70	0.55	0.59	3.60	164.	10.0	265.9	2.0
09	01	01	1	17	-33.2	0.401	-9.000	-9.000	-999.	622.	168.7	0.61	0.95	0.82	3.10	141.	10.0	265.9	2.0
09	01	01	1	18	-28.3	0.491	-9.000	-9.000	-999.	824.	362.7	0.61	0.95	1.00	3.60	137.	10.0	265.9	2.0
09	01	01	1	19	-53.3	0.464	-9.000	-9.000	-999.	760.	163.0	0.61	0.95	1.00	3.60	134.	10.0	265.9	2.0
09	01	01	1	20	-60.2	0.545	-9.000	-9.000	-999.	964.	233.5	0.61	0.95	1.00	4.10	127.	10.0	265.4	2.0
09	01	01	1	21	-44.8	0.474	-9.000	-9.000	-999.	788.	206.2	0.61	0.95	1.00	3.60	130.	10.0	265.9	2.0
09	01	01	1	22	-61.4	0.544	-9.000	-9.000	-999.	961.	227.6	0.61	0.95	1.00	4.10	132.	10.0	266.4	2.0
09	01	01	1	23	-53.4	0.464	-9.000	-9.000	-999.	764.	162.3	0.61	0.95	1.00	3.60	140.	10.0	266.4	2.0
09	01	01	1	24	-21.2	0.225	-9.000	-9.000	-999.	318.	46.9	0.70	0.55	1.00	2.10	160.	10.0	267.0	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
09	01	01	01	10.0	1	291.	1.50	258.2	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: NonDFAULT 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 HIGHEST VALUE IS	2.04661 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	2.04661 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	1.72434 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	1.72434 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	1.65046 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	1.65046 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	1.43889 AT (562065.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	1.32402 AT (562085.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	1.27844 AT (562085.76, 4821532.01, 311.00, 311.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.97929 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC	
FOREHEAR	1ST HIGHEST VALUE IS	12.15557 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	12.15557 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	10.44240 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	10.44240 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	9.17001 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	

	6TH HIGHEST VALUE IS	9.17001 AT	(562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	8.37103 AT	(562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	8.18011 AT	(562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	7.36219 AT	(562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	6.05530 AT	(562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC	
GENEXHTS	1ST HIGHEST VALUE IS	1.00748 AT	(562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	1.00748 AT	(562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.86604 AT	(562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.86604 AT	(562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.81555 AT	(562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.81555 AT	(562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.69066 AT	(562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.65026 AT	(562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.62638 AT	(562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.62638 AT	(562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC	
B10	1ST HIGHEST VALUE IS	0.08024 AT	(562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.08024 AT	(562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.05750 AT	(562076.93,	4821485.66,	310.19,	310.19,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.05750 AT	(562076.93,	4821485.66,	310.19,	310.19,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.05426 AT	(562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.05426 AT	(562070.22,	4821492.13,	310.40,	310.40,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.05358 AT	(562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.05358 AT	(562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.05274 AT	(562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.05274 AT	(562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC	

**MODELOPTs: NonDFAULT 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
B24	1ST HIGHEST VALUE IS	1.05854 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	1.05854 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.92257 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.92257 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.85389 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.85389 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.72997 AT (562065.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.69230 AT (562085.76, 4821532.01, 311.00, 311.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.63497 AT (562085.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.52969 AT (562077.84, 4821540.29, 311.01, 311.01, 0.00)	DC	
B25	1ST HIGHEST VALUE IS	0.98808 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.98808 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.80177 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.80177 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	

	5TH HIGHEST VALUE IS	0.79658 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.79658 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.70892 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.68905 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.58614 AT (	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.50560 AT (	562105.76,	4821512.01,	311.00,	311.00,	0.00)	DC
B32	1ST HIGHEST VALUE IS	0.16941 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.16941 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.15283 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.15283 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.13784 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.13784 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.12654 AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.12654 AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.08876 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.08785 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
B33	1ST HIGHEST VALUE IS	0.29562 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.29562 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.25393 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.25393 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.23387 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.23387 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.20783 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.18964 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.16851 AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.16851 AT (	562050.10,	4821511.55,	311.00,	311.00,	0.00)	DC

**MODELOPTs: NonDFAULT 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
B34	1ST HIGHEST VALUE IS	0.13496 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.13496 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.11600 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.11600 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.11206 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.11206 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.09289 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.09289 AT (562050.10, 4821511.55, 311.00, 311.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.08457 AT (562085.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.08300 AT (562065.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
B35	1ST HIGHEST VALUE IS	0.13671 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.13671 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.11417 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	

	4TH HIGHEST VALUE IS	0.11417 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.10835 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.10835 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.09148 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.08925 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.08202 AT (	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.06283 AT (	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC
B38	1ST HIGHEST VALUE IS	12.15557 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND HIGHEST VALUE IS	12.15557 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD HIGHEST VALUE IS	10.44240 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	4TH HIGHEST VALUE IS	10.44240 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH HIGHEST VALUE IS	9.17001 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	9.17001 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	8.37103 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	8.18011 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	7.36219 AT (	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	6.05530 AT (	562077.84,	4821540.29,	311.01,	311.01,	0.00)	DC
C79	1ST HIGHEST VALUE IS	0.10893 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	2ND HIGHEST VALUE IS	0.10893 AT (	562063.97,	4821525.92,	311.00,	311.00,	0.00)	DC
	3RD HIGHEST VALUE IS	0.09493 AT (	562085.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	4TH HIGHEST VALUE IS	0.09149 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	5TH HIGHEST VALUE IS	0.09149 AT (	562070.91,	4821533.11,	311.00,	311.00,	0.00)	DC
	6TH HIGHEST VALUE IS	0.08665 AT (	562065.76,	4821512.01,	311.00,	311.00,	0.00)	DC
	7TH HIGHEST VALUE IS	0.08102 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	8TH HIGHEST VALUE IS	0.08102 AT (	562057.04,	4821518.74,	311.00,	311.00,	0.00)	DC
	9TH HIGHEST VALUE IS	0.06501 AT (	562085.76,	4821532.01,	311.00,	311.00,	0.00)	DC
	10TH HIGHEST VALUE IS	0.06296 AT (	562105.76,	4821512.01,	311.00,	311.00,	0.00)	DC

**MODELOPTs: NonDFAULT 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
C80	1ST HIGHEST VALUE IS	0.10910 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.10910 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.10763 AT (562065.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.10032 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.10032 AT (562057.04, 4821518.74, 311.00, 311.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.08681 AT (562085.76, 4821512.01, 311.00, 311.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.07391 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.07391 AT (562070.91, 4821533.11, 311.00, 311.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.06977 AT (562085.76, 4821492.01, 310.52, 310.52, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.06310 AT (562056.81, 4821505.08, 310.84, 310.84, 0.00)	DC	
ALL	1ST HIGHEST VALUE IS	15.20966 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	15.20966 AT (562063.97, 4821525.92, 311.00, 311.00, 0.00)	DC	

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         3RD HIGHEST VALUE IS      12.98229 AT (  562070.91,  4821533.11,   311.00,   311.00,    0.00)  DC
         4TH HIGHEST VALUE IS      12.98229 AT (  562070.91,  4821533.11,   311.00,   311.00,    0.00)  DC
         5TH HIGHEST VALUE IS      11.68651 AT (  562057.04,  4821518.74,   311.00,   311.00,    0.00)  DC
         6TH HIGHEST VALUE IS      11.68651 AT (  562057.04,  4821518.74,   311.00,   311.00,    0.00)  DC
         7TH HIGHEST VALUE IS      10.34532 AT (  562085.76,  4821512.01,   311.00,   311.00,    0.00)  DC
         8TH HIGHEST VALUE IS      10.30965 AT (  562065.76,  4821512.01,   311.00,   311.00,    0.00)  DC
         9TH HIGHEST VALUE IS       9.19427 AT (  562085.76,  4821532.01,   311.00,   311.00,    0.00)  DC
        10TH HIGHEST VALUE IS       7.43715 AT (  562077.84,  4821540.29,   311.01,   311.01,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♀*** AERMOD - VERSION  14134 ***   *** OC Guelph Project 144539 - Site Specific Standard                  ***        02/28/15
 *** AERMET - VERSION  14134 ***   *** Ann_Opt_W_R2_Metyr2                                               ***       06:33:23
                                                                                                                 PAGE   8
 **MODELOPTs:   NonDFAULT 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            3 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  ***
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