Rule 1200 Health Risk Assessment

Facility Name:	Netly Fiber Holdings
Facility ID:	APCD2024-SITE-04517
Application:	APCD2024-APP-008188
Project Engineer:	Austin Stein
Modeler:	Bill Reeve
Toxics Risk Analyst:	Peter Ossowski
Date Submitted to Toxics:	7/02/2024
Date Completed by Toxics:	7/24/2024
HRA Tools Used:	Lakes-AERMOD (Version 23132)/HARP (v22118)

The following estimated risks are valid only for the input data provided by the Project Engineer.

Estimated worker risk does not exceed the residential risk. Therefore, only residential risk is presented in the following results.

Estimated Risk Levels:

Maximum Individual Cancer Risk (Resident)	1.64 in one million
Chronic Noncancer Health Hazard Index (Resident)	= 4.40E-04
Acute Health Hazard Index (*PMI)	= 0.155

*Point of Maximum Impact

The proposed application is for a stationary diesel emergency engine. The ARB Air Toxics Control Measure (ATCM) limits non-emergency operations to 50 hours per year.

The estimated cancer risk for the application exceeds Rule 1200 limits of 1 in one million (not equipped with T-BACT) at 50 hours, therefore the project is within Rule 1200 thresholds contingent on Routine Maintenance and Testing limited to 30 hours a year.

Input Data Provided by Project Engineer:

Type of Source: Diesel IC Engine.
Controls Description: None.

Worst-Case TAC Emissions Increase:

Toxic Air Contaminant	Hourly Emission Rate (lb/hr)	Annual Emission Rate (lb/yr)
DIESEL PARTICULATE	N/A	2.60E+00
ACETALDEHYDE	7.86E-03	3.93E-01
ACROLEIN*	3.40E-04	1.70E-02
ARSENIC COMPOUNDS	1.61E-05	8.03E-04
BENZENE	1.87E-03	9.35E-02
BUTADIENE, 1,3-	2.18E-03	1.09E-01
CADMIUM AND COMPOUNDS	1.51E-05	7.53E-04
CHLOROBENZENE	2.01E-06	1.00E-04
CHROMIUM (HEXAVALENT)	1.00E-06	5.02E-05
COPPER AND COMPOUNDS	4.12E-05	2.06E-03
ETHYL BENZENE	1.09E-04	5.47E-03
FORMALDEHYDE	1.73E-02	8.67E-01
HEXANE-N	2.70E-04	1.35E-02
HYDROCHLORIC ACID	1.87E-03	9.35E-02
LEAD & COMPOUNDS	8.33E-05	4.17E-03
MANGANESE AND COMPOUNDS	3.11E-05	1.56E-03
MERCURY AND COMPOUNDS (INORGANIC)	2.01E-05	1.00E-03
NAPHTHALENE	1.98E-04	9.89E-03
NICKEL AND NICKEL COMPOUNDS	3.92E-05	1.96E-03
POLYCYCLIC AROM. HC (PAH) [Treat as B(a)P for HRA]	3.63E-04	1.82E-02
PROPYLENE	4.69E-03	2.34E-01
SELENIUM AND COMPOUNDS	2.21E-05	1.10E-03
TOLUENE	1.06E-03	5.29E-02
XYLENES	4.26E-04	2.13E-02

Source: Acute TACs – Ventura County, 5/17/01.

Diesel particulate exhaust is a surrogate for all toxic air contaminant annual emissions from diesel-fueled engines when determining the potential cancer risk and noncancer chronic hazard index. Speciated toxic air contaminant hourly emissions are used when determining the potential noncancer acute hazard index.

Process Data:

Operation Parameter	Value
Diesel particulate emission factor (g/hp-hr)	0.12
Engine horsepower (bhp)	198
Fuel Consumption (gal/hr)	10.04
Annual hours of operation	50

Release Parameters:

Exhaust Flow Rate, cfm:	885
Exhaust Temperature, °F:	885
Stack Height above ground, ft:	8.8
Stack Diameter, ft:	0.4

Discussion

The HRA was conducted in accordance with EPA and OEHHA guidance and District standard procedures. A point source was modeled with refined air dispersion modeling using EPA's AERMOD model, AERMET (Version 22112) processed Del Mar 2010/2012 sigma theta meteorology data, AERMAP terrain processing, and urban dispersion coefficients. Building downwash effects were calculated using the EPA BPIP-Prime model. The receptor grid was sufficiently dense to identify maximum impacts.

Since there is a school within a 1 in one million residential cancer risk isopleth, a fraction of time (FAH) was not applied to ages less than 16 years.

These risk results are based on the risk scenario calculations and health data at the time of the review, and should not be scaled with revised emissions rates without consulting with the Toxics Section.

HARP2 - HRACalc (dated 22118) 7/24/2024 11:38:31 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home

3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Warm

****
TIER 2 SETTINGS
Tier2 not used.

****

Calculating cancer risk
Cancer risk saved to: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahNCAcuteRisk.csv
HRA ran successfully

*HARP - HRACalc v22118 7/24/2024 11:38:31 AM - Cancer Risk - Input File: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO
1	Engine		9901	DieselExhPM	0.0022	1.64E-06	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
						1.64E+00	
					Hours for <1 Risk =	30	

*HARP - HRACalc v22118 7/24/2024 11:38:31 AM - Chronic Risk - Input File: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RESP	SCENARIO
1	Engine		9901	DieselExhPM	0.0022	4.40E-04	NonCancerChronicDerived_InhSoilDermMMilk

*HARP - HRACalc v22118 7/24/2024 11:38:31 AM - Acute Risk - Input File: C:\Users\possowsk\Desktop\8188_Netly Fiber Holdings\risk\nofahHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	EYE	SCENARIO
1	Engine		9901	DieselExhPM	0	0.00E+00	NonCancerAcute
2	Engine		75070	Acetaldehyde	2.6	5.53E-03	NonCancerAcute
3	Engine		107028	Acrolein	0.113	4.52E-02	NonCancerAcute
4	Engine		7440382	Arsenic	0.00531	0.00E+00	NonCancerAcute
5	Engine		71432	Benzene	0.619	0.00E+00	NonCancerAcute
6	Engine		106990	1,3-Butadiene	0.721	0.00E+00	NonCancerAcute
7	Engine		7440439	Cadmium	0.00498	0.00E+00	NonCancerAcute
8	Engine		108907	Chlorobenzn	0.000664	0.00E+00	NonCancerAcute
9	Engine		18540299	Cr(VI)	0.000332	0.00E+00	NonCancerAcute
10	Engine		7440508	Copper	0.0136	0.00E+00	NonCancerAcute
11	Engine		100414	Ethyl Benzene	0.0362	0.00E+00	NonCancerAcute
12	Engine		50000	Formaldehyde	5.73	1.04E-01	NonCancerAcute
13	Engine		110543	Hexane	0.0893	0.00E+00	NonCancerAcute
14	Engine		7647010	HCl	0.619	2.95E-04	NonCancerAcute
15	Engine		7439921	Lead	0.0276	0.00E+00	NonCancerAcute
16	Engine		7439965	Manganese	0.0103	0.00E+00	NonCancerAcute
17	Engine		7439976	Mercury	0.00664	0.00E+00	NonCancerAcute
18	Engine		91203	Naphthalene	0.0654	0.00E+00	NonCancerAcute
19	Engine		7440020	Nickel	0.013	0.00E+00	NonCancerAcute
20	Engine		1151	PAHs-w/o	0.12	0.00E+00	NonCancerAcute
21	Engine		115071	Propylene	1.55	0.00E+00	NonCancerAcute
22	Engine		7782492	Selenium	0.00731	0.00E+00	NonCancerAcute
23	Engine		108883	Toluene	0.35	7.00E-05	NonCancerAcute
24	Engine		1330207	Xylenes	0.141	6.41E-06	NonCancerAcute
						1.55E-01	

FACILITY NAME: Netly Fiber Holdings

Fuel Consumption (gal/hr):	10.04
Diesel Particulate Emission Factor (g/hp-hr):	0.11936
Brake Horsepower (hp):	198
Annual Hours of Operation (hrs):	50
FACILITY ID:	APCD2024-SITE-04517
APPLICATION NO.:	APCD2024-APP-008188
ENGINEER:	**Austin Stein**

RISK ANALYST ONLY

DISPERSION MODELING DATA

Annual Receptor Type:	Resident
ANNUAL DISPERSION FACTOR (µg/m3)/(g/s):	**58.8**
Distance (m):	
Hourly Receptor Type:	PMI
HOURLY DISPERSION FACTOR (µg/m3)/(g/s):	**2625.2**
Distance (m):	

CHEMICAL NAME	Emission Factor lb/1000 gal	Acute Emission Rate lb/hr	Annual Emission Rate lb/yr	Acute Emissions Rate g/s	Annual Emission Rate g/s	Hourly GLC µg/m^3	Annual GLC µg/m^3
DIESEL PARTICULATE			2.60E+00		3.74E-05		2.20E-03
ACETALDEHYDE	7.83E-01	7.86E-03	3.93E-01	9.91E-04		2.60E+00	
ACROLEIN*	3.39E-02	3.40E-04	1.70E-02	4.29E-05		1.13E-01	
ARSENIC COMPOUNDS	1.60E-03	1.61E-05	8.03E-04	2.02E-06		5.31E-03	
BENZENE	1.86E-01	1.87E-03	9.35E-02	2.36E-04		6.19E-01	
BUTADIENE, 1,3-	2.17E-01	2.18E-03	1.09E-01	2.75E-04		0.7206536	
CADMIUM AND COMPOUNDS	1.50E-03	1.51E-05	7.53E-04	1.90E-06		4.98E-03	
CHLOROBENZENE	2.00E-04	2.01E-06	1.00E-04	2.53E-07		6.64E-04	
CHROMIUM (HEXAVALENT)	1.00E-04	1.00E-06	5.02E-05	1.27E-07		3.32E-04	
COPPER AND COMPOUNDS	4.10E-03	4.12E-05	2.06E-03	5.19E-06		1.36E-02	
ETHYL BENZENE	1.09E-02	1.09E-04	5.47E-03	1.38E-05		3.62E-02	
FORMALDEHYDE	1.73E+00	1.73E-02	8.67E-01	2.18E-03		5.73E+00	
HEXANE-N	2.69E-02	2.70E-04	1.35E-02	3.40E-05		8.93E-02	
HYDROCHLORIC ACID	1.86E-01	1.87E-03	9.35E-02	2.36E-04		6.19E-01	
LEAD & COMPOUNDS	8.30E-03	8.33E-05	4.17E-03	1.05E-05		2.76E-02	
MANGANESE AND COMPOUNDS	3.10E-03	3.11E-05	1.56E-03	3.92E-06		1.03E-02	
MERCURY AND COMPOUNDS (INORGANIC)	2.00E-03	2.01E-05	1.00E-03	2.53E-06		6.64E-03	
NAPHTHALENE	1.97E-02	1.98E-04	9.89E-03	2.49E-05		6.54E-02	
NICKEL AND NICKEL COMPOUNDS	3.90E-03	3.92E-05	1.96E-03	4.93E-06		1.30E-02	
POLYCYCLIC AROM. HC (PAH) [Treat as B(a)P for	3.62E-02	3.63E-04	1.82E-02	4.58E-05		1.20E-01	
PROPYLENE	4.67E-01	4.69E-03	2.34E-01	5.91E-04		1.55E+00	
SELENIUM AND COMPOUNDS	2.20E-03	2.21E-05	1.10E-03	2.78E-06		7.31E-03	
TOLUENE	1.05E-01	1.06E-03	5.29E-02	1.33E-04		3.50E-01	
XYLENES	4.24E-02	4.26E-04	2.13E-02	5.36E-05		1.41E-01	

PROJECT TITLE:

C:\Users\breeve\OneDrive - County of San Diego\HDrive\Modeling Proje

COMMENTS:

SOURCES:

1

RECEPTORS:

17984

Concentration

93.6 ug/m^3

COMPANY NAME:

SDAPCD

MODELER:

PO

DATE:

7/24/2024

SCALE: 1:1,000

0 0.03 km

PROJECT NO.:

PROJECT TITLE:

C:\Users\breeve\OneDrive - County of San Diego\HDrive\Modeling Proje

COMMENTS:

SOURCES:

1

RECEPTORS:

17984

Concentration

2625 ug/m^3

COMPANY NAME:

SDAPCD

MODELER:

PO

DATE:

7/24/2024

SCALE: 1:1,000

0 0.03 km

PROJECT NO.:

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** MODEL SETUP OPTIONS SUMMARY ***

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
STCK1	0	0.10000E+01	475926.2	3650995.4	41.3	2.68	747.04	32.45	0.13	YES	YES	NO	

*** AERMOD - VERSION 23132 *** *** C:\Users\breeve\OneDrive - County of San Diego\HDrive\Modeling Proje *** 07/23/24
*** AERMET - VERSION 22112 *** *** *** 09:24:16
PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

** Model Options Selected:
* Model Uses Regulatory DEFAULT Options
* Model Is Setup For Calculation of Average CONCentration Values.
* NO GAS DEPOSITION Data Provided.
* NO PARTICLE DEPOSITION Data Provided.
* Model Uses NO DRY DEPLETION. DDPLETE = F
* Model Uses NO WET DEPLETION. WETDPLT = F
* Stack-tip Downwash.
* Model Accounts for ELEVated Terrain Effects.
* Use Calms Processing Routine.
* Use Missing Data Processing Routine.
* No Exponential Decay.
* Model Uses URBAN Dispersion Algorithm for the SBL for 1 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 189946.0 ; Urban Roughness Length = 1.000 m
* Urban Roughness Length of 1.0 Meter Used.
* CCVR_Sub - Meteorological data includes CCVR substitutions
* NOTURBST - Meteorological data Ignore turbulence - stable hours

```
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: OTHER

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates PERIOD Averages

**This Run Includes:      1 Source(s);       1 Source Group(s); and   17984 Receptor(s)

               with:      1 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


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

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         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) =    39.00 ;  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 =      5.5 MB of RAM.
```

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

**Detailed Error/Message File:   8188_Netly.err
**File for Summary of Results:   8188_Netly.sum
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                              *** 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  URBAN  SigA Data

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

Surface file: ..\..\AERMET\AERMET 22112 data\DMR 2010_2012_sigma_v22112.SFC Met Version: 22112
Profile file: ..\..\AERMET\AERMET 22112 data\DMR 2010_2012_sigma_v22112.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

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
10	01	01	1	01	-2.6	0.050	-9.000	-9.000	-999.	27.	4.3	0.04	0.32	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-2.6	0.050	-9.000	-9.000	-999.	27.	4.3	0.04	0.32	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-4.5	0.066	-9.000	-9.000	-999.	40.	5.6	0.04	0.32	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-1.1	0.033	-9.000	-9.000	-999.	14.	2.8	0.04	0.32	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-0.3	0.016	-9.000	-9.000	-999.	5.	1.4	0.04	0.32	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-2.6	0.049	-9.000	-9.000	-999.	26.	4.2	0.04	0.32	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-4.5	0.066	-9.000	-9.000	-999.	40.	5.6	0.04	0.32	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-5.7	0.082	-9.000	-9.000	-999.	57.	8.8	0.04	0.32	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	17.6	0.041	0.281	0.016	46.	20.	-1.0	0.01	0.32	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	42.3	0.127	0.475	0.010	91.	108.	-4.4	0.03	0.32	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	59.7	0.075	0.671	0.009	182.	50.	-1.0	0.01	0.32	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	67.5	0.101	0.839	0.008	315.	77.	-1.4	0.01	0.32	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	66.3	0.124	0.907	0.008	405.	105.	-2.6	0.01	0.32	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	55.8	0.123	0.898	0.008	466.	103.	-3.0	0.01	0.32	0.17	1.78	309.	10.0	289.8	2.0
10	01	01	1	15	37.0	0.119	0.804	0.008	504.	98.	-4.1	0.01	0.32	0.20	1.78	321.	10.0	290.3	2.0
10	01	01	1	16	11.0	0.113	0.540	0.008	514.	91.	-11.7	0.03	0.32	0.29	1.34	341.	10.0	289.8	2.0
10	01	01	1	17	-1.0	0.031	-9.000	-9.000	-999.	20.	2.8	0.03	0.32	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-0.2	0.015	-9.000	-9.000	-999.	5.	1.3	0.03	0.32	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-2.3	0.049	-9.000	-9.000	-999.	26.	4.5	0.04	0.32	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-2.5	0.050	-9.000	-9.000	-999.	27.	4.3	0.04	0.32	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-1.1	0.033	-9.000	-9.000	-999.	14.	2.8	0.04	0.32	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-1.1	0.033	-9.000	-9.000	-999.	14.	2.8	0.04	0.32	1.00	0.89	65.	10.0	285.3	2.0
10	01	01	1	23	-1.1	0.033	-9.000	-9.000	-999.	14.	2.8	0.04	0.32	1.00	0.89	56.	10.0	285.3	2.0
10	01	01	1	24	-1.1	0.033	-9.000	-9.000	-999.	14.	2.8	0.04	0.32	1.00	0.89	51.	10.0	285.3	2.0

First hour of profile data

```
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 10 01 01 01   10.0 1   57.    1.34  -999.0   99.0  -99.00  -99.00

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



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                    *** THE SUMMARY OF MAXIMUM PERIOD ( 26304 HRS) RESULTS ***


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

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

ALL       1ST HIGHEST VALUE IS      93.55418 AT (  475872.12,  3650983.36,    40.46,    91.42,    0.00)  DC
          2ND HIGHEST VALUE IS      82.31731 AT (  475879.24,  3650989.03,    41.08,    91.10,    0.00)  DC
          3RD HIGHEST VALUE IS      76.76559 AT (  475864.99,  3650977.69,    40.19,    91.42,    0.00)  DC
          4TH HIGHEST VALUE IS      72.56404 AT (  475861.50,  3650986.50,    40.34,    91.42,    0.00)  DC
          5TH HIGHEST VALUE IS      70.72055 AT (  475857.86,  3650972.03,    39.79,    91.42,    0.00)  DC
          6TH HIGHEST VALUE IS      68.14808 AT (  475846.50,  3650986.50,    41.70,    91.38,    0.00)  DC
          7TH HIGHEST VALUE IS      65.55179 AT (  475846.50,  3650971.50,    39.34,    91.52,    0.00)  DC
          8TH HIGHEST VALUE IS      64.92810 AT (  475929.20,  3650980.17,    40.80,    90.03,    0.00)  DC
          9TH HIGHEST VALUE IS      63.63590 AT (  475831.50,  3650986.50,    45.14,    89.86,    0.00)  DC
         10TH HIGHEST VALUE IS      63.35913 AT (  475850.73,  3650966.36,    39.78,    91.38,    0.00)  DC


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



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
```

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

** CONC OF OTHER   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	2625.20111	ON 11091012: AT (475932.47, 3650996.80, 41.56, 90.80, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

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

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

A Total of   0 Fatal Error Message(s)
A Total of   9 Warning Message(s)
A Total of   15042 Informational Message(s)

A Total of   26304 Hours Were Processed

A Total of   1791 Calm Hours Identified

A Total of   505 Missing Hours Identified (1.92 Percent)

   ******** FATAL ERROR MESSAGES ********

```
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
MX W403     102       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       1       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       2       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       3       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       4       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       5       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       6       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       7       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
MX W403       8       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data
```