November 14, 2022

Katherine Shipley
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RE: Otay Ranch Town Center – Health Risk Screening Letter City of Chula Vista CA

The purpose of this Air Quality Heath Risk screening letter is to identify potential health risks at the proposed project site from Diesel Particulate Matter (DPM) originating from State Route 125 (SR-125). The Project proposes to construct 840 multi-family residential units and 669,700 Square Foot (SF) of retail space within the City of Chula Vista, CA. The residential units would be as close as 100 feet to the east of SR-125.

This health risk analysis uses the California Office of Environmental Health Hazard Assessment (OEHHA) methodologies (Office of Environmental Health Hazard Assessment, 2015) as outlined by the California Air Pollution Control Officers Association (CAPCOA, July 2009). Health risk impacts are generally broken up into two various types. Type A project: are projects which have the potential to emit toxic emissions and have the potential to impact nearby receptor. Type B projects: place receptors in the vicinity of existing toxic sources like freeways, high traffic roads or rail yards. Based on this information the proposed project is classified as Type B.

Projects within the San Diego County air basin are generally regulated by San Diego Air Pollution Control District (SDAPCD). For Type A projects, significance thresholds have been established under SDAPCDs "Hot Spots" and permitting program (SDAPCD Rule 1200 and 1210). Under this program, excess cancer risk significance threshold is set at **10 in a million** and acute and chronic, non-carcinogenic health effect, a hazard index of **one** must not be exceeded.

For Type B projects, there are no clear significance thresholds. California Environmental Quality Act (CEQA) statutes encourage an air district or any lead agency to establish Type B significance thresholds under CEQA for any pollutant. While there are considerations that support the establishment of thresholds, there is no obligation to do so. Significance thresholds for Type B projects within the City of San Diego and the County of San Diego have also not been defined. According to CAPCOA Air districts have historically recommended CEQA thresholds for air pollutants in the context of the air district's clean air attainment plan, or (in the case of toxic air pollutants) within the framework of a rule or policy that manages risks and exposures due to toxic pollutants such as SDAPCDs Rule 1200 and 1210 for Type A projects above. For purposes

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of this analysis significance thresholds will be assumed to be those of the "Hot Spot" program discussed above.

Cancer risk calculations are often presented on a 9, 30 or 70 year lifetime exposure duration. The 9 year exposure scenario is based on exposure to children during the first 9 years of life. Some districts use the 9 year exposure scenario to model short term projects. (CAPCOA, July 2009). For purposes of this analysis, it is reasonable to assume a 30 year duration but a 70 year duration is also presented. For purposes of modeling, AERMOD was used for air quality dispersion modeling and is the preferred/recommended U.S. Environmental Protection Agency (EPA) model for roadway modeling. The software has the ability to incorporate meteorological inputs as well as multiple source and receptor locations and is now used throughout the world. The model input/output is shown in **Attachment A** to this letter.

SR-125 is adjacent to the overall project site which is located between the Otay River Bridge and the on/off ramp of Olympic Parkway. According to Caltrans, the annual average daily trips are 15,500 AADT (CALTRANS, 2020ADT EXCEL Download, 2022) along this section of SR-125 today. SANDAGs ABM2+/2021 RP forecast for 2035 indicates that this section of roadway would have 37,800 AADT (SANDAG, 2022). An analysis completed for Otay Village 8 however estimated that trips could be as high as 94,000. For consistency, this analysis also utilizes the 94,000 AADT. In addition, the California Air Resource Boards EMFAC 2021 web database model was used for emission rates under a 2030 calendar scenario.

Modeling at the site included coordinates for SR-125 are represented by multiple volume sources within AERMOD to calculate roadway emissions and are identified as red squares, the black grid represents a receptor matrix made up of computer-generated receptors used by AERMOD to calculate emission values for contour and discreet outputs. A graphical representation of the modeling locations is shown on a site aerial below in Figure 1. Figure 2 shows the discreet receptors locations around the residential building facades.

The emission rates assumptions incorporate projected mixed vehicle categories, aggregated vehicle model years, a 65 mile per hour (MPH) speed and the running emissions from all diesel sources which best matches SR-125. The emission rates for each vehicle type were then categorized in terms of categorized Vehicle Miles Traveled (VMT) divided by Total fleet VMT. The data is further broken down into only Diesel particulates which are then used as inputs to AERMOD. The EMFAC Model and Normalization calculations are shown for SR-125 in **Attachments B** to this letter.

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Figure 1: Modeling Graphical Layout

□ AERMOD Volume Sources for Roadway

✚ AERMOD Receptor Grid used for Discreet Emission Calculations and Emission Contours

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Figure 2: Discreet Receptor Locations

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Based on discussions with the project applicant, all residential homes constructed as part of this project will have mechanical ventilation filtration systems consistent with the latest building codes such as California's Title 24. Typical indoor air filtration systems used within todays heating and ventilation systems within California and consistent with Title 24 have a Minimum Efficiency Reporting Value (MERV) rating of 13 (California Energy Commission, 2019).

The US Environmental Protection Agency indicates that MERV 13 filtration systems reduce particulates between 1 and 3 microns by 85% and particles less than 10 microns (PM_{10}) by 90% relative to outdoor ambient air (EPA, 2021).

The annual diesel particulate concentrations at the modeled receptors are summarized below in Table 1 and include the expected reductions within the interior of all residential structures which would have a minimum air filtration system of MERV 13. The modeled output plot from AERMOD is shown in Figure 3 below.

Table 1: Annual DPM Concentrations at each Receptor

Discreet Receptor AERMOD Name	Concentration ($\mu g/m^3$)
R1	0.0104
R2	0.0131
R3	0.0091

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Figure 3: Modeling Graphical DPM Concentration Output

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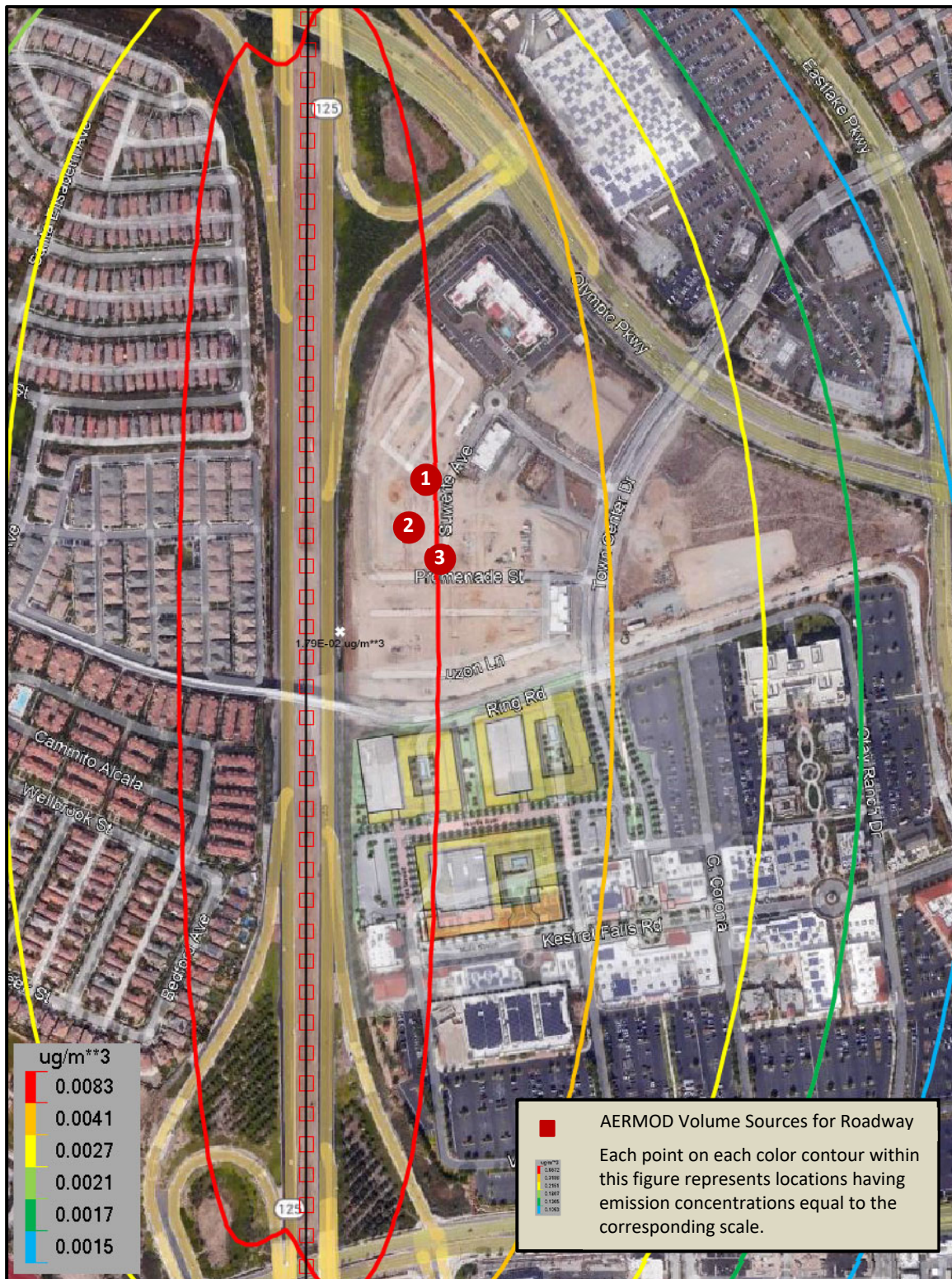
Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Cancer Risk Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst-case cancer risk dose calculation is defined in Equation 1 below (OEHHA, 2015):

Equation 1 $$Dose_{air}=C_{air}*(BR/BW)*A*EF*(1x10^{-6})$$

$Dose_{air}$	=	Dose through inhalation (mg/kg/d)
C_{air}	=	Concentration in air (µg/m3) Annual average DPM concentration in µg/m3 – AERMOD
BR/BW	=	Daily average breathing rates normalized to body weight (L/kg BW-day).
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
$1x10^{-6}$	=	Milligrams to micrograms conversion (10^{-3} mg/ µg), cubic meters to liters conversion (10^{-3} m³/l)

Once the dose is determined then you must calculate the cancer risk. The average daily inhalation dose (mg/kg-day) multiplied by the cancer potency factor (mg/kg-day)-1 will give the inhalation cancer risk (unitless), which is an expression of the chemical's cancer risk during a 70-year lifespan of exposure. For example, an inhalation cancer risk of 5 x 10-6 is the same as stating that an individual has an estimated probability of developing cancer from their exposure of 5 chances per million people exposed.

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. The worst-case cancer risk calculation is defined in Equation 2 below (OEHHA, 2015).

Equation 2 $$RISK_{inh-res}=DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$$

$RISK_{inh-res}$	=	Residential inhalation cancer risk
$DOSE_{air}$	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day^{-1})
ASF	=	Age sensitivity factor for a specified age group (unitless)

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ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

The results of the cancer risk calculations are shown in Table 2 below. The detailed model input/output is also provided as **Attachment C** to this report. Based on these calculations, cancer risks from DPM generated from SR-125 would not exceed the 10 per one million exposed thresholds within any units constructed within the Otay Village 8 East specific plan.

Table 2: Cancer Risk at Worst-Case Indoor Receptors (MERV 13 Design Feature)

Receptor	C_i	Unmitigated Cancer Risk (30 Years)	Unmitigated Cancer Risk (70 Years)	Potential Impact
R1	0.0063	4.31	5.54	No
R2	0.0069	5.43	7.06	No
R3	0.0065	3.77	4.91	No
C_i annual inputs from AERMOD within prospective building.				
Cancer Risk = DOSEair × CPF × ASF × ED/AT × FAH				

It is important to note that this assessment serves simply as a disclosure document to providing a characterization of the background emissions that occupants of the proposed project may be exposed to. If you should have any questions regarding this assessment, please do not hesitate to contact me at (760) 473-1253.

Sincerely,
Ldn Consulting, Inc.

Jeremy Louden

References:

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Attachments:

A: AERMOD

B: EMFAC 2021 Emission Factors – 2025

C: Cancer Risk Calculations

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1                      AERMOD PRIME - (DATED  19191)

                         AERMODPrMSPx VERSION
                  (C) COPYRIGHT 1998-2017, Trinity Consultants

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** Trinity Consultants
** VERSION  10.0

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RE GRIDCART JRC3L02K HILL 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART JRC3L02K HILL 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART JRC3L02K HILL 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART JRC3L02K HILL 21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART JRC3L02K END
RE DISCCART  502775.3  3609760.7  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  502746.1  3609680.3  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  502793.9  3609652.9  0  0
** SENSITIV
** RCPDESCR  R3
```

```
RE FINISHED

ME STARTING
ME SURFFILE   "C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.SFC"
** SURFFILE   "C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.SFC"
ME PROFFILE   "C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.PFL"
** PROFFILE   "C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.PFL"
ME SURFDATA   93107 2012 OVERLANDSURFACESTATION
ME UAIRDATA   3190 2012 OVERLANDUPPERSTATION
ME SITEDATA   00001016 2012
ME PROFBASE   116  METERS
ME FINISHED

OU STARTING
OU FILEFORM   FIX
OU PLOTFILE   ANNUAL  ALL  ALL`ANNUAL.plt  10000
OU FINISHED

** *****************************************************************************
** It is recommended that the user not edit any data below this line
** *****************************************************************************


** TAG NAM  JRC3L019
** TAG PRM  0  2  F  F  1  255,0,0,0
** TAG CRD   502686.4,3610484.7,0,502684.5,3610123.4,0,502684.5,3609736.0,0,502684.5,3609225.7,0

** TERRFILE  C:\USERS\RYAN_000\ONEDRIVE\LDNWOR~1\17-903~1\AERMOD\NEDU17~1\NEDU17991156.TIF  2  0  WGS84  11  0
486620.4 3617040.8  486627.8  3622511.1  491372.6  3622505.8  491367.9  3617035.5
** AMPTYPE   NED
** AMPDATUM  3
** AMPZONE   11
** AMPHEMISPHERE   N

** PROJECTIONWKT
PROJCS["UTM_4326_Zone2",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.25722356
3],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transvers
e_Mercator"],PARAMETER["Zone",2],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION   UTM
** DATUM   WGE
** UNITS   METER
** ZONE   2
** HEMISPHERE   N
** ORIGINLON   0
** ORIGINLAT   0
** PARALLEL1   0
** PARALLEL2   0
** AZIMUTH   0
** SCALEFACT   0
** FALSEEAST   0
** FALSENORTH   0

** POSTFMT   UNFORM
** TEMPLATE USERDEFINED
** AERMODEXE  AERMOD_BREEZE_19191_64.EXE
** AERMAPEXE  AERMAP_EPA_11103.EXE



  *** Message Summary For AERMOD Model Setup ***

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

 A Total of         0 Fatal Error Message(s)
 A Total of         1 Warning Message(s)
 A Total of         0 Informational Message(s)


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

```
                  ***   NONE  ***


     ********   WARNING MESSAGES   ********
 MX W403     219        PFLCNV: Turbulence data is being used w/o ADJ_U* option      SigA Data


 **********************************
 *** SETUP Finishes Successfully ***
 **********************************


♠ *** AERMOD - VERSION  19191 ***   ***  PM10 Exhaust I 125                                      ***
    11/11/22
 *** AERMET - VERSION  15181 ***   ***                                                          ***
   10:44:19

   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

                                      ***     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 Uses Regulatory DEFAULT 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.

 **Other Options Specified:
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM10

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:    42 Source(s);      1 Source Group(s); and     444 Receptor(s)

               with:       0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                and:      42 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      0 line(s)


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

 **The AERMET Input Meteorological Data Version Date:  15181

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
```

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   116.00 ; 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 =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

⬆ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
    11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
  10:44:19

    PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                              *** VOLUME SOURCE DATA ***

                 NUMBER EMISSION RATE   BASE   RELEASE   INIT.   INIT.   URBAN EMISSION RATE
      SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY   SZ   SOURCE SCALAR VARY
        ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS) (METERS)   BY
- -
- - - -

  JRC3L01A   0   0.35283E-05 502686.3 3610469.7   0.0   3.00   13.95   2.79   NO
  JRC3L01B   0   0.35283E-05 502686.2 3610439.7   0.0   3.00   13.95   2.79   NO
  JRC3L01C   0   0.35283E-05 502686.0 3610409.7   0.0   3.00   13.95   2.79   NO
  JRC3L01D   0   0.35283E-05 502685.8 3610379.7   0.0   3.00   13.95   2.79   NO
  JRC3L01E   0   0.35283E-05 502685.7 3610349.7   0.0   3.00   13.95   2.79   NO
  JRC3L01F   0   0.35283E-05 502685.5 3610319.7   0.0   3.00   13.95   2.79   NO
  JRC3L01G   0   0.35283E-05 502685.4 3610289.7   0.0   3.00   13.95   2.79   NO
  JRC3L01H   0   0.35283E-05 502685.2 3610259.7   0.0   3.00   13.95   2.79   NO
  JRC3L01I   0   0.35283E-05 502685.1 3610229.7   0.0   3.00   13.95   2.79   NO
  JRC3L01J   0   0.35283E-05 502684.9 3610199.7   0.0   3.00   13.95   2.79   NO
  JRC3L01K   0   0.35283E-05 502684.7 3610169.7   0.0   3.00   13.95   2.79   NO
  JRC3L01L   0   0.35283E-05 502684.6 3610139.7   0.0   3.00   13.95   2.79   NO
  JRC3L01M   0   0.35283E-05 502684.5 3610109.7   0.0   3.00   13.95   2.79   NO
  JRC3L01N   0   0.35283E-05 502684.5 3610079.7   0.0   3.00   13.95   2.79   NO
  JRC3L01O   0   0.35283E-05 502684.5 3610049.7   0.0   3.00   13.95   2.79   NO
  JRC3L01P   0   0.35283E-05 502684.5 3610019.7   0.0   3.00   13.95   2.79   NO
  JRC3L01Q   0   0.35283E-05 502684.5 3609989.7   0.0   3.00   13.95   2.79   NO
  JRC3L01R   0   0.35283E-05 502684.5 3609959.7   0.0   3.00   13.95   2.79   NO
  JRC3L01S   0   0.35283E-05 502684.5 3609929.7   0.0   3.00   13.95   2.79   NO
  JRC3L01T   0   0.35283E-05 502684.5 3609899.7   0.0   3.00   13.95   2.79   NO
  JRC3L01U   0   0.35283E-05 502684.5 3609869.7   0.0   3.00   13.95   2.79   NO
  JRC3L01V   0   0.35283E-05 502684.5 3609839.7   0.0   3.00   13.95   2.79   NO
  JRC3L01W   0   0.35283E-05 502684.5 3609809.7   0.0   3.00   13.95   2.79   NO
  JRC3L01X   0   0.35283E-05 502684.5 3609779.7   0.0   3.00   13.95   2.79   NO
  JRC3L01Y   0   0.35283E-05 502684.5 3609749.7   0.0   3.00   13.95   2.79   NO
  JRC3L01Z   0   0.35283E-05 502684.5 3609719.7   0.0   3.00   13.95   2.79   NO
  JRC3L020   0   0.35283E-05 502684.5 3609689.7   0.0   3.00   13.95   2.79   NO
  JRC3L021   0   0.35283E-05 502684.5 3609659.7   0.0   3.00   13.95   2.79   NO
  JRC3L022   0   0.35283E-05 502684.5 3609629.7   0.0   3.00   13.95   2.79   NO
  JRC3L023   0   0.35283E-05 502684.5 3609599.7   0.0   3.00   13.95   2.79   NO
  JRC3L024   0   0.35283E-05 502684.5 3609569.7   0.0   3.00   13.95   2.79   NO
  JRC3L025   0   0.35283E-05 502684.5 3609539.7   0.0   3.00   13.95   2.79   NO
  JRC3L026   0   0.35283E-05 502684.5 3609509.7   0.0   3.00   13.95   2.79   NO
  JRC3L027   0   0.35283E-05 502684.5 3609479.7   0.0   3.00   13.95   2.79   NO
  JRC3L028   0   0.35283E-05 502684.5 3609449.7   0.0   3.00   13.95   2.79   NO
  JRC3L029   0   0.35283E-05 502684.5 3609419.7   0.0   3.00   13.95   2.79   NO

```
JRC3L02A          0  0.35283E-05  502684.5 3609389.7    0.0    3.00   13.95    2.79    NO
JRC3L02B          0  0.35283E-05  502684.5 3609359.7    0.0    3.00   13.95    2.79    NO
JRC3L02C          0  0.35283E-05  502684.5 3609329.7    0.0    3.00   13.95    2.79    NO
JRC3L02D          0  0.35283E-05  502684.5 3609299.7    0.0    3.00   13.95    2.79    NO
```

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
      11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
    10:44:19

    PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** VOLUME SOURCE DATA ***

	NUMBER	EMISSION RATE			BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY

```
 JRC3L02E          0  0.35283E-05  502684.5 3609269.7    0.0    3.00   13.95    2.79    NO
 JRC3L02F          0  0.35283E-05  502684.5 3609239.7    0.0    3.00   13.95    2.79    NO
```

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
      11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
    10:44:19

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 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

```
 SRCGROUP ID                              SOURCE IDs
 -----------                              ----------


   ALL      JRC3L01A   , JRC3L01B   , JRC3L01C   , JRC3L01D   , JRC3L01E   , JRC3L01F   , JRC3L01G   ,
 JRC3L01H   ,

            JRC3L01I   , JRC3L01J   , JRC3L01K   , JRC3L01L   , JRC3L01M   , JRC3L01N   , JRC3L01O   ,
 JRC3L01P   ,

            JRC3L01Q   , JRC3L01R   , JRC3L01S   , JRC3L01T   , JRC3L01U   , JRC3L01V   , JRC3L01W   ,
 JRC3L01X   ,

            JRC3L01Y   , JRC3L01Z   , JRC3L020   , JRC3L021   , JRC3L022   , JRC3L023   , JRC3L024   ,
 JRC3L025   ,

            JRC3L026   , JRC3L027   , JRC3L028   , JRC3L029   , JRC3L02A   , JRC3L02B   , JRC3L02C   ,
 JRC3L02D   ,

            JRC3L02E   , JRC3L02F   ,
```

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
      11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
    10:44:19

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 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

```
        502382.6,  502430.6,  502478.6,  502526.6,  502574.6,  502622.6,  502670.6,  502718.6,  502766.6,  502814.6,
        502862.6,  502910.6,  502958.6,  503006.6,  503054.6,  503102.6,  503150.6,  503198.6,  503246.6,  503294.6,
        503342.6,
```

                         *** Y-COORDINATES OF GRID ***
                                   (METERS)

```
      3610512.6, 3610447.8, 3610383.0, 3610318.2, 3610253.4, 3610188.6, 3610123.8, 3610059.0, 3609994.2, 3609929.4,
      3609864.6, 3609799.8, 3609735.0, 3609670.2, 3609605.4, 3609540.6, 3609475.8, 3609411.0, 3609346.2, 3609281.4,
      3609216.6,
```
♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
     11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

    PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                   *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                          * ELEVATION HEIGHTS IN METERS *

```
    Y-COORD  |                                  X-COORD (METERS)
    (METERS) |    502382.60     502430.60     502478.60     502526.60     502574.60     502622.60     502670.60
502718.60    502766.60
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - -

   3609216.60 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609281.40 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609346.20 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609411.00 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609475.80 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609540.60 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609605.40 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609670.20 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609735.00 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609799.80 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609864.60 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609929.40 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3609994.20 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610059.00 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610123.80 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610188.60 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610253.40 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610318.20 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610383.00 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610447.80 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
0.00         0.00
   3610512.60 |         0.00          0.00          0.00          0.00          0.00          0.00          0.00
```

0.00   0.00

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
      11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

    PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                          *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                              * ELEVATION HEIGHTS IN METERS *

     Y-COORD | X-COORD (METERS)
     (METERS) | 502814.60   502862.60   502910.60   502958.60   503006.60   503054.60   503102.60
  503150.60   503198.60
  -
  - - - - - - - - -

   3609216.60 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609281.40 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609346.20 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609411.00 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609475.80 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609540.60 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609605.40 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609670.20 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609735.00 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609799.80 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609864.60 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609929.40 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3609994.20 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610059.00 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610123.80 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610188.60 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610253.40 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610318.20 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610383.00 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610447.80 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00
   3610512.60 | 0.00   0.00   0.00   0.00   0.00   0.00   0.00
  0.00   0.00

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
      11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

    PAGE   8
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

* ELEVATION HEIGHTS IN METERS *

Y-COORD	X-COORD (METERS)		
(METERS)	503246.60	503294.60	503342.60
3609216.60	0.00	0.00	0.00
3609281.40	0.00	0.00	0.00
3609346.20	0.00	0.00	0.00
3609411.00	0.00	0.00	0.00
3609475.80	0.00	0.00	0.00
3609540.60	0.00	0.00	0.00
3609605.40	0.00	0.00	0.00
3609670.20	0.00	0.00	0.00
3609735.00	0.00	0.00	0.00
3609799.80	0.00	0.00	0.00
3609864.60	0.00	0.00	0.00
3609929.40	0.00	0.00	0.00
3609994.20	0.00	0.00	0.00
3610059.00	0.00	0.00	0.00
3610123.80	0.00	0.00	0.00
3610188.60	0.00	0.00	0.00
3610253.40	0.00	0.00	0.00
3610318.20	0.00	0.00	0.00
3610383.00	0.00	0.00	0.00
3610447.80	0.00	0.00	0.00
3610512.60	0.00	0.00	0.00

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
    11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

   PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

* HILL HEIGHT SCALES IN METERS *

Y-COORD	X-COORD (METERS)								
(METERS)	502382.60	502430.60	502478.60	502526.60	502574.60	502622.60	502670.60	502718.60	502766.60
3609216.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609281.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609346.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609411.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609475.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609540.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609605.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609670.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609735.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609799.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609864.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

```
     0.00         0.00
    3609929.40 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3609994.20 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610059.00 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610123.80 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610188.60 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610253.40 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610318.20 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610383.00 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610447.80 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
    3610512.60 |         0.00       0.00       0.00       0.00       0.00       0.00       0.00
     0.00         0.00
```

 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                         *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                             * HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	502814.60	502862.60	502910.60	502958.60	503006.60	503054.60	503102.60	503150.60	503198.60
3609216.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609281.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609346.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609411.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609475.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609540.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609605.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609670.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609735.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609799.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609864.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609929.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3609994.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3610059.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3610123.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

```
   3610188.60 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
   3610253.40 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
   3610318.20 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
   3610383.00 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
   3610447.80 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
   3610512.60 |          0.00       0.00       0.00       0.00       0.00       0.00       0.00
0.00        0.00
```

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
    11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

   PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                    *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                              * HILL HEIGHT SCALES IN METERS *

```
   Y-COORD |                                      X-COORD (METERS)
   (METERS)|    503246.60    503294.60    503342.60
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - -

   3609216.60 |        0.00       0.00       0.00
   3609281.40 |        0.00       0.00       0.00
   3609346.20 |        0.00       0.00       0.00
   3609411.00 |        0.00       0.00       0.00
   3609475.80 |        0.00       0.00       0.00
   3609540.60 |        0.00       0.00       0.00
   3609605.40 |        0.00       0.00       0.00
   3609670.20 |        0.00       0.00       0.00
   3609735.00 |        0.00       0.00       0.00
   3609799.80 |        0.00       0.00       0.00
   3609864.60 |        0.00       0.00       0.00
   3609929.40 |        0.00       0.00       0.00
   3609994.20 |        0.00       0.00       0.00
   3610059.00 |        0.00       0.00       0.00
   3610123.80 |        0.00       0.00       0.00
   3610188.60 |        0.00       0.00       0.00
   3610253.40 |        0.00       0.00       0.00
   3610318.20 |        0.00       0.00       0.00
   3610383.00 |        0.00       0.00       0.00
   3610447.80 |        0.00       0.00       0.00
   3610512.60 |        0.00       0.00       0.00
```

♠ *** AERMOD - VERSION 19191 ***   *** PM10 Exhaust I 125   ***
    11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

   PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

         * SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
            LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

```
             SOURCE        - - RECEPTOR LOCATION - -        DISTANCE
               ID         XR (METERS)  YR (METERS)         (METERS)
           - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

             JRC3L01A        502670.6    3610447.8            -3.05
             JRC3L01B        502670.6    3610447.8           -12.42
             JRC3L01C        502670.6    3610383.0             0.82
```

```
                    JRC3L01D            502670.6        3610383.0              -14.45
                    JRC3L01F            502670.6        3610318.2              -15.02
                    JRC3L01H            502670.6        3610253.4              -14.10
                    JRC3L01I            502670.6        3610253.4               -2.22
                    JRC3L01J            502670.6        3610188.6              -11.90
                    JRC3L01K            502670.6        3610188.6               -6.42
                    JRC3L01L            502670.6        3610123.8               -8.81
                    JRC3L01M            502670.6        3610123.8              -10.20
                    JRC3L01N            502670.6        3610059.0               -5.07
                    JRC3L01O            502670.6        3610059.0              -13.28
                    JRC3L01P            502670.6        3609994.2               -0.96
                    JRC3L01Q            502670.6        3609994.2              -15.39
                    JRC3L01S            502670.6        3609929.4              -16.10
                    JRC3L01U            502670.6        3609864.6              -15.19
                    JRC3L01V            502670.6        3609864.6               -1.48
                    JRC3L01W            502670.6        3609799.8              -12.93
                    JRC3L01X            502670.6        3609799.8               -5.56
                    JRC3L01Y            502670.6        3609735.0               -9.77
                    JRC3L01Z            502670.6        3609735.0               -9.33
                    JRC3L020            502670.6        3609670.2               -6.05
                    JRC3L021            502670.6        3609670.2              -12.58
                    JRC3L022            502670.6        3609605.4               -2.01
                    JRC3L023            502670.6        3609605.4              -14.98
                    JRC3L025            502670.6        3609540.6              -16.07
                    JRC3L027            502670.6        3609475.8              -15.56
                    JRC3L028            502670.6        3609475.8               -0.43
                    JRC3L029            502670.6        3609411.0              -13.60
                    JRC3L02A            502670.6        3609411.0               -4.57
                    JRC3L02B            502670.6        3609346.2              -10.62
                    JRC3L02C            502670.6        3609346.2               -8.43
                    JRC3L02D            502670.6        3609281.4               -7.02
                    JRC3L02E            502670.6        3609281.4              -11.83
                    JRC3L02F            502670.6        3609216.6               -3.04
```

 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL 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,

    PAGE 14
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

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

    Surface file: C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.SFC   Met Version:
15181
    Profile file: C:\Users\ryan\OneDrive\LDNONE~1\CI2617~1\22-62O~1\AERMOD\KMA2012V15181.PFL
    Surface format: FREE

    Profile format: FREE

    Surface station no.:   93107   Upper air station no.:   3190
                Name: OVERLANDSURFACESTATION   Name: OVERLANDUPPERSTATION
                Year: 2012   Year: 2012

 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
12 01 01	1	01	-0.5	0.025	-9.000	-9.000	-999.	9.	2.6	0.26	1.32	1.00	0.45	125.	10.0	283.8	10.0
12 01 01	1	02	-2.3	0.053	-9.000	-9.000	-999.	29.	5.8	0.34	1.32	1.00	0.89	334.	10.0	283.8	10.0
12 01 01	1	03	-0.6	0.027	-9.000	-9.000	-999.	11.	3.0	0.38	1.32	1.00	0.45	5.	10.0	285.9	10.0
12 01 01	1	04	-0.5	0.025	-9.000	-9.000	-999.	9.	2.6	0.26	1.32	1.00	0.45	77.	10.0	284.9	10.0
12 01 01	1	05	-0.6	0.027	-9.000	-9.000	-999.	10.	2.9	0.34	1.32	1.00	0.45	336.	10.0	285.4	10.0
12 01 01	1	06	-0.5	0.025	-9.000	-9.000	-999.	10.	2.7	0.29	1.32	1.00	0.45	233.	10.0	284.2	10.0
12 01 01	1	07	-0.5	0.025	-9.000	-9.000	-999.	10.	2.7	0.29	1.32	1.00	0.45	175.	10.0	283.1	10.0
12 01 01	1	08	27.3	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.31	1.32	0.49	0.00	0.	10.0	283.1	10.0
12 01 01	1	09	55.2	0.108	0.487	0.014	75.	85.	-2.0	0.37	1.32	0.29	0.45	329.	10.0	286.4	10.0
12 01 01	1	10	123.3	0.120	0.896	0.007	208.	100.	-1.3	0.37	1.32	0.22	0.45	321.	10.0	291.4	10.0
12 01 01	1	11	169.2	0.295	1.303	0.005	468.	384.	-13.6	0.37	1.32	0.20	1.79	320.	10.0	295.4	10.0
12 01 01	1	12	191.0	0.299	1.625	0.005	805.	392.	-12.5	0.37	1.32	0.19	1.79	310.	10.0	297.0	10.0
12 01 01	1	13	186.3	0.298	1.865	0.005	1245.	391.	-12.7	0.37	1.32	0.19	1.79	307.	10.0	298.8	10.0
12 01 01	1	14	160.2	0.293	1.884	0.005	1493.	381.	-14.1	0.37	1.32	0.20	1.79	305.	10.0	299.9	10.0
12 01 01	1	15	107.4	0.331	1.688	0.005	1601.	456.	-30.0	0.37	1.32	0.23	2.24	305.	10.0	299.2	10.0
12 01 01	1	16	36.1	0.304	1.180	0.005	1627.	403.	-69.5	0.37	1.32	0.32	2.24	300.	10.0	296.4	10.0
12 01 01	1	17	-4.7	0.079	-9.000	-9.000	-999.	139.	9.2	0.33	1.32	0.60	1.34	299.	10.0	294.2	10.0
12 01 01	1	18	-2.2	0.052	-9.000	-9.000	-999.	36.	5.8	0.33	1.32	1.00	0.89	279.	10.0	292.0	10.0
12 01 01	1	19	-0.5	0.025	-9.000	-9.000	-999.	10.	2.6	0.26	1.32	1.00	0.45	63.	10.0	289.9	10.0
12 01 01	1	20	-0.6	0.027	-9.000	-9.000	-999.	11.	3.1	0.38	1.32	1.00	0.45	19.	10.0	288.1	10.0
12 01 01	1	21	-2.2	0.052	-9.000	-9.000	-999.	29.	5.7	0.33	1.32	1.00	0.89	290.	10.0	287.0	10.0
12 01 01	1	22	-2.4	0.054	-9.000	-9.000	-999.	30.	6.0	0.37	1.32	1.00	0.89	329.	10.0	285.4	

```
10.0
 12 01 01   1 23   -2.3  0.053 -9.000 -9.000 -999.   29.     5.8  0.34  1.32  1.00   0.89 330.   10.0 284.9
10.0
 12 01 01   1 24   -0.6  0.026 -9.000 -9.000 -999.   10.     2.9  0.33  1.32  1.00   0.45 291.   10.0 284.9
10.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD  AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.0 1  125.    0.45   283.8   48.0  -99.00    0.27

 F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION  19191 ***   *** PM10 Exhaust I 125                                          ***
    11/11/22
 *** AERMET - VERSION  15181 ***   ***                                                              ***
  10:44:19

   PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL
  ***
                                 INCLUDING SOURCE(S):   JRC3L01A  , JRC3L01B  , JRC3L01C  , JRC3L01D  ,
 JRC3L01E   ,
              JRC3L01F  , JRC3L01G  , JRC3L01H  , JRC3L01I  , JRC3L01J  , JRC3L01K  , JRC3L01L  ,
 JRC3L01M   ,
              JRC3L01N  , JRC3L01O  , JRC3L01P  , JRC3L01Q  , JRC3L01R  , JRC3L01S  , JRC3L01T  ,
 JRC3L01U   ,
              JRC3L01V  , JRC3L01W  , JRC3L01X  , JRC3L01Y  , JRC3L01Z  , JRC3L020  , JRC3L021  ,
 . . .      ,

                      *** NETWORK ID: JRC3L02K ;  NETWORK TYPE: GRIDCART ***

                        ** CONC OF PM10    IN MICROGRAMS/M**3                       **

    Y-COORD  |                                      X-COORD (METERS)
    (METERS) |   502382.60    502430.60    502478.60    502526.60    502574.60    502622.60    502670.60
 502718.60    502766.60
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
  - - - - - - - - -

   3609216.60 |     0.00264      0.00299      0.00346      0.00410      0.00506      0.00666      0.00595
 0.00925      0.00641
   3609281.40 |     0.00295      0.00341      0.00403      0.00494      0.00642      0.00941      0.00833
 0.01452      0.00841
   3609346.20 |     0.00322      0.00375      0.00448      0.00556      0.00733      0.01075      0.01007
 0.01607      0.00951
   3609411.00 |     0.00344      0.00403      0.00484      0.00603      0.00791      0.01144      0.01100
 0.01680      0.01013
   3609475.80 |     0.00363      0.00425      0.00511      0.00635      0.00828      0.01185      0.01178
 0.01723      0.01051
   3609540.60 |     0.00377      0.00443      0.00531      0.00657      0.00853      0.01211      0.01545
 0.01749      0.01075
   3609605.40 |     0.00389      0.00456      0.00546      0.00673      0.00870      0.01229      0.01187
 0.01766      0.01092
   3609670.20 |     0.00397      0.00465      0.00555      0.00683      0.00881      0.01240      0.01181
 0.01777      0.01103
   3609735.00 |     0.00403      0.00471      0.00562      0.00690      0.00888      0.01248      0.01187
 0.01784      0.01110
   3609799.80 |     0.00406      0.00474      0.00565      0.00694      0.00892      0.01252      0.01205
 0.01788      0.01113
   3609864.60 |     0.00406      0.00475      0.00566      0.00695      0.00893      0.01252      0.01236
 0.01789      0.01114
   3609929.40 |     0.00404      0.00473      0.00564      0.00693      0.00890      0.01250      0.01580
 0.01787      0.01111
   3609994.20 |     0.00400      0.00469      0.00559      0.00688      0.00885      0.01244      0.01210
 0.01780      0.01105
   3610059.00 |     0.00393      0.00461      0.00552      0.00679      0.00876      0.01235      0.01178
 0.01769      0.01095
```

```
 3610123.80 |     0.00383      0.00450      0.00540      0.00666      0.00862      0.01220      0.01157
0.01755     0.01081
 3610188.60 |     0.00370      0.00435      0.00523      0.00648      0.00842      0.01196      0.01143
0.01740     0.01060
 3610253.40 |     0.00351      0.00414      0.00499      0.00621      0.00812      0.01162      0.01135
0.01716     0.01029
 3610318.20 |     0.00325      0.00384      0.00465      0.00582      0.00766      0.01110      0.01429
0.01670     0.00979
 3610383.00 |     0.00290      0.00342      0.00415      0.00521      0.00693      0.01021      0.00981
0.01575     0.00889
 3610447.80 |     0.00253      0.00293      0.00348      0.00428      0.00560      0.00829      0.00695
0.01311     0.00703
 3610512.60 |     0.00219      0.00248      0.00285      0.00334      0.00404      0.00510      0.00647
0.00592     0.00455
```

 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                 *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL
  ***
                                 INCLUDING SOURCE(S):   JRC3L01A , JRC3L01B , JRC3L01C , JRC3L01D ,
JRC3L01E   ,
             JRC3L01F , JRC3L01G , JRC3L01H , JRC3L01I , JRC3L01J , JRC3L01K , JRC3L01L ,
JRC3L01M   ,
             JRC3L01N , JRC3L01O , JRC3L01P , JRC3L01Q , JRC3L01R , JRC3L01S , JRC3L01T ,
JRC3L01U   ,
             JRC3L01V , JRC3L01W , JRC3L01X , JRC3L01Y , JRC3L01Z , JRC3L020 , JRC3L021 ,
. . .   ,

                       *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                            ** CONC OF PM10   IN MICROGRAMS/M**3   **

   Y-COORD | X-COORD (METERS)
   (METERS) | 502814.60   502862.60   502910.60   502958.60   503006.60   503054.60   503102.60
503150.60   503198.60
 -
- - - - - - - - -

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 3609216.60 |     0.00494      0.00404      0.00342      0.00296      0.00261      0.00233      0.00210
0.00190     0.00174
 3609281.40 |     0.00603      0.00473      0.00390      0.00331      0.00288      0.00254      0.00226
0.00204     0.00185
 3609346.20 |     0.00678      0.00526      0.00429      0.00361      0.00311      0.00272      0.00241
0.00216     0.00195
 3609411.00 |     0.00727      0.00565      0.00459      0.00385      0.00330      0.00288      0.00254
0.00227     0.00204
 3609475.80 |     0.00760      0.00593      0.00482      0.00404      0.00346      0.00301      0.00265
0.00236     0.00212
 3609540.60 |     0.00783      0.00612      0.00499      0.00419      0.00358      0.00311      0.00274
0.00243     0.00218
 3609605.40 |     0.00798      0.00626      0.00512      0.00429      0.00367      0.00319      0.00280
0.00249     0.00222
 3609670.20 |     0.00809      0.00636      0.00520      0.00437      0.00374      0.00324      0.00285
0.00253     0.00226
 3609735.00 |     0.00815      0.00641      0.00525      0.00441      0.00378      0.00328      0.00288
0.00255     0.00228
 3609799.80 |     0.00818      0.00644      0.00527      0.00443      0.00379      0.00329      0.00289
0.00256     0.00228
 3609864.60 |     0.00818      0.00644      0.00527      0.00443      0.00378      0.00328      0.00288
0.00255     0.00227
 3609929.40 |     0.00815      0.00641      0.00524      0.00440      0.00376      0.00325      0.00285
0.00252     0.00225
 3609994.20 |     0.00809      0.00635      0.00518      0.00434      0.00370      0.00321      0.00281
0.00248     0.00221
```

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   3610059.00 |     0.00799      0.00626      0.00509      0.00426      0.00362      0.00313      0.00274
0.00242      0.00216
   3610123.80 |     0.00785      0.00612      0.00496      0.00414      0.00352      0.00304      0.00265
0.00234      0.00208
   3610188.60 |     0.00765      0.00592      0.00478      0.00397      0.00337      0.00290      0.00253
0.00223      0.00198
   3610253.40 |     0.00734      0.00564      0.00453      0.00375      0.00317      0.00273      0.00238
0.00209      0.00186
   3610318.20 |     0.00688      0.00524      0.00418      0.00345      0.00291      0.00251      0.00219
0.00194      0.00173
   3610383.00 |     0.00612      0.00463      0.00369      0.00306      0.00260      0.00226      0.00199
0.00177      0.00159
   3610447.80 |     0.00491      0.00381      0.00312      0.00264      0.00229      0.00201      0.00179
0.00161      0.00146
   3610512.60 |     0.00365      0.00304      0.00260      0.00226      0.00200      0.00179      0.00161
0.00146      0.00134
```

    PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL
 ***
                              INCLUDING SOURCE(S):   JRC3L01A   , JRC3L01B   , JRC3L01C   , JRC3L01D   ,
JRC3L01E   ,
              JRC3L01F   , JRC3L01G   , JRC3L01H   , JRC3L01I   , JRC3L01J   , JRC3L01K   , JRC3L01L   ,
JRC3L01M   ,
              JRC3L01N   , JRC3L01O   , JRC3L01P   , JRC3L01Q   , JRC3L01R   , JRC3L01S   , JRC3L01T   ,
JRC3L01U   ,
              JRC3L01V   , JRC3L01W   , JRC3L01X   , JRC3L01Y   , JRC3L01Z   , JRC3L020   , JRC3L021   ,
. . .   ,

                        *** NETWORK ID: JRC3L02K ; NETWORK TYPE: GRIDCART ***

                          ** CONC OF PM10   IN MICROGRAMS/M**3   **

   Y-COORD | X-COORD (METERS)
   (METERS) | 503246.60   503294.60   503342.60
 -
 - - - - - - - - -

```
   3609216.60 |     0.00159      0.00147      0.00136
   3609281.40 |     0.00169      0.00155      0.00143
   3609346.20 |     0.00178      0.00162      0.00149
   3609411.00 |     0.00185      0.00169      0.00154
   3609475.80 |     0.00191      0.00174      0.00159
   3609540.60 |     0.00196      0.00178      0.00163
   3609605.40 |     0.00200      0.00182      0.00166
   3609670.20 |     0.00203      0.00184      0.00168
   3609735.00 |     0.00205      0.00185      0.00169
   3609799.80 |     0.00205      0.00186      0.00169
   3609864.60 |     0.00204      0.00185      0.00168
   3609929.40 |     0.00202      0.00183      0.00166
   3609994.20 |     0.00198      0.00179      0.00162
   3610059.00 |     0.00193      0.00174      0.00158
   3610123.80 |     0.00186      0.00168      0.00152
   3610188.60 |     0.00177      0.00160      0.00145
   3610253.40 |     0.00167      0.00151      0.00137
   3610318.20 |     0.00156      0.00141      0.00129
   3610383.00 |     0.00144      0.00132      0.00121
   3610447.80 |     0.00133      0.00122      0.00113
   3610512.60 |     0.00123      0.00113      0.00105
```

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL
 ***
                                     INCLUDING SOURCE(S):   JRC3L01A , JRC3L01B   , JRC3L01C   , JRC3L01D   ,
JRC3L01E   ,
              JRC3L01F   , JRC3L01G   , JRC3L01H   , JRC3L01I   , JRC3L01J   , JRC3L01K   , JRC3L01L   ,
JRC3L01M   ,
              JRC3L01N   , JRC3L01O   , JRC3L01P   , JRC3L01Q   , JRC3L01R   , JRC3L01S   , JRC3L01T   ,
JRC3L01U   ,
              JRC3L01V   , JRC3L01W   , JRC3L01X   , JRC3L01Y   , JRC3L01Z   , JRC3L020   , JRC3L021   ,
. . .   ,

                              *** SENSITIVE DISCRETE RECEPTOR POINTS ***

                          ** CONC OF PM10   IN MICROGRAMS/M**3   **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 -
 - - - - - - - -
        502775.30   3609760.70   0.01043   502746.10   3609680.30   0.01311

        502793.90   3609652.90   0.00912

♠ *** AERMOD - VERSION 19191 ***   ***   PM10 Exhaust I 125   ***
    11/11/22
 *** AERMET - VERSION 15181 ***   ***   ***
   10:44:19

 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

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

                          ** CONC OF PM10   IN MICROGRAMS/M**3   **

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

ALL   1ST HIGHEST VALUE IS   0.01789 AT (502718.60, 3609864.60,   0.00,   0.00,   0.00) GC
JRC3L02K
        2ND HIGHEST VALUE IS   0.01788 AT (502718.60, 3609799.80,   0.00,   0.00,   0.00) GC
JRC3L02K
        3RD HIGHEST VALUE IS   0.01787 AT (502718.60, 3609929.40,   0.00,   0.00,   0.00) GC
JRC3L02K
        4TH HIGHEST VALUE IS   0.01784 AT (502718.60, 3609735.00,   0.00,   0.00,   0.00) GC
JRC3L02K
        5TH HIGHEST VALUE IS   0.01780 AT (502718.60, 3609994.20,   0.00,   0.00,   0.00) GC
JRC3L02K
        6TH HIGHEST VALUE IS   0.01777 AT (502718.60, 3609670.20,   0.00,   0.00,   0.00) GC
JRC3L02K
        7TH HIGHEST VALUE IS   0.01769 AT (502718.60, 3610059.00,   0.00,   0.00,   0.00) GC
JRC3L02K
        8TH HIGHEST VALUE IS   0.01766 AT (502718.60, 3609605.40,   0.00,   0.00,   0.00) GC
JRC3L02K
        9TH HIGHEST VALUE IS   0.01755 AT (502718.60, 3610123.80,   0.00,   0.00,   0.00) GC
JRC3L02K
       10TH HIGHEST VALUE IS   0.01749 AT (502718.60, 3609540.60,   0.00,   0.00,   0.00) GC
JRC3L02K

 *** RECEPTOR TYPES: GC = GRIDCART

```
                     GP = GRIDPOLR
                     DC = DISCCART
                     DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   ***  PM10 Exhaust I 125                                    ***
     11/11/22
 *** AERMET - VERSION  15181 ***   ***                                                        ***
   10:44:19

   PAGE  20
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

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

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

A Total of           0 Fatal Error Message(s)
A Total of           1 Warning Message(s)
A Total of         178 Informational Message(s)

A Total of        8784 Hours Were Processed

A Total of         101 Calm Hours Identified

A Total of          77 Missing Hours Identified (  0.88 Percent)


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


    ********   WARNING MESSAGES   ********
MX W403     219        PFLCNV: Turbulence data is being used w/o ADJ_U* option      SigA Data

    **********************************
    *** AERMOD Finishes Successfully ***
    **********************************
```

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: Sub-Area

Region: San Diego (SD)
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

RoadwayADT	94000	Trips/Day	
RoadwaySegmentAERMOD_VolumeSourceDistance	0.78	Miles/Trip	
SegmentVMT	73320	Miles/Day	

Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	%ofTotalVMT	VMT on Roadway Segment	PM10_RUNEX	Total Grams	Grams from DSL Only
San Diego (SD)	2030	HHDT	Aggregate	65	Gasoline	102.0680246	0.00099%	0.72914534	0.001056787	0.000770551	0
San Diego (SD)	2030	HHDT	Aggregate	65	Diesel	476977.1165	4.64729%	3407.390741	0.033846245	115.3273806	115.3273806
San Diego (SD)	2030	HHDT	Aggregate	65	Electricity	22097.10059	0.21530%	157.855489	0	0	0
San Diego (SD)	2030	HHDT	Aggregate	65	Natural Gas	10896.65897	0.10617%	77.84267547	0.001482321	0.115387839	0
San Diego (SD)	2030	LDA	Aggregate	65	Gasoline	5017668.698	48.88819%	35844.81787	0.000900929	32.29364354	0
San Diego (SD)	2030	LDA	Aggregate	65	Diesel	8968.585376	0.08738%	64.06905849	0.006234403	0.399432331	0.399432331
San Diego (SD)	2030	LDA	Aggregate	65	Electricity	3816.252679	0.03718%	27.26223879	0	0	0
San Diego (SD)	2030	LDA	Aggregate	65	Plug-in Hybrid	98369.0975	0.95843%	702.7212428	0.000890811	0.625991605	0
San Diego (SD)	2030	LDT1	Aggregate	65	Gasoline	407262.5409	3.96804%	2909.369366	0.001361701	3.961691477	0
San Diego (SD)	2030	LDT1	Aggregate	65	Diesel	6.603308945	0.00006%	0.047172187	0.144209248	0.006802666	0.006802666
San Diego (SD)	2030	LDT1	Aggregate	65	Electricity	29.17317531	0.00028%	0.208404982	0	0	0
San Diego (SD)	2030	LDT1	Aggregate	65	Plug-in Hybrid	1328.402116	0.01294%	9.489732137	0.000586885	0.005569377	0
San Diego (SD)	2030	LDT2	Aggregate	65	Gasoline	2512628.305	24.48106%	17949.51189	0.000954869	17.13942959	0
San Diego (SD)	2030	LDT2	Aggregate	65	Diesel	9778.961743	0.09528%	69.85815996	0.003497765	0.244347427	0.244347427
San Diego (SD)	2030	LDT2	Aggregate	65	Electricity	259.1944394	0.00253%	1.851612378	0	0	0
San Diego (SD)	2030	LDT2	Aggregate	65	Plug-in Hybrid	18585.65391	0.18108%	132.7706988	0.000714008	0.094799367	0
San Diego (SD)	2030	MCY	Aggregate	65	Gasoline	44428.96277	0.43288%	317.388049	0.001874979	0.595095885	0
San Diego (SD)	2030	MDV	Aggregate	65	Gasoline	1448074.615	14.10889%	10344.6389	0.000922424	9.5421467	0
San Diego (SD)	2030	MDV	Aggregate	65	Diesel	21030.87111	0.20491%	150.2386446	0.003712056	0.557694318	0.557694318
San Diego (SD)	2030	MDV	Aggregate	65	Electricity	256.9376507	0.00250%	1.835490513	0	0	0
San Diego (SD)	2030	MDV	Aggregate	65	Plug-in Hybrid	11878.44654	0.11573%	84.85629053	0.000761543	0.064621747	0
San Diego (SD)	2030	MH	Aggregate	65	Gasoline	13670.14107	0.13319%	97.6556537	0.000976384	0.095349464	0
San Diego (SD)	2030	MH	Aggregate	65	Diesel	7071.198369	0.06890%	50.51465787	0.107658219	5.438318113	5.438318113
San Diego (SD)	2030	MHDT	Aggregate	65	Gasoline	36398.93029	0.35464%	260.0237491	0.000974139	0.253299283	0
San Diego (SD)	2030	MHDT	Aggregate	65	Diesel	60143.23597	0.58599%	429.6464093	0.009932077	4.267281296	4.267281296
San Diego (SD)	2030	MHDT	Aggregate	65	Electricity	10563.7863	0.10293%	75.46472647	0	0	0
San Diego (SD)	2030	MHDT	Aggregate	65	Natural Gas	1086.373481	0.01058%	7.76074745	0.000801984	0.006223995	0
San Diego (SD)	2030	OBUS	Aggregate	65	Gasoline	7090.016097	0.06908%	50.64908645	0.000919174	0.046555322	0
San Diego (SD)	2030	OBUS	Aggregate	65	Diesel	6246.439275	0.06086%	44.62281023	0.033238952	1.483215436	1.483215436
San Diego (SD)	2030	OBUS	Aggregate	65	Electricity	763.6387483	0.00744%	5.455221039	0	0	0
San Diego (SD)	2030	OBUS	Aggregate	65	Natural Gas	0.002009905	0.00000%	1.43582E-05	0.000690239	9.91058E-09	0
San Diego (SD)	2030	SBUS	Aggregate	65	Gasoline	760.8554656	0.00741%	5.435338047	0.000837329	0.004551165	0
San Diego (SD)	2030	SBUS	Aggregate	65	Diesel	1840.24565	0.01793%	13.14619879	0.023734949	0.312024352	0.312024352
San Diego (SD)	2030	SBUS	Aggregate	65	Electricity	211.9943789	0.00207%	1.514428384	0	0	0
San Diego (SD)	2030	SBUS	Aggregate	65	Natural Gas	27.01749634	0.00026%	0.193005416	0.002120519	0.000409272	0
San Diego (SD)	2030	UBUS	Aggregate	65	Gasoline	13.78906496	0.00013%	0.098505213	0.001023295	0.0001008	0
San Diego (SD)	2030	UBUS	Aggregate	65	Electricity	929.907208	0.00906%	6.642996281	0	0	0
San Diego (SD)	2030	UBUS	Aggregate	65	Natural Gas	2299.023967	0.02240%	16.42358241	0.000155955	0.002561335	0
			Total VMT			10263560.84	100.00000%	73320		Total Grams from DSL Only PM10 per Day	128.0364965
										Total Grams from DSL PM10 per Second (g/s)	0.001481904
										MERV 13 %Passing from Roadway (g/s)	0.00014819

REC: R1 (Outdoor Façade)

Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From AERMOD	0.0104	0.0104	0.0104	0.0104	0.0104	0.0104
Average Breathing Rate per agegroup BR/BW	225	658	535	452	210	185
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000225	0.00000657	0.00000534	0.00000451	0.00000210	0.00000185
Potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED (Residents live onsite for 30 years)	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	1
Risk for Each Age Group	7.50137E-08	1.75499E-06	1.26913E-06	2.14447E-06	3.3672E-07	1.56735E-06
	0.075013714	1.75498752	1.269126144	2.144467354	0.336720384	1.567345371
Cancer Risk Per Million 30-years	4.31					
Cancer Risk Per Million 70-years	5.54					

REC: R2 (Outdoor Façade)

Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From AERMOD	0.0131	0.0131	0.0131	0.0131	0.0131	0.0131
Average Breathing Rate per agegroup BR/BW	225	658	535	452	210	185
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	1
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000283	0.00000828	0.00000673	0.00000568	0.00000264	0.00000242
Potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED (Residents live onsite for 30 years)	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	1
Risk for Each Age Group	9.44884E-08	2.21061E-06	1.59861E-06	2.7012E-06	4.24138E-07	2.05651E-06
	0.094488429	2.21060928	1.598610816	2.70120407	0.424138176	2.056512857
Cancer Risk Per Million 30-years	5.43					
Cancer Risk Per Million 70-years	7.06					

REC: R3 (Outdoor Façade)

Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From AERMOD	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091
Average Breathing Rate per agegroup BR/BW	225	658	535	452	210	185
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	1
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000197	0.00000575	0.00000467	0.00000395	0.00000183	0.00000168
Potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED (Residents live onsite for 30 years)	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	1
Risk for Each Age Group	6.5637E-08	1.53561E-06	1.11049E-06	1.87641E-06	2.9463E-07	1.42857E-06
	0.065637	1.53561408	1.110485376	1.876408934	0.294630336	1.42857
Cancer Risk Per Million 30-years	3.77					
Cancer Risk Per Million 70-years	4.91					