

Date: August 21, 2023

To: Norman S. Eke
Converse Consultants
717 S. Myrtle Ave.
Monrovia, CA 91016

From: Andre Almeida P.E., Scott D. Cohen P.E., C.I.H.

**Re: Health Risk Assessment
Windblown Dust Containing Lead From Burn Ash Impact on
Planned Residential Use for County Assessor Parcel Number (APN) 624-071-02**

Health risk assessment (HRA) was performed to quantify potential effects of lead contamination on future occupants of a planned residential development (APN 624-071-02) in the City of San Diego (referred to as the "Site" or "Project"). The Site, also known as the Nakano Property, is located on the north side of Dennery Ranch Road near the intersection of Interstate 805 and the Otay River (see Figure 1, attached). The Site is adjacent to a property known as the Vincent Davies Property, on which burn ash was reportedly deposited (Converse Consultants, 2006). The Davies property is located within and owned by the City of Chula Vista (APNs 624-071-01 and 624-060-74).

HRA was performed using current methodologies, meteorological data provided by the SDAPCD, and exposure assumptions as described in the Risk Assessment Guidelines (OEHHA, 2015) and the Supplemental Guidelines (SDAPCD, 2022).

Emissions Calculations

The SDAPCD default emissions factor for windblown dust from inactive storage piles¹ was used to determine Total Suspended Particulate (TSP) emissions from the Davies Property. Conservatively, 14.3 acres of the Davies Property were assumed to be emitting windblown dust. The northern 8.5 acres of the Davies property occupied by riparian habitat along the Otay River is vegetated and was assigned a control efficiency of 95% consistent with the WRAP Fugitive Dust Handbook (WRAP, 2006). The southern 5.8 acres adjacent to the Project site are less vegetated and were assigned a control efficiency of zero (0%).

Lead content in the soil for the Davies site was modeled based on soil sample data from the "Soil and Groundwater Sampling Report, Davies Acquisition, November 3, 2006" (Converse Consultants, 2006). A statistical analysis of this soil sample data was also conducted by Converse Consultants (attachment 2), in order to determine the 95% Upper Confidence Level (UCL) of lead content in the soil. Conservatively, the 95%UCL value of 245.4 mg/kg was recommended for use in this HRA. Emissions calculations are presented in Attachment 3.

¹ <https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/mineral-products-industry-open-material-storage-piles/APCD-Open-Material-Storage-Areas-General.pdf>

Dispersion Modeling

AERMOD model version 22112 was run using the Lakes AERMOD View MPI. Per project modeling files, an urban dispersion coefficient was chosen based on the population density of the surrounding area 7,644 population per square kilometer (pop/km²) as compared to the threshold of 750 pop/km² below which rural coefficient should be chosen. Two polygon area source objects were modeled, with one representing vegetated area and the other representing unvegetated areas. Source parameters are outlined in Table 1.

Table 1. AERMOD Model Source Parameters

Source Type	Source ID	Description	Base Elevation (m)	Height	X Coordinate	Y Coordinate
Polygon Area	PAREA1	Davies Property, Unvegetated Area	26.9	0	496655.73	3605889.34
Polygon Area	PAREA2	Davies Property, Vegetated Area	27.9	0	496655.73	3605885.06

The AERMOD model used variable source emissions to account for the fact that windblown emissions would only occur when wind speed is sufficient. The range of wind speeds at 10 m above the ground that correspond to the threshold velocity for various materials range from 10 meters per second (m/s) for coal dust on concrete pad up to 25 m/s for scoria (roadbed material) according to AP-42 Table 13.2.5-2. The AP-42 methodology uses the “fastest mile wind speed” which is greater than the hourly average wind speed used by AERMOD. Nevertheless, it would be unrepresentative to model emissions of windblown dust when the atmosphere is most stable. Therefore, hours when the AERMOD default Stability Class A occurs (i.e., wind speed less than 1.54 m/s) were omitted from the hours during which wind erosion occurs. The meteorological surface data file provided by APCD was analyzed with WRPlot to determine that 45.5% of hours would potentially generate windblown dust emissions. Accordingly, emissions were multiplied by an adjustment factor of 2.2 as determined using the method described in Section 4.12 of the Risk Assessment Guidelines (OEHHA, 2015) for non-continuous sources.

A grid of discrete cartesian receptors with 10 meter spacing was used to ensure that the risk at each potential residence on the Project site was assessed. A total of 711 receptors were modeled. Figure 2 presents the source and receptor objects utilized in the AERMOD model.

Health Risk Modeling

HARP2 Version 22118 was used to model cancer risk at receptor locations. Lead is a multi-pathway pollutant, and cancer risk from lead was assessed by summing the risk from inhalation, soil ingestion, dermal, and mother’s milk pathways. Non-cancer (chronic and acute) risks are not assessed in California because OEHHA has determined that non-cancer risks from lead do not warrant establishing Reference Exposure Levels (REL). A dermal pathway site parameter Climate of “Warm” was selected. The deposition rate for non-inhalation pathways was conservatively chosen to be 0.05 m/s which represents larger dust particles associated with uncontrolled emissions sources. A Frequency of Time at Home (FAH) factor was applied for individuals 16 years and older. Results of lead concentration and health risk modeling are presented in Table 2.

Table 2. Lead Concentration and Health Risk Modeling Results

Parameter	Units	Value	Threshold Value	Threshold Exceeded?
30 Day Average Ambient Standard for Maximum Concentration of Lead	µg/m ³	< 0.067*	1.5	No
Maximum Cancer Risk to Receptors on Project Site	Excess Cancer Cases Per Million Exposed	2.3	10	No

*The maximum hour concentration of lead was determined to be 0.067 µg/m³. The 30-day average is less than this value.

The maximum exposed individual receptor demonstrated an excess cancer risk of 2.3 cases per million exposed, which is less than the SDAPCD health risk threshold of 10 cases per million exposed. The maximum hour concentration of lead was 0.067 micrograms per cubic meter (µg/m³) which is less than the threshold of 1.5 µg/m³. Thus, the 30-day average concentration must also be less than the threshold value.

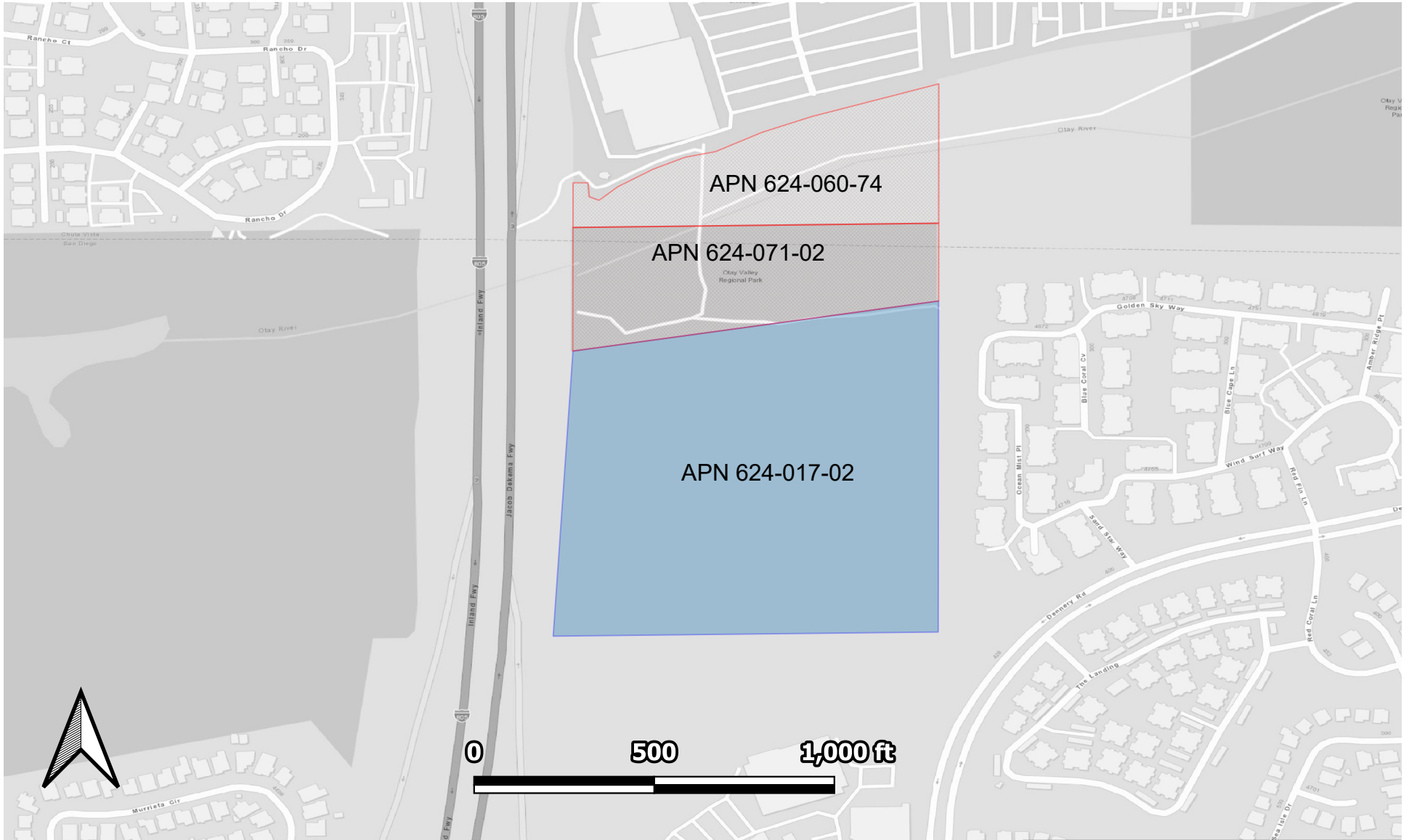
Please direct questions and modeling file requests to Scott Cohen (scohen@sespe.com) or Andre Almeida (aalmeida@sespe.com) by email or telephone (619.894.8669).

Attachments



- 1 – Figures (1. Site Map, 2. Model Sources and Receptors)
- 2 – Sampling Data Analysis from Converse Consultants
- 3 – Emissions calculations
- 4 – AERMOD Modeling Output Report Tables and AERMOD Input File
- 5 – Health Risk Input File, Output File and Cancer Risk Results

Attachment 1 – Figures

1. Site Map
2. Model Sources and Receptors



Legend:

-  Burn Ash (Davies) Site
-  Project (Nakano) Site

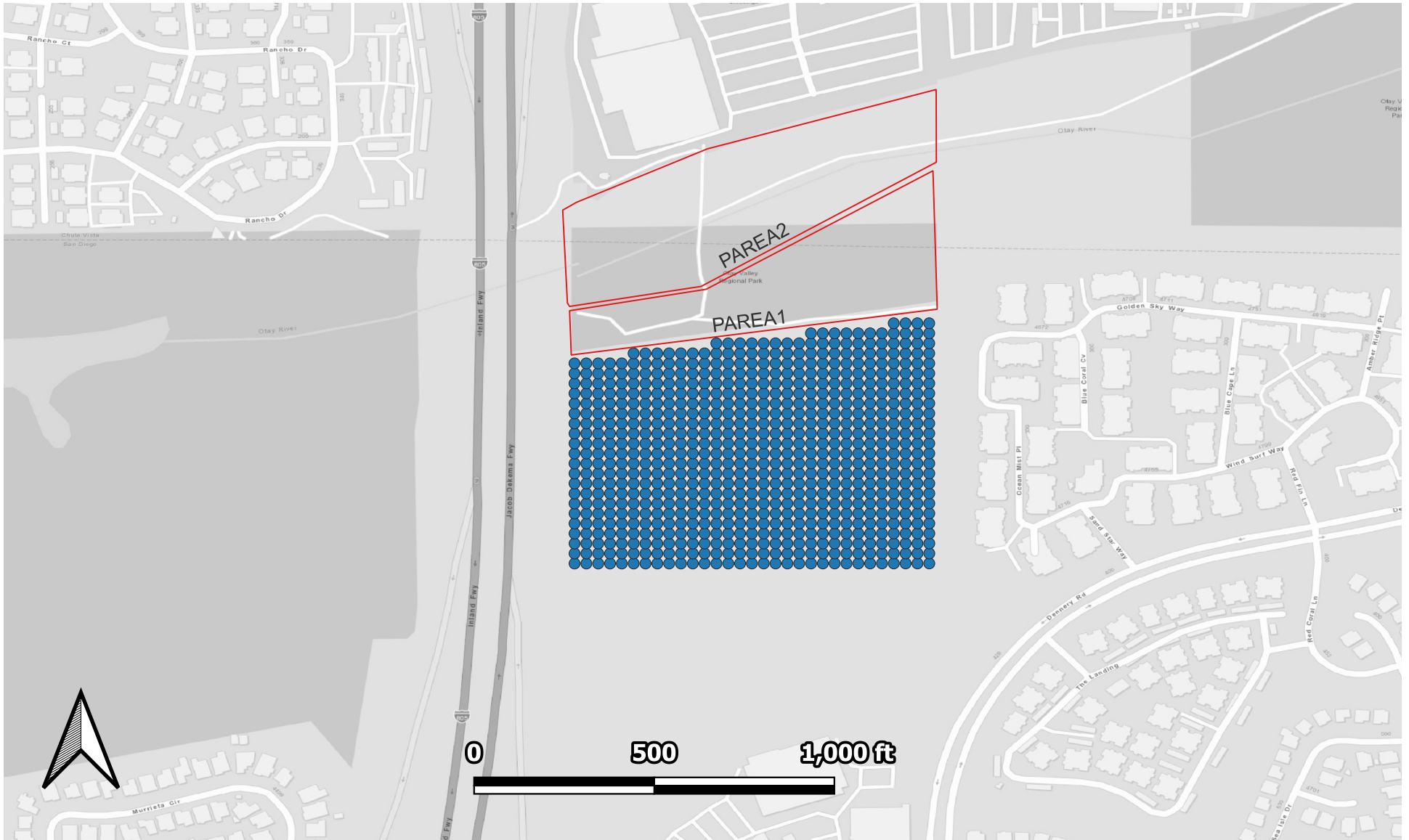
SESPE
CONSULTING, INC.

a Trinity Consultants Company

FIGURE
1

Site Map

PROJECT #:	230510.0040	DATE:	8/11/2023
SCALE:	As shown	DRAWN BY:	SDC



Legend:

- Area Sources
- Discrete Receptors

SESPE
CONSULTING, INC.

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FIGURE
2

Model Objects

PROJECT #:	230510.0040	DATE:	8/11/2023
SCALE:	As shown	DRAWN BY:	SDC

Attachment 2 – Soil Sample Analysis From Converse Consultants

	0	1
	pb	d_pb
1	18.2	1
2	61.2	1
3	14.5	1
4	173	1
5	0.5	0
6	19.5	1
7	44.3	1
8	0.5	0
9	11.2	1
10	163	1
11	20.2	1
12	25.9	1
13	136	1
14	132	1
15	2.68	1
16	320	1
17	818	1
18	1.93	1
19	7.27	1
20	113	1
21	8.61	1
22	58.9	1
23	822	1

	A	B	C	D	E	F	G	H	I	J	K	L								
1	UCL Statistics for Uncensored Full Data Sets																			
2																				
3	User Selected Options																			
4	Date/Time of Computation		ProUCL 5.18/14/2023 12:10:18 PM																	
5	From File		WorkSheet.xls																	
6	Full Precision		OFF																	
7	Confidence Coefficient		95%																	
8	Number of Bootstrap Operations		2000																	
9																				
10																				
11	pb																			
12																				
13	General Statistics																			
14	Total Number of Observations				23				Number of Distinct Observations				22							
15									Number of Missing Observations				0							
16					Minimum				1.93				Mean				129.6			
17					Maximum				822				Median				25.9			
18					SD				231.3				Std. Error of Mean				48.24			
19					Coefficient of Variation				1.785				Skewness				2.589			
20																				
21	Normal GOF Test																			
22	Shapiro Wilk Test Statistic				0.571				Shapiro Wilk GOF Test											
23	5% Shapiro Wilk Critical Value				0.914				Data Not Normal at 5% Significance Level											
24	Lilliefors Test Statistic				0.295				Lilliefors GOF Test											
25	5% Lilliefors Critical Value				0.18				Data Not Normal at 5% Significance Level											
26	Data Not Normal at 5% Significance Level																			
27																				
28	Assuming Normal Distribution																			
29	95% Normal UCL								95% UCLs (Adjusted for Skewness)											
30	95% Student's-t UCL				212.5				95% Adjusted-CLT UCL (Chen-1995)				236.8							
31									95% Modified-t UCL (Johnson-1978)				216.8							
32																				
33	Gamma GOF Test																			
34	A-D Test Statistic				0.842				Anderson-Darling Gamma GOF Test											
35	5% A-D Critical Value				0.807				Data Not Gamma Distributed at 5% Significance Level											
36	K-S Test Statistic				0.173				Kolmogorov-Smirnov Gamma GOF Test											
37	5% K-S Critical Value				0.192				Detected data appear Gamma Distributed at 5% Significance Level											
38	Detected data follow Appr. Gamma Distribution at 5% Significance Level																			
39																				
40	Gamma Statistics																			
41	k hat (MLE)				0.493				k star (bias corrected MLE)				0.457							
42	Theta hat (MLE)				263.2				Theta star (bias corrected MLE)				283.5							
43	nu hat (MLE)				22.66				nu star (bias corrected)				21.04							
44	MLE Mean (bias corrected)				129.6				MLE Sd (bias corrected)				191.7							
45									Approximate Chi Square Value (0.05)				11.62							
46	Adjusted Level of Significance				0.0389				Adjusted Chi Square Value				11.11							
47																				
48	Assuming Gamma Distribution																			
49	95% Approximate Gamma UCL (use when n>=50)				234.7				95% Adjusted Gamma UCL (use when n<50)				245.4							
50																				
51	Lognormal GOF Test																			
52	Shapiro Wilk Test Statistic				0.968				Shapiro Wilk Lognormal GOF Test											

	A	B	C	D	E	F	G	H	I	J	K	L
53			5% Shapiro Wilk Critical Value			0.914		Data appear Lognormal at 5% Significance Level				
54			Lilliefors Test Statistic			0.107		Lilliefors Lognormal GOF Test				
55			5% Lilliefors Critical Value			0.18		Data appear Lognormal at 5% Significance Level				
56			Data appear Lognormal at 5% Significance Level									
57												
58			Lognormal Statistics									
59			Minimum of Logged Data			0.658				Mean of logged Data		3.572
60			Maximum of Logged Data			6.712				SD of logged Data		1.726
61												
62			Assuming Lognormal Distribution									
63			95% H-UCL			595.4				90% Chebyshev (MVUE) UCL		322.9
64			95% Chebyshev (MVUE) UCL			407				97.5% Chebyshev (MVUE) UCL		523.6
65			99% Chebyshev (MVUE) UCL			752.7						
66												
67			Nonparametric Distribution Free UCL Statistics									
68			Data appear to follow a Discernible Distribution at 5% Significance Level									
69												
70			Nonparametric Distribution Free UCLs									
71			95% CLT UCL			209				95% Jackknife UCL		212.5
72			95% Standard Bootstrap UCL			209.3				95% Bootstrap-t UCL		356.4
73			95% Hall's Bootstrap UCL			579.1				95% Percentile Bootstrap UCL		211.6
74			95% BCA Bootstrap UCL			242.5						
75			90% Chebyshev(Mean, Sd) UCL			274.3				95% Chebyshev(Mean, Sd) UCL		339.9
76			97.5% Chebyshev(Mean, Sd) UCL			430.9				99% Chebyshev(Mean, Sd) UCL		609.6
77												
78			Suggested UCL to Use									
79			95% Adjusted Gamma UCL			245.4						
80												
81			When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test									
82			When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL									
83												
84			Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.									
85			Recommendations are based upon data size, data distribution, and skewness.									
86			These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).									
87			However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.									
88												

Attachment 3 – Emissions Calculations

Emissions Source	Source Description	TSP Emissions Factor¹	TSP Emissions Factor Units	Area Size (Acres)	Control Factor (Percent)²	Lead content of TSP³	Lead Emissions (Annual) (lbs)	Emissions (hourly)
PAREA1	Unvegetated Area	3.5	lbs/acre day	5.8	0%	0.0002454	1.828	2.09E-04
PAREA2	Vegetated Area	3.5	lbs/acre day	8.5	95%	0.0002454	0.133	1.45E-05

¹<https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/mineral-products-industry-open-material-storage-piles/APCD-Open-Materials-Storage-Areas.pdf>

²[WRAP Fugitive Dust Handbook, September 7, 2006 \(http://www.wrapair.org/forums/deif/fdh/content/FDHandbook_Rev_06.pdf\)](http://www.wrapair.org/forums/deif/fdh/content/FDHandbook_Rev_06.pdf).

³Converse Consultants, Soil and Groundwater Sampling Report, Davies Acquisition, November 3, 2006

95% Upper Confidence Level of soil sampling data was chosen as a conservative representation of soil lead content. See Attachment 2 for 95UCL analysis.

Attachment 4 - AERMOD Modeling Output Report Tables and AERMOD Input File

Control Pathway

AERMOD

Dispersion Options

Titles C:\Modeling\Converse_TriPointe\Converse_TriPointe.isc	
Dispersion Options <input type="checkbox"/> Regulatory Default <input checked="" type="checkbox"/> Non-Default Options	Dispersion Coefficient Urban Population: Name (Optional): Roughness Length:
<input checked="" type="checkbox"/> Elevated Terrain <input type="checkbox"/> No Stack-Tip Downwash (NOSTD) <input type="checkbox"/> Run in Screening Mode <input type="checkbox"/> Conversion of NOx to NO2 (OLM or PVMRM) <input type="checkbox"/> No Checks for Non-Sequential Met Data <input type="checkbox"/> Fast All Sources (FASTALL) <input type="checkbox"/> Fast Area Sources (FASTAREA) <input type="checkbox"/> Optimized Area Source Plume Depletion <input type="checkbox"/> Gas Deposition	Output Type <input checked="" type="checkbox"/> Concentration <input type="checkbox"/> Total Deposition (Dry & Wet) <input type="checkbox"/> Dry Deposition <input type="checkbox"/> Wet Deposition
BETA Options: <input type="checkbox"/> Capped and Horizontal Stack Releases <input type="checkbox"/> Adjusted Friction Velocity (u^*) in AERMET (ADJ_U*) <input type="checkbox"/> Low Wind Options	Plume Depletion <input type="checkbox"/> Dry Removal <input type="checkbox"/> Wet Removal
<input type="checkbox"/> SCIM (Sampled Chronological Input Model) <input type="checkbox"/> Ignore Urban Night / Daytime Transition (NOURBTRAN)	Output Warnings <input type="checkbox"/> No Output Warnings <input type="checkbox"/> Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type OTHER - HRA	Exponential Decay <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Averaging Time Options Hours <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 8 <input type="checkbox"/> 12 <input type="checkbox"/> 24 <input type="checkbox"/> Month <input checked="" type="checkbox"/> Period <input type="checkbox"/> Annual	Terrain Height Options <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Elevated SO: Meters RE: Meters TG: Meters
Flagpole Receptors <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Default Height = 0.00 m	

Optional Files



Re-Start File



Init File



Multi-Year Analyses



Event Input File



Error Listing File

Detailed Error Listing File

Filename: Converse_TriPointe.err

Source Pathway - Source Inputs

AERMOD

Polygon Area Sources

Source Type: AREA POLY

Source: PAREA1

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m ²)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
27.91	0.00	0.00004		5	496655.73	3605885.06
		0.00004			496771.26	3605906.46
		0.00004			496963.11	3606024.85
		0.00004			496966.68	3605886.49
		0.00004			496657.15	3605840.85

Source Type: AREA POLY

Source: PAREA2

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m ²)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
26.86	0.00	0.00003		8	496655.73	3605889.34
		0.00003			496766.99	3605909.31
		0.00003			496965.97	3606033.41
		0.00003			496965.84	3606106.02
		0.00003			496772.36	3606046.79
		0.00003			496661.80	3605993.49
		0.00003			496649.96	3605985.59
		0.00003			496653.91	3605892.80

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: ..\AERMET 22112 data SDAPCD\CVA_2010_2012_sigma_v22112.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: ..\AERMET 22112 data SDAPCD\CVA_2010_2012_sigma_v22112.PFL
Format Type: Default AERMET format

Wind Speed



Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 182.00 [ft]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2010			Chula Vista
Upper Air		2010			
On-Site		2010			

Data Period

Data Period to Process

Start Date: 1/1/2010 Start Hour: 1 End Date: 12/31/2012 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

```

1  **
2  *****
3  **
4  ** AERMOD Input Produced by:
5  ** AERMOD View Ver. 11.2.0
6  ** Lakes Environmental Software Inc.
7  ** Date: 8/14/2023
8  ** File: C:\Modeling\Converse_TriPointe\Converse_TriPointe.ADI
9  **
10 *****
11 **
12 **
13 *****
14 ** AERMOD Control Pathway
15 *****
16 **
17 **
18 CO STARTING
19     TITLEONE C:\Modeling\Converse_TriPointe\Converse_TriPointe.isc
20     MODELOPT CONC
21     AVERTIME 1 PERIOD
22     URBANOPT 277220 Chula_Vista
23     POLLUTID HRA
24     RUNORNOT RUN
25     ERRORFIL Converse_TriPointe.err
26 CO FINISHED
27 **
28 *****
29 ** AERMOD Source Pathway
30 *****
31 **
32 **
33 SO STARTING
34 ** Source Location **
35 ** Source ID - Type - X Coord. - Y Coord. **
36     LOCATION PAREA1      AREAPOLY    496655.728    3605885.063        27.910
37     LOCATION PAREA2      AREAPOLY    496655.728    3605889.342        26.860
38 ** Source Parameters **
39     SRCPARAM PAREA1      0.0000423677    0.000            5
40     AREAVERT PAREA1      496655.728    3605885.063    496771.265    3605906.459
41     AREAVERT PAREA1      496963.113    3606024.848    496966.679    3605886.490
42     AREAVERT PAREA1      496657.155    3605840.846
43     SRCPARAM PAREA2      0.0000292125    0.000            8
44     AREAVERT PAREA2      496655.728    3605889.342    496766.986    3605909.312
45     AREAVERT PAREA2      496965.965    3606033.407    496965.836    3606106.017
46     AREAVERT PAREA2      496772.360    3606046.790    496661.803    3605993.486
47     AREAVERT PAREA2      496649.957    3605985.589    496653.906    3605892.800
48     URBANSRC ALL
49
50 ** Variable Emissions Type: "By Wind Speed (WSPEED)"
51 ** Variable Emission Scenario: "Scenario 1"
52     EMISFACT PAREA1      WSPEED 0.0 2.2 2.2 2.2 2.2 2.2
53     EMISFACT PAREA2      WSPEED 0.0 2.2 2.2 2.2 2.2 2.2
54     SRCGROUP PAREA1      PAREA1
55     SRCGROUP PAREA2      PAREA2
56     SRCGROUP ALL
57 SO FINISHED
58 **
59 *****
60 ** AERMOD Receptor Pathway
61 *****
62 **
63 **
64 RE STARTING
65     INCLUDED Converse_TriPointe.rou
66 RE FINISHED
67 **
68 *****
69 ** AERMOD Meteorology Pathway

```

```
70 *****
71 **
72 **
73 ME STARTING
74 SURFFILE "..\AERMET 22112 data SDAPCD\CVA_2010_2012_sigma_v22112.SFC"
75 PROFFILE "..\AERMET 22112 data SDAPCD\CVA_2010_2012_sigma_v22112.PFL"
76 SURFDATA 23188 2010 Chula_Vista
77 UAIRDATA 3190 2010
78 SITEDATA 1 2010
79 PROFBASE 182.0 FEET
80 ME FINISHED
81 **
82 *****
83 ** AERMOD Output Pathway
84 *****
85 **
86 **
87 OU STARTING
88 RECTABLE ALLAVE 1ST
89 RECTABLE 1 1ST
90 ** Auto-Generated Plotfiles
91 PLOTFILE 1 ALL 1ST CONVERSE_TRIPOINTE.AD\01H1GALL.PLT 31
92 PLOTFILE 1 PAREA1 1ST CONVERSE_TRIPOINTE.AD\01H1G001.PLT 32
93 PLOTFILE 1 PAREA2 1ST CONVERSE_TRIPOINTE.AD\01H1G002.PLT 33
94 PLOTFILE PERIOD ALL CONVERSE_TRIPOINTE.AD\PE00GALL.PLT 34
95 PLOTFILE PERIOD PAREA1 CONVERSE_TRIPOINTE.AD\PE00G001.PLT 35
96 PLOTFILE PERIOD PAREA2 CONVERSE_TRIPOINTE.AD\PE00G002.PLT 36
97 SUMMFILE Converse_TriPointe.sum
98 OU FINISHED
99 **
100 *****
101 ** Project Parameters
102 *****
103 ** PROJCTN CoordinateSystemUTM
104 ** DESCPTN UTM: Universal Transverse Mercator
105 ** DATUM World Geodetic System 1984
106 ** DTMRGN Global Definition
107 ** UNITS m
108 ** ZONE 11
109 ** ZONEINX 0
110 **
111
```

Attachment 5 – Health Risk Input File, Output File and Cancer Risk Results

HARP2 - HRACalc (dated 22118) 8/14/2023 2:45:01 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
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: LongTerm24HR

****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): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Warm

TIER 2 SETTINGS
Tier2 not used.

Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra\30yrCancerRisk.csv
Cancer risk total by receptor saved to:
C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra\30yrCancerRiskSumByRec.csv
HRA ran successfully

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!--HARP RISK INPUT FILE-->
3 <!--Created 2023/08/14 14:45:01-->
4 <HRA>
5   <HRAVERSION>22118</HRAVERSION>
6   <Title>30yr</Title>
7   <AERMODMode>Y</AERMODMode><!--Read AERMOD plot file (Y) or read CSV file (N)-->
8   <GLCList>C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra\30yrGLCList.csv
9   </GLCList>
10  <PollutantList>C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra\30yrPolDB.csv
11  </PollutantList>
12  <PathwayRecConc>
13  C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra\30yrPathwayRec.csv
14  </PathwayRecConc>
15  <Output>C:\Users\Andre.Almeida\Desktop\CONVERSE_TRIPOINTE\hra</Output>
16  <PollutantNum>1</PollutantNum>
17  <Append>N</Append>
18  <ReceptorIndex>NA</ReceptorIndex>
19  <SourceName>NA</SourceName>
20  <RiskScenario>
21  <ReceptorType>Resident</ReceptorType><!--Residential, Population, School, or
22  Worker-->
23  <UDEDOn>N</UDEDOn><!--Y or N-->
24  <ExposureDuration>30</ExposureDuration><!--years-->
25  <Scenario>Cancer</Scenario><!--Cancer, NCChronic, NCChronic8HR, NCAcute, All-->
26  <StartAge>-0.25</StartAge><!--years-->
27  <WorkerExposureFrequency>250</WorkerExposureFrequency><!--days/year-->
28  <WorkerNote>NA</WorkerNote>
29  <Tier2On>N</Tier2On>
30  <IntakeRatePercentile>Derived</IntakeRatePercentile><!--HighEnd, Mean, Derived-->
31  </RiskScenario>
32  <Pathways>
33  <Type>4</Type>
34  <PathwaysEnabled><!--Y or N-->
35  <Inhalation>Y</Inhalation>
36  <Soil>Y</Soil>
37  <Dermal>Y</Dermal>
38  <MothersMilk>Y</MothersMilk>
39  <Water>N</Water>
40  <Fish>N</Fish>
41  <HomegrownCrop>N</HomegrownCrop>
42  <Beef>N</Beef>
43  <Dairy>N</Dairy>
44  <Pig>N</Pig>
45  <Chicken>N</Chicken>
46  <Egg>N</Egg>
47  </PathwaysEnabled>
48  <Inhalation>
49  <FAH3rdTritol6>N</FAH3rdTritol6><!--Y or N-->
50  <FAH16to70>Y</FAH16to70><!--Y or N-->
51  <DBRType>LongTerm24HR</DBRType><!--LongTerm24HR, RMP, SedentaryPassive8HR, Light8HR,
52  or Moderate8HR-->
53  <GLCAdjustmentFactor>1</GLCAdjustmentFactor>
54  <UseAdj>N</UseAdj><!--Y or N-->
55  <USEPOSTFILE8REL>N</USEPOSTFILE8REL><!--Y or N-->
56  <USEPOSTFILECAN>N</USEPOSTFILECAN><!--Y or N-->
57  </Inhalation>
58  <Deposition>0.05</Deposition>
59  <SoilMixingRate>0.01</SoilMixingRate>
60  <DermalClimate>Warm</DermalClimate><!--Cold, Mixed, or Warm-->
61  <HumanWater>
62  <SurfaceArea>0</SurfaceArea><!--m^2-->
63  <WaterVolume>0</WaterVolume><!--kg-->
64  <VolumeChangesPerYear>0</VolumeChangesPerYear>
65  <FractionFromContamSource>0</FractionFromContamSource>
66  <RecPhysicallyActiveLivesWorkHotClimates>N</RecPhysicallyActiveLivesWorkHotClimates>
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    <!--Y or N-->
61 </HumanWater>
62 <Homegrown>
63   <HouseholdType>HouseholdsthatGarden</HouseholdType><!--HouseholdsthatGarden,
      HouseholdsthatFarm, or UserDefined-->
64   <Leafy>0.137</Leafy>
65   <Exposed>0.137</Exposed>
66   <Protected>0.137</Protected>
67   <Root>0.137</Root>
68 </Homegrown>
69 <Fish>
70   <SurfaceArea>0</SurfaceArea><!--m^2-->
71   <WaterVolume>0</WaterVolume><!--kg-->
72   <VolumeChangesPerYear>0</VolumeChangesPerYear>
73   <FractionFromContamSource>0</FractionFromContamSource>
74 </Fish>
75 <AnimalFractions>
76   <HouseholdTypeBD>RaiseHunt</HouseholdTypeBD><!--RaiseHunt, Farm, or UserDefined-->
77   <HouseholdTypePCE>RaiseHunt</HouseholdTypePCE><!--RaiseHunt, Farm, or UserDefined-->
78   <Beef>0.485</Beef>
79   <Pork>0.242</Pork>
80   <Poultry>0.156</Poultry>
81   <Eggs>0.146</Eggs>
82   <Dairy>0.207</Dairy>
83 </AnimalFractions>
84 <BeefDairyWater>
85   <SurfaceArea>0</SurfaceArea><!--m^2-->
86   <WaterVolume>0</WaterVolume><!--kg-->
87   <VolumeChangesPerYear>0</VolumeChangesPerYear>
88   <FractionFromContamSourceBeef>0</FractionFromContamSourceBeef>
89   <FractionFromContamSourceDairy>0</FractionFromContamSourceDairy>
90 </BeefDairyWater>
91 <BeefFractionFromGrazing>0.5</BeefFractionFromGrazing>
92 <DairyFractionFromGrazing>0.5</DairyFractionFromGrazing>
93 <PigChickenEggsWater>
94   <SurfaceArea>0</SurfaceArea><!--m^2-->
95   <WaterVolume>0</WaterVolume><!--kg-->
96   <VolumeChangesPerYear>0</VolumeChangesPerYear>
97   <FractionFromContamSourcePig>0</FractionFromContamSourcePig>
98   <FractionFromContamSourceChicken>0</FractionFromContamSourceChicken>
99   <FractionFromContamSourceEggs>0</FractionFromContamSourceEggs>
100 </PigChickenEggsWater>
101 <Pig>
102   <FractionEatenOffGround>0</FractionEatenOffGround>
103   <FractionFeedOnsiteContaminated>0.1</FractionFeedOnsiteContaminated>
104   <Leafy>0.25</Leafy>
105   <Exposed>0.25</Exposed>
106   <Protected>0.25</Protected>
107   <Root>0.25</Root>
108 </Pig>
109 <Chicken>
110   <FractionEatenOffGround>0</FractionEatenOffGround>
111   <FractionFeedOnsiteContaminated>0.05</FractionFeedOnsiteContaminated>
112   <Leafy>0.25</Leafy>
113   <Exposed>0.25</Exposed>
114   <Protected>0.25</Protected>
115   <Root>0.25</Root>
116 </Chicken>
117 <Egg>
118   <FractionEatenOffGround>0.05</FractionEatenOffGround>
119   <FractionFeedOnsiteContaminated>0</FractionFeedOnsiteContaminated>
120   <Leafy>0.25</Leafy>
121   <Exposed>0.25</Exposed>
122   <Protected>0.25</Protected>
123   <Root>0.25</Root>
124 </Egg>

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125 </Pathways>
126 <Tier2>
127   <EFOnt>N</EFOnt><!--Y or N-->
128   <EF>350</EF>
129   <Inhalation>
130     <IROnt>N</IROnt><!--Y or N-->
131     <Mean>225,658,535,452,210,185</Mean>
132     <HighEnd>361,1090,861,745,335,290</HighEnd>
133     <FAHont>N</FAHont><!--Y or N-->
134     <FAH>0.85,0.85,0.72,0.72,0.73,0.73</FAH>
135   </Inhalation>
136   <Soil>
137     <IROnt>N</IROnt><!--Y or N-->
138     <Mean>0.7,20,5,3,0.7,0.6</Mean>
139     <HighEnd>3,40,20,10,3,3</HighEnd>
140     <TfOnt>N</TfOnt><!--Y or N-->
141     <Tf>25550</Tf>
142   </Soil>
143   <Dermal>
144     <TfOnt>N</TfOnt><!--Y or N-->
145     <Mean>1200,3600,7500,6400,1200,1200</Mean>
146     <HighEnd>2600,4300,9100,8500,2600,2600</HighEnd>
147   </Dermal>
148   <MothersMilk>
149     <TfOnt>N</TfOnt><!--Y or N-->
150     <Mean>101</Mean>
151     <HighEnd>139</HighEnd>
152   </MothersMilk>
153   <Water>
154     <TfOnt>N</TfOnt><!--Y or N-->
155     <Mean>18,113,26,24,18,18</Mean>
156     <HighEnd>47,196,66,61,47,45</HighEnd>
157   </Water>
158   <Fish>
159     <TfOnt>N</TfOnt><!--Y or N-->
160     <Mean>0.38,0.18,0.36,0.36,0.38,0.36</Mean>
161     <HighEnd>1.22,0.58,1.16,1.16,1.22,1.16</HighEnd>
162   </Fish>
163   <CropIROnt>N</CropIROnt><!--Y or N-->
164   <BDIROnt>N</BDIROnt><!--Y or N-->
165   <PCEIROnt>N</PCEIROnt><!--Y or N-->
166   <Leafy>
167     <Mean>0.9,3.8,2.5,1.7,0.9,1.1</Mean>
168     <HighEnd>3.2,10.8,7.9,5.8,3.2,3.4</HighEnd>
169   </Leafy>
170   <Exposed>
171     <Mean>1.9,11.7,7.4,5.5,1.9,1.8</Mean>
172     <HighEnd>5.9,30.2,21.7,16.6,5.9,5.6</HighEnd>
173   </Exposed>
174   <Protected>
175     <Mean>1.7,5.9,4.7,3.6,1.7,1.6</Mean>
176     <HighEnd>5.8,17.5,13.3,10.6,5.8,5.2</HighEnd>
177   </Protected>
178   <Root>
179     <Mean>1.7,5.7,3.9,3.0,1.7,1.5</Mean>
180     <HighEnd>4.6,15.3,10.8,8.7,4.6,4.2</HighEnd>
181   </Root>
182   <Beef>
183     <Mean>2,3.9,3.5,3,2,1.7</Mean>
184     <HighEnd>4.8,11.3,8.6,7.6,4.8,4.4</HighEnd>
185   </Beef>
186   <Dairy>
187     <Mean>5.4,50.9,23.3,16.5,5.4,4.3</Mean>
188     <HighEnd>15.9,116.1,61.4,48.4,15.9,13.2</HighEnd>
189   </Dairy>
190   <Pig>
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191         <Mean>0.9,2.9,2.2,1.8,0.9,0.9</Mean>
192         <HighEnd>2.9,10.5,7.8,5.7,2.9,2.8</HighEnd>
193     </Pig>
194     <Chicken>
195         <Mean>1.8,4.5,3.7,3.0,1.8,1.5</Mean>
196         <HighEnd>4.7,11.4,9,7.5,4.7,3.8</HighEnd>
197     </Chicken>
198     <Egg>
199         <Mean>1.6,6.1,3.9,3.1,1.6,1.3</Mean>
200         <HighEnd>4.2,15,9.4,8.1,4.2,3.4</HighEnd>
201     </Egg>
202     <WhatWasChanged>NA</WhatWasChanged>
203 </Tier2>
204 </HRA>
205
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REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
636	496929.9	3605872	2.31E-06	1.15E-07	2.12E-06	5.17E-08	2.50E-08
282	496779.9	3605852	2.23E-06	1.10E-07	2.04E-06	4.97E-08	2.41E-08
467	496859.9	3605862	2.22E-06	1.10E-07	2.04E-06	4.96E-08	2.40E-08
661	496939.9	3605872	2.17E-06	1.07E-07	1.99E-06	4.84E-08	2.34E-08
305	496789.9	3605852	2.10E-06	1.04E-07	1.93E-06	4.70E-08	2.27E-08
491	496869.9	3605862	2.09E-06	1.03E-07	1.92E-06	4.66E-08	2.26E-08
686	496949.9	3605872	2.04E-06	1.01E-07	1.88E-06	4.57E-08	2.21E-08
515	496879.9	3605862	1.98E-06	9.81E-08	1.82E-06	4.43E-08	2.14E-08
328	496799.9	3605852	1.98E-06	9.81E-08	1.82E-06	4.42E-08	2.14E-08
711	496959.9	3605872	1.89E-06	9.38E-08	1.74E-06	4.23E-08	2.05E-08
539	496889.9	3605862	1.89E-06	9.36E-08	1.73E-06	4.22E-08	2.04E-08
351	496809.9	3605852	1.88E-06	9.31E-08	1.72E-06	4.20E-08	2.03E-08
563	496899.9	3605862	1.80E-06	8.93E-08	1.65E-06	4.03E-08	1.95E-08
374	496819.9	3605852	1.78E-06	8.82E-08	1.63E-06	3.98E-08	1.93E-08
587	496909.9	3605862	1.72E-06	8.54E-08	1.58E-06	3.85E-08	1.86E-08
397	496829.9	3605852	1.68E-06	8.34E-08	1.55E-06	3.76E-08	1.82E-08
611	496919.9	3605862	1.66E-06	8.22E-08	1.52E-06	3.71E-08	1.80E-08
420	496839.9	3605852	1.60E-06	7.91E-08	1.46E-06	3.57E-08	1.73E-08
635	496929.9	3605862	1.59E-06	7.90E-08	1.46E-06	3.56E-08	1.72E-08
660	496939.9	3605862	1.54E-06	7.60E-08	1.41E-06	3.43E-08	1.66E-08
443	496849.9	3605852	1.53E-06	7.58E-08	1.41E-06	3.42E-08	1.66E-08
466	496859.9	3605852	1.47E-06	7.30E-08	1.35E-06	3.29E-08	1.59E-08
685	496949.9	3605862	1.47E-06	7.29E-08	1.35E-06	3.29E-08	1.59E-08
490	496869.9	3605852	1.42E-06	7.04E-08	1.30E-06	3.18E-08	1.54E-08
127	496709.9	3605842	1.40E-06	6.94E-08	1.29E-06	3.13E-08	1.51E-08
710	496959.9	3605862	1.39E-06	6.90E-08	1.28E-06	3.11E-08	1.51E-08
149	496719.9	3605842	1.38E-06	6.84E-08	1.27E-06	3.08E-08	1.49E-08
514	496879.9	3605852	1.38E-06	6.83E-08	1.27E-06	3.08E-08	1.49E-08
259	496769.9	3605842	1.36E-06	6.74E-08	1.25E-06	3.04E-08	1.47E-08
171	496729.9	3605842	1.36E-06	6.72E-08	1.25E-06	3.03E-08	1.47E-08
237	496759.9	3605842	1.36E-06	6.71E-08	1.24E-06	3.03E-08	1.46E-08
193	496739.9	3605842	1.35E-06	6.70E-08	1.24E-06	3.02E-08	1.46E-08
215	496749.9	3605842	1.35E-06	6.69E-08	1.24E-06	3.02E-08	1.46E-08
538	496889.9	3605852	1.34E-06	6.63E-08	1.23E-06	2.99E-08	1.45E-08
281	496779.9	3605842	1.33E-06	6.58E-08	1.22E-06	2.97E-08	1.44E-08
562	496899.9	3605852	1.30E-06	6.43E-08	1.19E-06	2.90E-08	1.40E-08
304	496789.9	3605842	1.29E-06	6.41E-08	1.19E-06	2.89E-08	1.40E-08
586	496909.9	3605852	1.27E-06	6.28E-08	1.16E-06	2.83E-08	1.37E-08
327	496799.9	3605842	1.26E-06	6.24E-08	1.16E-06	2.82E-08	1.36E-08
610	496919.9	3605852	1.23E-06	6.10E-08	1.13E-06	2.75E-08	1.33E-08
350	496809.9	3605842	1.23E-06	6.07E-08	1.12E-06	2.74E-08	1.33E-08
634	496929.9	3605852	1.20E-06	5.93E-08	1.10E-06	2.68E-08	1.30E-08
373	496819.9	3605842	1.19E-06	5.89E-08	1.09E-06	2.66E-08	1.29E-08
659	496939.9	3605852	1.17E-06	5.77E-08	1.07E-06	2.60E-08	1.26E-08
396	496829.9	3605842	1.15E-06	5.71E-08	1.06E-06	2.58E-08	1.25E-08
684	496949.9	3605852	1.13E-06	5.57E-08	1.03E-06	2.51E-08	1.22E-08
419	496839.9	3605842	1.12E-06	5.54E-08	1.03E-06	2.50E-08	1.21E-08
442	496849.9	3605842	1.09E-06	5.42E-08	1.00E-06	2.44E-08	1.18E-08
709	496959.9	3605852	1.08E-06	5.37E-08	9.95E-07	2.42E-08	1.17E-08
465	496859.9	3605842	1.07E-06	5.29E-08	9.81E-07	2.39E-08	1.16E-08
489	496869.9	3605842	1.05E-06	5.18E-08	9.60E-07	2.34E-08	1.13E-08
513	496879.9	3605842	1.03E-06	5.08E-08	9.41E-07	2.29E-08	1.11E-08
537	496889.9	3605842	1.00E-06	4.98E-08	9.22E-07	2.24E-08	1.09E-08
561	496899.9	3605842	9.86E-07	4.88E-08	9.04E-07	2.20E-08	1.07E-08

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
585	496909.9	3605842	9.70E-07	4.81E-08	8.90E-07	2.17E-08	1.05E-08
609	496919.9	3605842	9.54E-07	4.73E-08	8.75E-07	2.13E-08	1.03E-08
633	496929.9	3605842	9.37E-07	4.64E-08	8.59E-07	2.09E-08	1.01E-08
658	496939.9	3605842	9.11E-07	4.51E-08	8.36E-07	2.04E-08	9.85E-09
683	496949.9	3605842	8.95E-07	4.43E-08	8.21E-07	2.00E-08	9.67E-09
258	496769.9	3605832	8.81E-07	4.36E-08	8.08E-07	1.97E-08	9.52E-09
280	496779.9	3605832	8.76E-07	4.34E-08	8.03E-07	1.96E-08	9.47E-09
303	496789.9	3605832	8.74E-07	4.33E-08	8.02E-07	1.95E-08	9.45E-09
708	496959.9	3605842	8.73E-07	4.32E-08	8.01E-07	1.95E-08	9.44E-09
326	496799.9	3605832	8.68E-07	4.30E-08	7.96E-07	1.94E-08	9.38E-09
236	496759.9	3605832	8.63E-07	4.27E-08	7.91E-07	1.93E-08	9.33E-09
349	496809.9	3605832	8.59E-07	4.25E-08	7.88E-07	1.92E-08	9.29E-09
372	496819.9	3605832	8.49E-07	4.21E-08	7.79E-07	1.90E-08	9.18E-09
214	496749.9	3605832	8.45E-07	4.18E-08	7.75E-07	1.89E-08	9.14E-09
395	496829.9	3605832	8.38E-07	4.15E-08	7.68E-07	1.87E-08	9.05E-09
418	496839.9	3605832	8.27E-07	4.10E-08	7.59E-07	1.85E-08	8.94E-09
192	496739.9	3605832	8.21E-07	4.06E-08	7.53E-07	1.83E-08	8.87E-09
441	496849.9	3605832	8.19E-07	4.06E-08	7.51E-07	1.83E-08	8.86E-09
464	496859.9	3605832	8.10E-07	4.01E-08	7.43E-07	1.81E-08	8.76E-09
488	496869.9	3605832	8.01E-07	3.96E-08	7.34E-07	1.79E-08	8.65E-09
512	496879.9	3605832	7.92E-07	3.92E-08	7.27E-07	1.77E-08	8.56E-09
170	496729.9	3605832	7.85E-07	3.89E-08	7.20E-07	1.75E-08	8.48E-09
536	496889.9	3605832	7.84E-07	3.88E-08	7.19E-07	1.75E-08	8.47E-09
560	496899.9	3605832	7.75E-07	3.84E-08	7.11E-07	1.73E-08	8.38E-09
584	496909.9	3605832	7.69E-07	3.81E-08	7.05E-07	1.72E-08	8.31E-09
608	496919.9	3605832	7.59E-07	3.76E-08	6.96E-07	1.70E-08	8.21E-09
632	496929.9	3605832	7.49E-07	3.71E-08	6.87E-07	1.67E-08	8.10E-09
148	496719.9	3605832	7.46E-07	3.69E-08	6.84E-07	1.67E-08	8.06E-09
657	496939.9	3605832	7.38E-07	3.65E-08	6.77E-07	1.65E-08	7.98E-09
682	496949.9	3605832	7.28E-07	3.60E-08	6.67E-07	1.63E-08	7.87E-09
707	496959.9	3605832	7.13E-07	3.53E-08	6.54E-07	1.59E-08	7.71E-09
126	496709.9	3605832	6.97E-07	3.45E-08	6.39E-07	1.56E-08	7.54E-09
105	496699.9	3605832	6.36E-07	3.15E-08	5.83E-07	1.42E-08	6.88E-09
394	496829.9	3605822	6.35E-07	3.15E-08	5.83E-07	1.42E-08	6.87E-09
417	496839.9	3605822	6.35E-07	3.14E-08	5.82E-07	1.42E-08	6.86E-09
371	496819.9	3605822	6.34E-07	3.14E-08	5.82E-07	1.42E-08	6.86E-09
440	496849.9	3605822	6.34E-07	3.14E-08	5.81E-07	1.42E-08	6.85E-09
463	496859.9	3605822	6.32E-07	3.13E-08	5.80E-07	1.41E-08	6.84E-09
348	496809.9	3605822	6.32E-07	3.13E-08	5.80E-07	1.41E-08	6.83E-09
487	496869.9	3605822	6.31E-07	3.12E-08	5.78E-07	1.41E-08	6.82E-09
325	496799.9	3605822	6.29E-07	3.11E-08	5.77E-07	1.40E-08	6.80E-09
511	496879.9	3605822	6.29E-07	3.11E-08	5.77E-07	1.40E-08	6.80E-09
535	496889.9	3605822	6.27E-07	3.10E-08	5.75E-07	1.40E-08	6.78E-09
302	496789.9	3605822	6.26E-07	3.10E-08	5.74E-07	1.40E-08	6.77E-09
559	496899.9	3605822	6.22E-07	3.08E-08	5.71E-07	1.39E-08	6.73E-09
583	496909.9	3605822	6.21E-07	3.07E-08	5.69E-07	1.39E-08	6.71E-09
279	496779.9	3605822	6.19E-07	3.07E-08	5.68E-07	1.38E-08	6.70E-09
607	496919.9	3605822	6.18E-07	3.06E-08	5.67E-07	1.38E-08	6.68E-09
631	496929.9	3605822	6.14E-07	3.04E-08	5.63E-07	1.37E-08	6.64E-09
257	496769.9	3605822	6.10E-07	3.02E-08	5.59E-07	1.36E-08	6.59E-09
656	496939.9	3605822	6.08E-07	3.01E-08	5.58E-07	1.36E-08	6.57E-09
681	496949.9	3605822	6.00E-07	2.97E-08	5.51E-07	1.34E-08	6.49E-09
706	496959.9	3605822	5.92E-07	2.93E-08	5.43E-07	1.32E-08	6.40E-09
235	496759.9	3605822	5.89E-07	2.92E-08	5.41E-07	1.32E-08	6.37E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
213	496749.9	3605822	5.68E-07	2.81E-08	5.21E-07	1.27E-08	6.14E-09
84	496689.9	3605832	5.56E-07	2.75E-08	5.10E-07	1.24E-08	6.01E-09
191	496739.9	3605822	5.43E-07	2.69E-08	4.98E-07	1.21E-08	5.87E-09
606	496919.9	3605812	5.11E-07	2.53E-08	4.69E-07	1.14E-08	5.53E-09
582	496909.9	3605812	5.11E-07	2.53E-08	4.69E-07	1.14E-08	5.52E-09
630	496929.9	3605812	5.10E-07	2.53E-08	4.68E-07	1.14E-08	5.51E-09
558	496899.9	3605812	5.09E-07	2.52E-08	4.67E-07	1.14E-08	5.51E-09
534	496889.9	3605812	5.09E-07	2.52E-08	4.67E-07	1.14E-08	5.50E-09
510	496879.9	3605812	5.09E-07	2.52E-08	4.67E-07	1.14E-08	5.50E-09
655	496939.9	3605812	5.07E-07	2.51E-08	4.65E-07	1.13E-08	5.48E-09
169	496729.9	3605822	5.07E-07	2.51E-08	4.65E-07	1.13E-08	5.48E-09
486	496869.9	3605812	5.07E-07	2.51E-08	4.65E-07	1.13E-08	5.48E-09
462	496859.9	3605812	5.04E-07	2.50E-08	4.63E-07	1.13E-08	5.45E-09
680	496949.9	3605812	5.03E-07	2.49E-08	4.62E-07	1.12E-08	5.44E-09
439	496849.9	3605812	5.02E-07	2.49E-08	4.60E-07	1.12E-08	5.43E-09
416	496839.9	3605812	4.98E-07	2.47E-08	4.57E-07	1.11E-08	5.39E-09
705	496959.9	3605812	4.98E-07	2.47E-08	4.57E-07	1.11E-08	5.39E-09
393	496829.9	3605812	4.95E-07	2.45E-08	4.54E-07	1.11E-08	5.35E-09
370	496819.9	3605812	4.90E-07	2.43E-08	4.49E-07	1.09E-08	5.30E-09
347	496809.9	3605812	4.83E-07	2.39E-08	4.43E-07	1.08E-08	5.22E-09
324	496799.9	3605812	4.75E-07	2.35E-08	4.35E-07	1.06E-08	5.13E-09
147	496719.9	3605822	4.67E-07	2.31E-08	4.29E-07	1.04E-08	5.05E-09
301	496789.9	3605812	4.66E-07	2.31E-08	4.27E-07	1.04E-08	5.04E-09
278	496779.9	3605812	4.57E-07	2.26E-08	4.19E-07	1.02E-08	4.94E-09
63	496679.9	3605832	4.54E-07	2.25E-08	4.17E-07	1.02E-08	4.91E-09
256	496769.9	3605812	4.43E-07	2.19E-08	4.06E-07	9.88E-09	4.78E-09
654	496939.9	3605802	4.28E-07	2.12E-08	3.92E-07	9.55E-09	4.62E-09
234	496759.9	3605812	4.27E-07	2.12E-08	3.92E-07	9.55E-09	4.62E-09
629	496929.9	3605802	4.27E-07	2.12E-08	3.92E-07	9.54E-09	4.62E-09
679	496949.9	3605802	4.27E-07	2.11E-08	3.91E-07	9.53E-09	4.61E-09
605	496919.9	3605802	4.26E-07	2.11E-08	3.91E-07	9.52E-09	4.61E-09
581	496909.9	3605802	4.25E-07	2.11E-08	3.90E-07	9.50E-09	4.60E-09
125	496709.9	3605822	4.25E-07	2.10E-08	3.90E-07	9.49E-09	4.59E-09
704	496959.9	3605802	4.24E-07	2.10E-08	3.89E-07	9.46E-09	4.58E-09
557	496899.9	3605802	4.22E-07	2.09E-08	3.87E-07	9.43E-09	4.56E-09
533	496889.9	3605802	4.19E-07	2.08E-08	3.84E-07	9.36E-09	4.53E-09
509	496879.9	3605802	4.16E-07	2.06E-08	3.81E-07	9.29E-09	4.49E-09
485	496869.9	3605802	4.12E-07	2.04E-08	3.78E-07	9.21E-09	4.46E-09
212	496749.9	3605812	4.09E-07	2.03E-08	3.75E-07	9.14E-09	4.42E-09
461	496859.9	3605802	4.09E-07	2.02E-08	3.75E-07	9.13E-09	4.42E-09
438	496849.9	3605802	4.04E-07	2.00E-08	3.71E-07	9.03E-09	4.37E-09
415	496839.9	3605802	3.99E-07	1.97E-08	3.66E-07	8.90E-09	4.31E-09
392	496829.9	3605802	3.93E-07	1.95E-08	3.60E-07	8.77E-09	4.25E-09
369	496819.9	3605802	3.86E-07	1.91E-08	3.54E-07	8.61E-09	4.17E-09
190	496739.9	3605812	3.85E-07	1.91E-08	3.53E-07	8.61E-09	4.17E-09
104	496699.9	3605822	3.80E-07	1.88E-08	3.48E-07	8.48E-09	4.10E-09
346	496809.9	3605802	3.77E-07	1.87E-08	3.46E-07	8.42E-09	4.08E-09
323	496799.9	3605802	3.68E-07	1.82E-08	3.38E-07	8.23E-09	3.98E-09
678	496949.9	3605792	3.64E-07	1.80E-08	3.34E-07	8.13E-09	3.93E-09
703	496959.9	3605792	3.63E-07	1.80E-08	3.33E-07	8.11E-09	3.93E-09
653	496939.9	3605792	3.63E-07	1.80E-08	3.33E-07	8.10E-09	3.92E-09
628	496929.9	3605792	3.61E-07	1.79E-08	3.31E-07	8.06E-09	3.90E-09
300	496789.9	3605802	3.59E-07	1.78E-08	3.30E-07	8.02E-09	3.88E-09
604	496919.9	3605792	3.59E-07	1.78E-08	3.29E-07	8.01E-09	3.88E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
580	496909.9	3605792	3.58E-07	1.77E-08	3.28E-07	7.99E-09	3.87E-09
168	496729.9	3605812	3.58E-07	1.77E-08	3.28E-07	7.99E-09	3.87E-09
556	496899.9	3605792	3.53E-07	1.75E-08	3.24E-07	7.88E-09	3.81E-09
532	496889.9	3605792	3.49E-07	1.73E-08	3.20E-07	7.79E-09	3.77E-09
42	496669.9	3605832	3.49E-07	1.73E-08	3.20E-07	7.79E-09	3.77E-09
277	496779.9	3605802	3.48E-07	1.72E-08	3.19E-07	7.78E-09	3.76E-09
508	496879.9	3605792	3.44E-07	1.71E-08	3.16E-07	7.69E-09	3.72E-09
484	496869.9	3605792	3.40E-07	1.68E-08	3.12E-07	7.59E-09	3.67E-09
255	496769.9	3605802	3.36E-07	1.66E-08	3.08E-07	7.51E-09	3.63E-09
460	496859.9	3605792	3.35E-07	1.66E-08	3.07E-07	7.48E-09	3.62E-09
437	496849.9	3605792	3.30E-07	1.63E-08	3.03E-07	7.37E-09	3.57E-09
146	496719.9	3605812	3.29E-07	1.63E-08	3.01E-07	7.34E-09	3.55E-09
83	496689.9	3605822	3.28E-07	1.63E-08	3.01E-07	7.33E-09	3.55E-09
414	496839.9	3605792	3.24E-07	1.60E-08	2.97E-07	7.24E-09	3.50E-09
233	496759.9	3605802	3.23E-07	1.60E-08	2.97E-07	7.22E-09	3.49E-09
391	496829.9	3605792	3.17E-07	1.57E-08	2.91E-07	7.09E-09	3.43E-09
702	496959.9	3605782	3.13E-07	1.55E-08	2.87E-07	6.98E-09	3.38E-09
677	496949.9	3605782	3.12E-07	1.55E-08	2.86E-07	6.97E-09	3.37E-09
652	496939.9	3605782	3.10E-07	1.54E-08	2.85E-07	6.93E-09	3.36E-09
368	496819.9	3605792	3.10E-07	1.53E-08	2.84E-07	6.92E-09	3.35E-09
211	496749.9	3605802	3.09E-07	1.53E-08	2.83E-07	6.89E-09	3.34E-09
627	496929.9	3605782	3.08E-07	1.53E-08	2.83E-07	6.88E-09	3.33E-09
603	496919.9	3605782	3.05E-07	1.51E-08	2.80E-07	6.82E-09	3.30E-09
579	496909.9	3605782	3.03E-07	1.50E-08	2.78E-07	6.78E-09	3.28E-09
345	496809.9	3605792	3.02E-07	1.49E-08	2.77E-07	6.74E-09	3.26E-09
124	496709.9	3605812	2.98E-07	1.48E-08	2.74E-07	6.66E-09	3.23E-09
555	496899.9	3605782	2.98E-07	1.48E-08	2.73E-07	6.65E-09	3.22E-09
531	496889.9	3605782	2.93E-07	1.45E-08	2.69E-07	6.55E-09	3.17E-09
322	496799.9	3605792	2.93E-07	1.45E-08	2.69E-07	6.55E-09	3.17E-09
189	496739.9	3605802	2.91E-07	1.44E-08	2.67E-07	6.49E-09	3.14E-09
507	496879.9	3605782	2.88E-07	1.43E-08	2.65E-07	6.44E-09	3.12E-09
483	496869.9	3605782	2.83E-07	1.40E-08	2.60E-07	6.33E-09	3.06E-09
299	496789.9	3605792	2.83E-07	1.40E-08	2.60E-07	6.32E-09	3.06E-09
459	496859.9	3605782	2.78E-07	1.38E-08	2.55E-07	6.21E-09	3.01E-09
62	496679.9	3605822	2.75E-07	1.36E-08	2.52E-07	6.13E-09	2.97E-09
276	496779.9	3605792	2.74E-07	1.36E-08	2.52E-07	6.13E-09	2.97E-09
436	496849.9	3605782	2.73E-07	1.35E-08	2.50E-07	6.10E-09	2.95E-09
701	496959.9	3605772	2.72E-07	1.35E-08	2.50E-07	6.07E-09	2.94E-09
167	496729.9	3605802	2.71E-07	1.34E-08	2.49E-07	6.06E-09	2.93E-09
676	496949.9	3605772	2.70E-07	1.34E-08	2.48E-07	6.03E-09	2.92E-09
21	496659.9	3605832	2.70E-07	1.34E-08	2.47E-07	6.02E-09	2.91E-09
651	496939.9	3605772	2.68E-07	1.33E-08	2.46E-07	5.99E-09	2.90E-09
103	496699.9	3605812	2.68E-07	1.33E-08	2.46E-07	5.99E-09	2.90E-09
413	496839.9	3605782	2.67E-07	1.32E-08	2.45E-07	5.96E-09	2.88E-09
626	496929.9	3605772	2.66E-07	1.32E-08	2.44E-07	5.93E-09	2.87E-09
254	496769.9	3605792	2.64E-07	1.31E-08	2.42E-07	5.90E-09	2.86E-09
602	496919.9	3605772	2.63E-07	1.30E-08	2.41E-07	5.87E-09	2.84E-09
390	496829.9	3605782	2.60E-07	1.29E-08	2.39E-07	5.81E-09	2.81E-09
578	496909.9	3605772	2.59E-07	1.28E-08	2.38E-07	5.79E-09	2.80E-09
554	496899.9	3605772	2.54E-07	1.26E-08	2.33E-07	5.68E-09	2.75E-09
367	496819.9	3605782	2.54E-07	1.26E-08	2.33E-07	5.67E-09	2.74E-09
232	496759.9	3605792	2.53E-07	1.25E-08	2.32E-07	5.64E-09	2.73E-09
145	496719.9	3605802	2.50E-07	1.24E-08	2.30E-07	5.59E-09	2.71E-09
530	496889.9	3605772	2.50E-07	1.24E-08	2.29E-07	5.57E-09	2.70E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
344	496809.9	3605782	2.46E-07	1.22E-08	2.26E-07	5.50E-09	2.66E-09
506	496879.9	3605772	2.45E-07	1.21E-08	2.24E-07	5.46E-09	2.64E-09
210	496749.9	3605792	2.41E-07	1.19E-08	2.21E-07	5.39E-09	2.61E-09
482	496869.9	3605772	2.39E-07	1.19E-08	2.20E-07	5.35E-09	2.59E-09
700	496959.9	3605762	2.39E-07	1.18E-08	2.19E-07	5.33E-09	2.58E-09
321	496799.9	3605782	2.38E-07	1.18E-08	2.19E-07	5.33E-09	2.58E-09
82	496689.9	3605812	2.36E-07	1.17E-08	2.17E-07	5.28E-09	2.55E-09
675	496949.9	3605762	2.36E-07	1.17E-08	2.16E-07	5.26E-09	2.55E-09
458	496859.9	3605772	2.34E-07	1.16E-08	2.15E-07	5.23E-09	2.53E-09
650	496939.9	3605762	2.33E-07	1.16E-08	2.14E-07	5.21E-09	2.52E-09
625	496929.9	3605762	2.31E-07	1.14E-08	2.11E-07	5.15E-09	2.49E-09
298	496789.9	3605782	2.30E-07	1.14E-08	2.11E-07	5.14E-09	2.49E-09
188	496739.9	3605792	2.30E-07	1.14E-08	2.11E-07	5.13E-09	2.48E-09
123	496709.9	3605802	2.29E-07	1.14E-08	2.10E-07	5.12E-09	2.48E-09
435	496849.9	3605772	2.29E-07	1.13E-08	2.10E-07	5.11E-09	2.47E-09
601	496919.9	3605762	2.28E-07	1.13E-08	2.09E-07	5.08E-09	2.46E-09
41	496669.9	3605822	2.27E-07	1.12E-08	2.08E-07	5.06E-09	2.45E-09
577	496909.9	3605762	2.23E-07	1.10E-08	2.05E-07	4.98E-09	2.41E-09
275	496779.9	3605782	2.23E-07	1.10E-08	2.05E-07	4.98E-09	2.41E-09
412	496839.9	3605772	2.23E-07	1.10E-08	2.04E-07	4.98E-09	2.41E-09
553	496899.9	3605762	2.19E-07	1.08E-08	2.01E-07	4.89E-09	2.36E-09
389	496829.9	3605772	2.17E-07	1.07E-08	1.99E-07	4.85E-09	2.35E-09
166	496729.9	3605792	2.16E-07	1.07E-08	1.98E-07	4.82E-09	2.33E-09
253	496769.9	3605782	2.15E-07	1.07E-08	1.97E-07	4.80E-09	2.33E-09
529	496889.9	3605762	2.14E-07	1.06E-08	1.96E-07	4.78E-09	2.31E-09
366	496819.9	3605772	2.11E-07	1.05E-08	1.94E-07	4.71E-09	2.28E-09
699	496959.9	3605752	2.10E-07	1.04E-08	1.92E-07	4.68E-09	2.27E-09
505	496879.9	3605762	2.09E-07	1.04E-08	1.92E-07	4.68E-09	2.26E-09
102	496699.9	3605802	2.08E-07	1.03E-08	1.91E-07	4.65E-09	2.25E-09
674	496949.9	3605752	2.06E-07	1.02E-08	1.89E-07	4.61E-09	2.23E-09
231	496759.9	3605782	2.06E-07	1.02E-08	1.89E-07	4.61E-09	2.23E-09
343	496809.9	3605772	2.05E-07	1.02E-08	1.88E-07	4.58E-09	2.22E-09
61	496679.9	3605812	2.04E-07	1.01E-08	1.87E-07	4.56E-09	2.21E-09
481	496869.9	3605762	2.04E-07	1.01E-08	1.87E-07	4.56E-09	2.21E-09
649	496939.9	3605752	2.04E-07	1.01E-08	1.87E-07	4.55E-09	2.20E-09
144	496719.9	3605792	2.02E-07	9.98E-09	1.85E-07	4.50E-09	2.18E-09
624	496929.9	3605752	2.01E-07	9.95E-09	1.84E-07	4.49E-09	2.17E-09
457	496859.9	3605762	2.00E-07	9.88E-09	1.83E-07	4.46E-09	2.16E-09
320	496799.9	3605772	1.99E-07	9.84E-09	1.82E-07	4.44E-09	2.15E-09
600	496919.9	3605752	1.98E-07	9.82E-09	1.82E-07	4.43E-09	2.14E-09
209	496749.9	3605782	1.97E-07	9.78E-09	1.81E-07	4.41E-09	2.13E-09
434	496849.9	3605762	1.94E-07	9.63E-09	1.78E-07	4.34E-09	2.10E-09
576	496909.9	3605752	1.93E-07	9.56E-09	1.77E-07	4.31E-09	2.09E-09
20	496659.9	3605822	1.93E-07	9.56E-09	1.77E-07	4.31E-09	2.09E-09
297	496789.9	3605772	1.92E-07	9.52E-09	1.76E-07	4.29E-09	2.08E-09
552	496899.9	3605752	1.89E-07	9.38E-09	1.74E-07	4.23E-09	2.05E-09
411	496839.9	3605762	1.89E-07	9.36E-09	1.73E-07	4.22E-09	2.04E-09
187	496739.9	3605782	1.88E-07	9.33E-09	1.73E-07	4.21E-09	2.04E-09
81	496689.9	3605802	1.87E-07	9.24E-09	1.71E-07	4.17E-09	2.02E-09
274	496779.9	3605772	1.86E-07	9.22E-09	1.71E-07	4.16E-09	2.01E-09
122	496709.9	3605792	1.86E-07	9.20E-09	1.70E-07	4.15E-09	2.01E-09
528	496889.9	3605752	1.85E-07	9.16E-09	1.70E-07	4.13E-09	2.00E-09
698	496959.9	3605742	1.84E-07	9.14E-09	1.69E-07	4.12E-09	1.99E-09
388	496829.9	3605762	1.84E-07	9.11E-09	1.69E-07	4.11E-09	1.99E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
673	496949.9	3605742	1.82E-07	9.00E-09	1.67E-07	4.06E-09	1.97E-09
504	496879.9	3605752	1.81E-07	8.94E-09	1.66E-07	4.03E-09	1.95E-09
252	496769.9	3605772	1.80E-07	8.91E-09	1.65E-07	4.02E-09	1.95E-09
648	496939.9	3605742	1.79E-07	8.87E-09	1.64E-07	4.00E-09	1.94E-09
365	496819.9	3605762	1.79E-07	8.85E-09	1.64E-07	3.99E-09	1.93E-09
165	496729.9	3605782	1.78E-07	8.83E-09	1.64E-07	3.98E-09	1.93E-09
40	496669.9	3605812	1.77E-07	8.75E-09	1.62E-07	3.94E-09	1.91E-09
623	496929.9	3605742	1.76E-07	8.73E-09	1.62E-07	3.94E-09	1.91E-09
480	496869.9	3605752	1.76E-07	8.72E-09	1.62E-07	3.93E-09	1.90E-09
342	496809.9	3605762	1.74E-07	8.60E-09	1.59E-07	3.88E-09	1.88E-09
599	496919.9	3605742	1.73E-07	8.59E-09	1.59E-07	3.87E-09	1.87E-09
230	496759.9	3605772	1.73E-07	8.57E-09	1.59E-07	3.86E-09	1.87E-09
456	496859.9	3605752	1.72E-07	8.51E-09	1.58E-07	3.84E-09	1.86E-09
101	496699.9	3605792	1.70E-07	8.42E-09	1.56E-07	3.80E-09	1.84E-09
319	496799.9	3605762	1.69E-07	8.35E-09	1.55E-07	3.77E-09	1.82E-09
575	496909.9	3605742	1.69E-07	8.35E-09	1.55E-07	3.76E-09	1.82E-09
143	496719.9	3605782	1.67E-07	8.28E-09	1.53E-07	3.73E-09	1.81E-09
433	496849.9	3605752	1.67E-07	8.28E-09	1.53E-07	3.73E-09	1.81E-09
208	496749.9	3605772	1.66E-07	8.22E-09	1.52E-07	3.71E-09	1.79E-09
60	496679.9	3605802	1.66E-07	8.21E-09	1.52E-07	3.70E-09	1.79E-09
551	496899.9	3605742	1.65E-07	8.17E-09	1.51E-07	3.69E-09	1.78E-09
296	496789.9	3605762	1.63E-07	8.09E-09	1.50E-07	3.65E-09	1.77E-09
697	496959.9	3605732	1.63E-07	8.05E-09	1.49E-07	3.63E-09	1.76E-09
410	496839.9	3605752	1.63E-07	8.05E-09	1.49E-07	3.63E-09	1.76E-09
527	496889.9	3605742	1.61E-07	7.98E-09	1.48E-07	3.60E-09	1.74E-09
672	496949.9	3605732	1.61E-07	7.96E-09	1.47E-07	3.59E-09	1.74E-09
186	496739.9	3605772	1.58E-07	7.85E-09	1.45E-07	3.54E-09	1.71E-09
647	496939.9	3605732	1.58E-07	7.83E-09	1.45E-07	3.53E-09	1.71E-09
387	496829.9	3605752	1.58E-07	7.83E-09	1.45E-07	3.53E-09	1.71E-09
273	496779.9	3605762	1.58E-07	7.82E-09	1.45E-07	3.53E-09	1.71E-09
503	496879.9	3605742	1.57E-07	7.79E-09	1.44E-07	3.51E-09	1.70E-09
622	496929.9	3605732	1.56E-07	7.70E-09	1.43E-07	3.47E-09	1.68E-09
121	496709.9	3605782	1.55E-07	7.68E-09	1.42E-07	3.46E-09	1.68E-09
80	496689.9	3605792	1.55E-07	7.66E-09	1.42E-07	3.45E-09	1.67E-09
19	496659.9	3605812	1.54E-07	7.61E-09	1.41E-07	3.43E-09	1.66E-09
364	496819.9	3605752	1.54E-07	7.60E-09	1.41E-07	3.43E-09	1.66E-09
479	496869.9	3605742	1.53E-07	7.60E-09	1.41E-07	3.43E-09	1.66E-09
251	496769.9	3605762	1.53E-07	7.59E-09	1.41E-07	3.42E-09	1.66E-09
598	496919.9	3605732	1.52E-07	7.54E-09	1.40E-07	3.40E-09	1.65E-09
164	496729.9	3605772	1.50E-07	7.45E-09	1.38E-07	3.36E-09	1.63E-09
455	496859.9	3605742	1.50E-07	7.41E-09	1.37E-07	3.34E-09	1.62E-09
341	496809.9	3605752	1.49E-07	7.40E-09	1.37E-07	3.34E-09	1.61E-09
574	496909.9	3605732	1.48E-07	7.33E-09	1.36E-07	3.31E-09	1.60E-09
229	496759.9	3605762	1.48E-07	7.30E-09	1.35E-07	3.29E-09	1.59E-09
39	496669.9	3605802	1.47E-07	7.29E-09	1.35E-07	3.29E-09	1.59E-09
432	496849.9	3605742	1.45E-07	7.20E-09	1.33E-07	3.25E-09	1.57E-09
318	496799.9	3605752	1.45E-07	7.20E-09	1.33E-07	3.25E-09	1.57E-09
550	496899.9	3605732	1.45E-07	7.17E-09	1.33E-07	3.23E-09	1.57E-09
696	496959.9	3605722	1.44E-07	7.15E-09	1.32E-07	3.22E-09	1.56E-09
100	496699.9	3605782	1.43E-07	7.10E-09	1.31E-07	3.20E-09	1.55E-09
671	496949.9	3605722	1.43E-07	7.06E-09	1.31E-07	3.19E-09	1.54E-09
207	496749.9	3605762	1.42E-07	7.03E-09	1.30E-07	3.17E-09	1.53E-09
409	496839.9	3605742	1.42E-07	7.02E-09	1.30E-07	3.16E-09	1.53E-09
142	496719.9	3605772	1.41E-07	7.01E-09	1.30E-07	3.16E-09	1.53E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
526	496889.9	3605732	1.41E-07	7.01E-09	1.30E-07	3.16E-09	1.53E-09
295	496789.9	3605752	1.41E-07	6.99E-09	1.29E-07	3.15E-09	1.53E-09
646	496939.9	3605722	1.40E-07	6.95E-09	1.29E-07	3.13E-09	1.52E-09
59	496679.9	3605792	1.40E-07	6.94E-09	1.29E-07	3.13E-09	1.51E-09
502	496879.9	3605732	1.38E-07	6.84E-09	1.27E-07	3.09E-09	1.49E-09
621	496929.9	3605722	1.38E-07	6.82E-09	1.26E-07	3.08E-09	1.49E-09
386	496829.9	3605742	1.38E-07	6.82E-09	1.26E-07	3.08E-09	1.49E-09
272	496779.9	3605752	1.37E-07	6.77E-09	1.25E-07	3.05E-09	1.48E-09
185	496739.9	3605762	1.36E-07	6.72E-09	1.25E-07	3.03E-09	1.47E-09
478	496869.9	3605732	1.35E-07	6.68E-09	1.24E-07	3.01E-09	1.46E-09
597	496919.9	3605722	1.34E-07	6.64E-09	1.23E-07	2.99E-09	1.45E-09
363	496819.9	3605742	1.34E-07	6.63E-09	1.23E-07	2.99E-09	1.45E-09
250	496769.9	3605752	1.33E-07	6.57E-09	1.22E-07	2.96E-09	1.43E-09
120	496709.9	3605772	1.32E-07	6.54E-09	1.21E-07	2.95E-09	1.43E-09
79	496689.9	3605782	1.32E-07	6.53E-09	1.21E-07	2.95E-09	1.43E-09
454	496859.9	3605732	1.32E-07	6.52E-09	1.21E-07	2.94E-09	1.42E-09
18	496659.9	3605802	1.32E-07	6.52E-09	1.21E-07	2.94E-09	1.42E-09
573	496909.9	3605722	1.31E-07	6.48E-09	1.20E-07	2.92E-09	1.41E-09
340	496809.9	3605742	1.30E-07	6.46E-09	1.20E-07	2.91E-09	1.41E-09
163	496729.9	3605762	1.29E-07	6.39E-09	1.18E-07	2.88E-09	1.40E-09
695	496959.9	3605712	1.29E-07	6.38E-09	1.18E-07	2.88E-09	1.39E-09
549	496899.9	3605722	1.28E-07	6.34E-09	1.18E-07	2.86E-09	1.38E-09
431	496849.9	3605732	1.28E-07	6.33E-09	1.17E-07	2.85E-09	1.38E-09
228	496759.9	3605752	1.28E-07	6.32E-09	1.17E-07	2.85E-09	1.38E-09
38	496669.9	3605792	1.27E-07	6.29E-09	1.17E-07	2.84E-09	1.37E-09
670	496949.9	3605712	1.27E-07	6.29E-09	1.17E-07	2.84E-09	1.37E-09
317	496799.9	3605742	1.27E-07	6.29E-09	1.17E-07	2.84E-09	1.37E-09
525	496889.9	3605722	1.25E-07	6.20E-09	1.15E-07	2.80E-09	1.35E-09
645	496939.9	3605712	1.25E-07	6.18E-09	1.15E-07	2.79E-09	1.35E-09
408	496839.9	3605732	1.25E-07	6.18E-09	1.14E-07	2.79E-09	1.35E-09
294	496789.9	3605742	1.24E-07	6.12E-09	1.13E-07	2.76E-09	1.34E-09
99	496699.9	3605772	1.23E-07	6.10E-09	1.13E-07	2.75E-09	1.33E-09
206	496749.9	3605752	1.23E-07	6.09E-09	1.13E-07	2.74E-09	1.33E-09
620	496929.9	3605712	1.23E-07	6.07E-09	1.12E-07	2.74E-09	1.32E-09
501	496879.9	3605722	1.22E-07	6.06E-09	1.12E-07	2.74E-09	1.32E-09
141	496719.9	3605762	1.22E-07	6.03E-09	1.12E-07	2.72E-09	1.32E-09
385	496829.9	3605732	1.22E-07	6.02E-09	1.12E-07	2.72E-09	1.31E-09
58	496679.9	3605782	1.21E-07	6.01E-09	1.11E-07	2.71E-09	1.31E-09
271	496779.9	3605742	1.20E-07	5.94E-09	1.10E-07	2.68E-09	1.30E-09
477	496869.9	3605722	1.20E-07	5.92E-09	1.10E-07	2.67E-09	1.29E-09
362	496819.9	3605732	1.18E-07	5.87E-09	1.09E-07	2.65E-09	1.28E-09
596	496919.9	3605712	1.18E-07	5.87E-09	1.09E-07	2.65E-09	1.28E-09
184	496739.9	3605752	1.18E-07	5.82E-09	1.08E-07	2.62E-09	1.27E-09
453	496859.9	3605722	1.17E-07	5.79E-09	1.07E-07	2.61E-09	1.26E-09
572	496909.9	3605712	1.16E-07	5.75E-09	1.07E-07	2.60E-09	1.26E-09
249	496769.9	3605742	1.16E-07	5.74E-09	1.06E-07	2.59E-09	1.25E-09
17	496659.9	3605792	1.16E-07	5.73E-09	1.06E-07	2.58E-09	1.25E-09
339	496809.9	3605732	1.15E-07	5.71E-09	1.06E-07	2.58E-09	1.25E-09
694	496959.9	3605702	1.15E-07	5.71E-09	1.06E-07	2.57E-09	1.25E-09
78	496689.9	3605772	1.15E-07	5.68E-09	1.05E-07	2.56E-09	1.24E-09
119	496709.9	3605762	1.14E-07	5.66E-09	1.05E-07	2.55E-09	1.24E-09
548	496899.9	3605712	1.14E-07	5.65E-09	1.05E-07	2.55E-09	1.23E-09
430	496849.9	3605722	1.14E-07	5.63E-09	1.04E-07	2.54E-09	1.23E-09
669	496949.9	3605702	1.14E-07	5.62E-09	1.04E-07	2.54E-09	1.23E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
316	496799.9	3605732	1.12E-07	5.56E-09	1.03E-07	2.51E-09	1.21E-09
37	496669.9	3605782	1.12E-07	5.54E-09	1.03E-07	2.50E-09	1.21E-09
162	496729.9	3605752	1.12E-07	5.54E-09	1.03E-07	2.50E-09	1.21E-09
524	496889.9	3605712	1.12E-07	5.53E-09	1.03E-07	2.50E-09	1.21E-09
227	496759.9	3605742	1.12E-07	5.53E-09	1.02E-07	2.49E-09	1.21E-09
407	496839.9	3605722	1.11E-07	5.51E-09	1.02E-07	2.48E-09	1.20E-09
644	496939.9	3605702	1.11E-07	5.50E-09	1.02E-07	2.48E-09	1.20E-09
500	496879.9	3605712	1.09E-07	5.41E-09	1.00E-07	2.44E-09	1.18E-09
293	496789.9	3605732	1.09E-07	5.41E-09	1.00E-07	2.44E-09	1.18E-09
384	496829.9	3605722	1.09E-07	5.37E-09	9.96E-08	2.42E-09	1.17E-09
619	496929.9	3605702	1.08E-07	5.36E-09	9.94E-08	2.42E-09	1.17E-09
205	496749.9	3605742	1.07E-07	5.32E-09	9.85E-08	2.40E-09	1.16E-09
98	496699.9	3605762	1.07E-07	5.31E-09	9.84E-08	2.40E-09	1.16E-09
476	496869.9	3605712	1.07E-07	5.29E-09	9.81E-08	2.39E-09	1.16E-09
57	496679.9	3605772	1.07E-07	5.29E-09	9.79E-08	2.38E-09	1.15E-09
270	496779.9	3605732	1.06E-07	5.25E-09	9.73E-08	2.37E-09	1.15E-09
140	496719.9	3605752	1.06E-07	5.25E-09	9.72E-08	2.37E-09	1.15E-09
361	496819.9	3605722	1.06E-07	5.24E-09	9.70E-08	2.36E-09	1.14E-09
595	496919.9	3605702	1.05E-07	5.20E-09	9.63E-08	2.35E-09	1.14E-09
452	496859.9	3605712	1.05E-07	5.18E-09	9.59E-08	2.33E-09	1.13E-09
693	496959.9	3605692	1.04E-07	5.14E-09	9.53E-08	2.32E-09	1.12E-09
16	496659.9	3605782	1.03E-07	5.12E-09	9.48E-08	2.31E-09	1.12E-09
571	496909.9	3605702	1.03E-07	5.11E-09	9.46E-08	2.30E-09	1.12E-09
338	496809.9	3605722	1.03E-07	5.10E-09	9.45E-08	2.30E-09	1.11E-09
183	496739.9	3605742	1.03E-07	5.08E-09	9.42E-08	2.29E-09	1.11E-09
668	496949.9	3605692	1.02E-07	5.07E-09	9.40E-08	2.29E-09	1.11E-09
248	496769.9	3605732	1.02E-07	5.07E-09	9.38E-08	2.28E-09	1.11E-09
429	496849.9	3605712	1.02E-07	5.06E-09	9.36E-08	2.28E-09	1.10E-09
547	496899.9	3605702	1.02E-07	5.04E-09	9.34E-08	2.27E-09	1.10E-09
77	496689.9	3605762	1.01E-07	5.00E-09	9.26E-08	2.25E-09	1.09E-09
315	496799.9	3605722	1.00E-07	4.96E-09	9.20E-08	2.24E-09	1.08E-09
118	496709.9	3605752	1.00E-07	4.96E-09	9.19E-08	2.24E-09	1.08E-09
523	496889.9	3605702	1.00E-07	4.96E-09	9.18E-08	2.24E-09	1.08E-09
406	496839.9	3605712	1.00E-07	4.95E-09	9.17E-08	2.23E-09	1.08E-09
643	496939.9	3605692	9.98E-08	4.94E-09	9.16E-08	2.23E-09	1.08E-09
36	496669.9	3605772	9.96E-08	4.93E-09	9.14E-08	2.22E-09	1.08E-09
226	496759.9	3605732	9.85E-08	4.88E-09	9.04E-08	2.20E-09	1.06E-09
499	496879.9	3605702	9.82E-08	4.86E-09	9.01E-08	2.19E-09	1.06E-09
161	496729.9	3605742	9.78E-08	4.85E-09	8.98E-08	2.19E-09	1.06E-09
383	496829.9	3605712	9.77E-08	4.84E-09	8.96E-08	2.18E-09	1.06E-09
292	496789.9	3605722	9.74E-08	4.82E-09	8.94E-08	2.18E-09	1.05E-09
618	496929.9	3605692	9.70E-08	4.80E-09	8.89E-08	2.17E-09	1.05E-09
475	496869.9	3605702	9.62E-08	4.77E-09	8.83E-08	2.15E-09	1.04E-09
360	496819.9	3605712	9.53E-08	4.72E-09	8.74E-08	2.13E-09	1.03E-09
56	496679.9	3605762	9.49E-08	4.70E-09	8.71E-08	2.12E-09	1.03E-09
204	496749.9	3605732	9.47E-08	4.69E-09	8.68E-08	2.11E-09	1.02E-09
97	496699.9	3605752	9.46E-08	4.68E-09	8.68E-08	2.11E-09	1.02E-09
692	496959.9	3605682	9.45E-08	4.68E-09	8.67E-08	2.11E-09	1.02E-09
269	496779.9	3605722	9.44E-08	4.67E-09	8.66E-08	2.11E-09	1.02E-09
594	496919.9	3605692	9.43E-08	4.67E-09	8.65E-08	2.11E-09	1.02E-09
451	496859.9	3605702	9.42E-08	4.66E-09	8.64E-08	2.10E-09	1.02E-09
139	496719.9	3605742	9.32E-08	4.62E-09	8.55E-08	2.08E-09	1.01E-09
667	496949.9	3605682	9.32E-08	4.61E-09	8.55E-08	2.08E-09	1.01E-09
15	496659.9	3605772	9.31E-08	4.61E-09	8.54E-08	2.08E-09	1.01E-09

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
337	496809.9	3605712	9.28E-08	4.60E-09	8.52E-08	2.07E-09	1.00E-09
570	496909.9	3605692	9.23E-08	4.57E-09	8.47E-08	2.06E-09	9.98E-10
428	496849.9	3605702	9.22E-08	4.57E-09	8.46E-08	2.06E-09	9.97E-10
546	496899.9	3605692	9.15E-08	4.53E-09	8.39E-08	2.04E-09	9.89E-10
247	496769.9	3605722	9.09E-08	4.50E-09	8.34E-08	2.03E-09	9.83E-10
642	496939.9	3605682	9.09E-08	4.50E-09	8.34E-08	2.03E-09	9.83E-10
182	496739.9	3605732	9.05E-08	4.48E-09	8.30E-08	2.02E-09	9.78E-10
405	496839.9	3605702	9.04E-08	4.48E-09	8.29E-08	2.02E-09	9.77E-10
314	496799.9	3605712	9.03E-08	4.47E-09	8.28E-08	2.02E-09	9.76E-10
522	496889.9	3605692	9.02E-08	4.47E-09	8.27E-08	2.01E-09	9.75E-10
76	496689.9	3605752	8.97E-08	4.44E-09	8.23E-08	2.00E-09	9.70E-10
35	496669.9	3605762	8.95E-08	4.43E-09	8.21E-08	2.00E-09	9.67E-10
117	496709.9	3605742	8.87E-08	4.39E-09	8.13E-08	1.98E-09	9.58E-10
498	496879.9	3605692	8.86E-08	4.39E-09	8.13E-08	1.98E-09	9.58E-10
382	496829.9	3605702	8.85E-08	4.38E-09	8.12E-08	1.98E-09	9.56E-10
617	496929.9	3605682	8.83E-08	4.37E-09	8.10E-08	1.97E-09	9.55E-10
291	496789.9	3605712	8.76E-08	4.34E-09	8.04E-08	1.96E-09	9.47E-10
225	496759.9	3605722	8.74E-08	4.33E-09	8.02E-08	1.95E-09	9.45E-10
474	496869.9	3605692	8.69E-08	4.30E-09	7.97E-08	1.94E-09	9.39E-10
160	496729.9	3605732	8.65E-08	4.28E-09	7.93E-08	1.93E-09	9.35E-10
359	496819.9	3605702	8.64E-08	4.28E-09	7.93E-08	1.93E-09	9.34E-10
691	496959.9	3605672	8.63E-08	4.27E-09	7.92E-08	1.93E-09	9.33E-10
593	496919.9	3605682	8.57E-08	4.24E-09	7.86E-08	1.91E-09	9.27E-10
450	496859.9	3605692	8.53E-08	4.23E-09	7.83E-08	1.91E-09	9.22E-10
55	496679.9	3605752	8.50E-08	4.21E-09	7.80E-08	1.90E-09	9.19E-10
666	496949.9	3605672	8.47E-08	4.19E-09	7.77E-08	1.89E-09	9.16E-10
268	496779.9	3605712	8.47E-08	4.19E-09	7.77E-08	1.89E-09	9.15E-10
14	496659.9	3605762	8.44E-08	4.18E-09	7.74E-08	1.88E-09	9.12E-10
336	496809.9	3605702	8.42E-08	4.17E-09	7.72E-08	1.88E-09	9.10E-10
96	496699.9	3605742	8.41E-08	4.17E-09	7.72E-08	1.88E-09	9.09E-10
203	496749.9	3605722	8.40E-08	4.16E-09	7.71E-08	1.88E-09	9.08E-10
427	496849.9	3605692	8.37E-08	4.15E-09	7.68E-08	1.87E-09	9.05E-10
569	496909.9	3605682	8.37E-08	4.14E-09	7.68E-08	1.87E-09	9.05E-10
545	496899.9	3605682	8.32E-08	4.12E-09	7.64E-08	1.86E-09	9.00E-10
641	496939.9	3605672	8.27E-08	4.10E-09	7.59E-08	1.85E-09	8.94E-10
138	496719.9	3605732	8.27E-08	4.09E-09	7.58E-08	1.85E-09	8.93E-10
404	496839.9	3605692	8.22E-08	4.07E-09	7.54E-08	1.84E-09	8.88E-10
521	496889.9	3605682	8.22E-08	4.07E-09	7.54E-08	1.84E-09	8.88E-10
313	496799.9	3605702	8.18E-08	4.05E-09	7.51E-08	1.83E-09	8.85E-10
246	496769.9	3605712	8.14E-08	4.03E-09	7.46E-08	1.82E-09	8.79E-10
34	496669.9	3605752	8.08E-08	4.00E-09	7.41E-08	1.80E-09	8.73E-10
497	496879.9	3605682	8.08E-08	4.00E-09	7.41E-08	1.80E-09	8.73E-10
381	496829.9	3605692	8.06E-08	3.99E-09	7.39E-08	1.80E-09	8.71E-10
616	496929.9	3605672	8.05E-08	3.99E-09	7.38E-08	1.80E-09	8.70E-10
181	496739.9	3605722	8.04E-08	3.98E-09	7.37E-08	1.80E-09	8.69E-10
75	496689.9	3605742	8.03E-08	3.98E-09	7.37E-08	1.79E-09	8.68E-10
473	496869.9	3605682	7.93E-08	3.93E-09	7.28E-08	1.77E-09	8.58E-10
290	496789.9	3605702	7.92E-08	3.92E-09	7.26E-08	1.77E-09	8.56E-10
116	496709.9	3605732	7.90E-08	3.91E-09	7.25E-08	1.76E-09	8.54E-10
358	496819.9	3605692	7.86E-08	3.89E-09	7.21E-08	1.76E-09	8.50E-10
449	496859.9	3605682	7.82E-08	3.87E-09	7.18E-08	1.75E-09	8.46E-10
592	496919.9	3605672	7.81E-08	3.87E-09	7.17E-08	1.75E-09	8.45E-10
690	496959.9	3605662	7.81E-08	3.87E-09	7.16E-08	1.74E-09	8.44E-10
224	496759.9	3605712	7.80E-08	3.86E-09	7.16E-08	1.74E-09	8.44E-10

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
665	496949.9	3605662	7.70E-08	3.81E-09	7.06E-08	1.72E-09	8.32E-10
159	496729.9	3605722	7.70E-08	3.81E-09	7.06E-08	1.72E-09	8.32E-10
426	496849.9	3605682	7.69E-08	3.81E-09	7.05E-08	1.72E-09	8.31E-10
13	496659.9	3605752	7.68E-08	3.80E-09	7.04E-08	1.71E-09	8.30E-10
54	496679.9	3605742	7.67E-08	3.80E-09	7.03E-08	1.71E-09	8.29E-10
335	496809.9	3605692	7.65E-08	3.79E-09	7.02E-08	1.71E-09	8.27E-10
267	496779.9	3605702	7.64E-08	3.78E-09	7.01E-08	1.71E-09	8.26E-10
568	496909.9	3605672	7.63E-08	3.78E-09	7.00E-08	1.70E-09	8.25E-10
544	496899.9	3605672	7.61E-08	3.77E-09	6.98E-08	1.70E-09	8.23E-10
403	496839.9	3605682	7.55E-08	3.74E-09	6.93E-08	1.69E-09	8.16E-10
640	496939.9	3605662	7.55E-08	3.74E-09	6.92E-08	1.69E-09	8.16E-10
95	496699.9	3605732	7.53E-08	3.73E-09	6.91E-08	1.68E-09	8.14E-10
520	496889.9	3605672	7.53E-08	3.73E-09	6.91E-08	1.68E-09	8.14E-10
202	496749.9	3605712	7.50E-08	3.71E-09	6.88E-08	1.68E-09	8.11E-10
312	496799.9	3605692	7.43E-08	3.68E-09	6.81E-08	1.66E-09	8.03E-10
496	496879.9	3605672	7.43E-08	3.68E-09	6.81E-08	1.66E-09	8.03E-10
380	496829.9	3605682	7.40E-08	3.66E-09	6.79E-08	1.65E-09	8.00E-10
137	496719.9	3605722	7.38E-08	3.65E-09	6.77E-08	1.65E-09	7.98E-10
615	496929.9	3605662	7.34E-08	3.64E-09	6.74E-08	1.64E-09	7.94E-10
33	496669.9	3605742	7.34E-08	3.63E-09	6.73E-08	1.64E-09	7.93E-10
472	496869.9	3605672	7.33E-08	3.63E-09	6.72E-08	1.64E-09	7.92E-10
245	496769.9	3605702	7.32E-08	3.63E-09	6.72E-08	1.64E-09	7.92E-10
448	496859.9	3605672	7.23E-08	3.58E-09	6.63E-08	1.61E-09	7.81E-10
74	496689.9	3605732	7.23E-08	3.58E-09	6.63E-08	1.61E-09	7.81E-10
357	496819.9	3605682	7.22E-08	3.58E-09	6.62E-08	1.61E-09	7.81E-10
180	496739.9	3605712	7.19E-08	3.56E-09	6.60E-08	1.61E-09	7.77E-10
289	496789.9	3605692	7.18E-08	3.56E-09	6.59E-08	1.60E-09	7.76E-10
591	496919.9	3605662	7.14E-08	3.54E-09	6.55E-08	1.60E-09	7.72E-10
425	496849.9	3605672	7.11E-08	3.52E-09	6.52E-08	1.59E-09	7.69E-10
115	496709.9	3605722	7.08E-08	3.51E-09	6.49E-08	1.58E-09	7.65E-10
223	496759.9	3605702	7.02E-08	3.48E-09	6.44E-08	1.57E-09	7.59E-10
12	496659.9	3605742	7.01E-08	3.47E-09	6.43E-08	1.57E-09	7.58E-10
334	496809.9	3605682	7.01E-08	3.47E-09	6.43E-08	1.57E-09	7.58E-10
567	496909.9	3605662	6.99E-08	3.46E-09	6.41E-08	1.56E-09	7.55E-10
402	496839.9	3605672	6.99E-08	3.46E-09	6.41E-08	1.56E-09	7.55E-10
543	496899.9	3605662	6.99E-08	3.46E-09	6.41E-08	1.56E-09	7.55E-10
664	496949.9	3605652	6.98E-08	3.46E-09	6.40E-08	1.56E-09	7.54E-10
53	496679.9	3605732	6.94E-08	3.44E-09	6.37E-08	1.55E-09	7.51E-10
266	496779.9	3605692	6.92E-08	3.43E-09	6.35E-08	1.55E-09	7.48E-10
519	496889.9	3605662	6.92E-08	3.42E-09	6.34E-08	1.54E-09	7.48E-10
689	496959.9	3605652	6.92E-08	3.42E-09	6.34E-08	1.54E-09	7.48E-10
158	496729.9	3605712	6.90E-08	3.42E-09	6.33E-08	1.54E-09	7.46E-10
639	496939.9	3605652	6.89E-08	3.41E-09	6.32E-08	1.54E-09	7.45E-10
495	496879.9	3605662	6.85E-08	3.39E-09	6.28E-08	1.53E-09	7.40E-10
379	496829.9	3605672	6.83E-08	3.38E-09	6.27E-08	1.53E-09	7.39E-10
311	496799.9	3605682	6.78E-08	3.36E-09	6.22E-08	1.51E-09	7.33E-10
94	496699.9	3605722	6.78E-08	3.36E-09	6.22E-08	1.51E-09	7.33E-10
471	496869.9	3605662	6.77E-08	3.35E-09	6.21E-08	1.51E-09	7.32E-10
201	496749.9	3605702	6.74E-08	3.34E-09	6.18E-08	1.51E-09	7.29E-10
614	496929.9	3605652	6.74E-08	3.34E-09	6.18E-08	1.50E-09	7.28E-10
447	496859.9	3605662	6.68E-08	3.31E-09	6.13E-08	1.49E-09	7.22E-10
32	496669.9	3605732	6.68E-08	3.31E-09	6.13E-08	1.49E-09	7.22E-10
356	496819.9	3605672	6.67E-08	3.30E-09	6.12E-08	1.49E-09	7.21E-10
136	496719.9	3605712	6.63E-08	3.29E-09	6.09E-08	1.48E-09	7.17E-10

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
244	496769.9	3605692	6.62E-08	3.28E-09	6.07E-08	1.48E-09	7.15E-10
424	496849.9	3605662	6.58E-08	3.26E-09	6.04E-08	1.47E-09	7.11E-10
590	496919.9	3605652	6.56E-08	3.25E-09	6.02E-08	1.47E-09	7.09E-10
288	496789.9	3605682	6.54E-08	3.24E-09	6.00E-08	1.46E-09	7.07E-10
73	496689.9	3605722	6.53E-08	3.23E-09	5.99E-08	1.46E-09	7.06E-10
179	496739.9	3605702	6.47E-08	3.20E-09	5.93E-08	1.44E-09	6.99E-10
333	496809.9	3605672	6.47E-08	3.20E-09	5.93E-08	1.44E-09	6.99E-10
401	496839.9	3605662	6.46E-08	3.20E-09	5.93E-08	1.44E-09	6.99E-10
542	496899.9	3605652	6.44E-08	3.19E-09	5.91E-08	1.44E-09	6.97E-10
566	496909.9	3605652	6.43E-08	3.19E-09	5.90E-08	1.44E-09	6.95E-10
11	496659.9	3605732	6.42E-08	3.18E-09	5.89E-08	1.43E-09	6.94E-10
518	496889.9	3605652	6.40E-08	3.17E-09	5.87E-08	1.43E-09	6.92E-10
114	496709.9	3605712	6.38E-08	3.16E-09	5.86E-08	1.43E-09	6.90E-10
222	496759.9	3605692	6.34E-08	3.14E-09	5.82E-08	1.42E-09	6.86E-10
494	496879.9	3605652	6.34E-08	3.14E-09	5.82E-08	1.42E-09	6.85E-10
378	496829.9	3605662	6.31E-08	3.12E-09	5.79E-08	1.41E-09	6.82E-10
52	496679.9	3605722	6.30E-08	3.12E-09	5.78E-08	1.41E-09	6.81E-10
265	496779.9	3605682	6.28E-08	3.11E-09	5.76E-08	1.40E-09	6.79E-10
470	496869.9	3605652	6.27E-08	3.11E-09	5.75E-08	1.40E-09	6.78E-10
638	496939.9	3605642	6.25E-08	3.09E-09	5.73E-08	1.40E-09	6.76E-10
310	496799.9	3605672	6.23E-08	3.09E-09	5.72E-08	1.39E-09	6.74E-10
157	496729.9	3605702	6.22E-08	3.08E-09	5.71E-08	1.39E-09	6.73E-10
446	496859.9	3605652	6.20E-08	3.07E-09	5.69E-08	1.38E-09	6.70E-10
613	496929.9	3605642	6.17E-08	3.05E-09	5.66E-08	1.38E-09	6.67E-10
663	496949.9	3605642	6.17E-08	3.05E-09	5.66E-08	1.38E-09	6.66E-10
355	496819.9	3605662	6.15E-08	3.05E-09	5.64E-08	1.37E-09	6.65E-10
93	496699.9	3605712	6.13E-08	3.03E-09	5.62E-08	1.37E-09	6.62E-10
423	496849.9	3605652	6.11E-08	3.02E-09	5.60E-08	1.36E-09	6.60E-10
31	496669.9	3605722	6.09E-08	3.02E-09	5.59E-08	1.36E-09	6.59E-10
200	496749.9	3605692	6.09E-08	3.02E-09	5.59E-08	1.36E-09	6.59E-10
589	496919.9	3605642	6.05E-08	2.99E-09	5.55E-08	1.35E-09	6.54E-10
243	496769.9	3605682	6.00E-08	2.97E-09	5.51E-08	1.34E-09	6.49E-10
135	496719.9	3605702	6.00E-08	2.97E-09	5.50E-08	1.34E-09	6.48E-10
287	496789.9	3605672	5.99E-08	2.97E-09	5.49E-08	1.34E-09	6.47E-10
541	496899.9	3605642	5.99E-08	2.97E-09	5.49E-08	1.34E-09	6.47E-10
400	496839.9	3605652	5.98E-08	2.96E-09	5.49E-08	1.34E-09	6.47E-10
565	496909.9	3605642	5.97E-08	2.95E-09	5.47E-08	1.33E-09	6.45E-10
688	496959.9	3605642	5.96E-08	2.95E-09	5.47E-08	1.33E-09	6.45E-10
517	496889.9	3605642	5.96E-08	2.95E-09	5.47E-08	1.33E-09	6.45E-10
332	496809.9	3605662	5.96E-08	2.95E-09	5.47E-08	1.33E-09	6.44E-10
72	496689.9	3605712	5.92E-08	2.93E-09	5.43E-08	1.32E-09	6.40E-10
493	496879.9	3605642	5.92E-08	2.93E-09	5.43E-08	1.32E-09	6.40E-10
10	496659.9	3605722	5.89E-08	2.91E-09	5.40E-08	1.31E-09	6.36E-10
469	496869.9	3605642	5.85E-08	2.90E-09	5.37E-08	1.31E-09	6.33E-10
178	496739.9	3605692	5.85E-08	2.90E-09	5.37E-08	1.31E-09	6.33E-10
377	496829.9	3605652	5.83E-08	2.89E-09	5.35E-08	1.30E-09	6.30E-10
113	496709.9	3605702	5.79E-08	2.86E-09	5.31E-08	1.29E-09	6.25E-10
445	496859.9	3605642	5.77E-08	2.86E-09	5.29E-08	1.29E-09	6.24E-10
221	496759.9	3605682	5.76E-08	2.85E-09	5.29E-08	1.29E-09	6.23E-10
309	496799.9	3605662	5.74E-08	2.84E-09	5.27E-08	1.28E-09	6.21E-10
264	496779.9	3605672	5.73E-08	2.84E-09	5.26E-08	1.28E-09	6.20E-10
51	496679.9	3605712	5.73E-08	2.84E-09	5.26E-08	1.28E-09	6.20E-10
354	496819.9	3605652	5.68E-08	2.81E-09	5.21E-08	1.27E-09	6.14E-10
422	496849.9	3605642	5.67E-08	2.81E-09	5.20E-08	1.27E-09	6.13E-10

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
156	496729.9	3605692	5.63E-08	2.79E-09	5.17E-08	1.26E-09	6.09E-10
612	496929.9	3605632	5.63E-08	2.79E-09	5.16E-08	1.26E-09	6.08E-10
637	496939.9	3605632	5.59E-08	2.77E-09	5.13E-08	1.25E-09	6.05E-10
540	496899.9	3605632	5.57E-08	2.76E-09	5.11E-08	1.24E-09	6.02E-10
30	496669.9	3605712	5.57E-08	2.76E-09	5.11E-08	1.24E-09	6.02E-10
516	496889.9	3605632	5.56E-08	2.75E-09	5.10E-08	1.24E-09	6.01E-10
588	496919.9	3605632	5.56E-08	2.75E-09	5.10E-08	1.24E-09	6.01E-10
399	496839.9	3605642	5.55E-08	2.75E-09	5.09E-08	1.24E-09	6.00E-10
92	496699.9	3605702	5.55E-08	2.75E-09	5.09E-08	1.24E-09	6.00E-10
564	496909.9	3605632	5.55E-08	2.75E-09	5.09E-08	1.24E-09	6.00E-10
199	496749.9	3605682	5.53E-08	2.74E-09	5.08E-08	1.24E-09	5.98E-10
492	496879.9	3605632	5.53E-08	2.74E-09	5.07E-08	1.23E-09	5.97E-10
286	496789.9	3605662	5.51E-08	2.73E-09	5.06E-08	1.23E-09	5.96E-10
331	496809.9	3605652	5.50E-08	2.72E-09	5.04E-08	1.23E-09	5.94E-10
242	496769.9	3605672	5.48E-08	2.71E-09	5.03E-08	1.22E-09	5.93E-10
468	496869.9	3605632	5.46E-08	2.70E-09	5.01E-08	1.22E-09	5.90E-10
134	496719.9	3605692	5.44E-08	2.69E-09	4.99E-08	1.21E-09	5.88E-10
9	496659.9	3605712	5.40E-08	2.68E-09	4.96E-08	1.21E-09	5.84E-10
376	496829.9	3605642	5.39E-08	2.67E-09	4.94E-08	1.20E-09	5.83E-10
71	496689.9	3605702	5.37E-08	2.66E-09	4.93E-08	1.20E-09	5.81E-10
444	496859.9	3605632	5.37E-08	2.66E-09	4.93E-08	1.20E-09	5.81E-10
177	496739.9	3605682	5.32E-08	2.63E-09	4.88E-08	1.19E-09	5.75E-10
308	496799.9	3605652	5.29E-08	2.62E-09	4.85E-08	1.18E-09	5.72E-10
263	496779.9	3605662	5.28E-08	2.61E-09	4.84E-08	1.18E-09	5.71E-10
662	496949.9	3605632	5.28E-08	2.61E-09	4.84E-08	1.18E-09	5.70E-10
220	496759.9	3605672	5.26E-08	2.60E-09	4.82E-08	1.17E-09	5.68E-10
353	496819.9	3605642	5.25E-08	2.60E-09	4.82E-08	1.17E-09	5.68E-10
112	496709.9	3605692	5.25E-08	2.60E-09	4.82E-08	1.17E-09	5.68E-10
421	496849.9	3605632	5.25E-08	2.60E-09	4.81E-08	1.17E-09	5.67E-10
50	496679.9	3605702	5.22E-08	2.59E-09	4.79E-08	1.17E-09	5.65E-10
398	496839.9	3605632	5.13E-08	2.54E-09	4.70E-08	1.14E-09	5.54E-10
155	496729.9	3605682	5.12E-08	2.54E-09	4.70E-08	1.14E-09	5.54E-10
29	496669.9	3605702	5.09E-08	2.52E-09	4.67E-08	1.14E-09	5.50E-10
330	496809.9	3605642	5.08E-08	2.51E-09	4.66E-08	1.13E-09	5.49E-10
285	496789.9	3605652	5.08E-08	2.51E-09	4.66E-08	1.13E-09	5.49E-10
198	496749.9	3605672	5.05E-08	2.50E-09	4.63E-08	1.13E-09	5.46E-10
91	496699.9	3605692	5.04E-08	2.49E-09	4.62E-08	1.13E-09	5.45E-10
241	496769.9	3605662	5.03E-08	2.49E-09	4.61E-08	1.12E-09	5.44E-10
687	496959.9	3605632	5.00E-08	2.48E-09	4.59E-08	1.12E-09	5.40E-10
375	496829.9	3605632	4.98E-08	2.47E-09	4.57E-08	1.11E-09	5.39E-10
8	496659.9	3605702	4.95E-08	2.45E-09	4.54E-08	1.11E-09	5.36E-10
133	496719.9	3605682	4.95E-08	2.45E-09	4.54E-08	1.11E-09	5.35E-10
70	496689.9	3605692	4.90E-08	2.42E-09	4.49E-08	1.09E-09	5.29E-10
307	496799.9	3605642	4.88E-08	2.42E-09	4.48E-08	1.09E-09	5.28E-10
262	496779.9	3605652	4.86E-08	2.41E-09	4.46E-08	1.09E-09	5.26E-10
176	496739.9	3605672	4.86E-08	2.40E-09	4.45E-08	1.08E-09	5.25E-10
352	496819.9	3605632	4.85E-08	2.40E-09	4.45E-08	1.08E-09	5.24E-10
219	496759.9	3605662	4.81E-08	2.38E-09	4.41E-08	1.07E-09	5.20E-10
111	496709.9	3605682	4.79E-08	2.37E-09	4.39E-08	1.07E-09	5.17E-10
49	496679.9	3605692	4.77E-08	2.36E-09	4.38E-08	1.07E-09	5.16E-10
284	496789.9	3605642	4.69E-08	2.32E-09	4.30E-08	1.05E-09	5.07E-10
154	496729.9	3605672	4.68E-08	2.32E-09	4.29E-08	1.05E-09	5.06E-10
329	496809.9	3605632	4.67E-08	2.31E-09	4.29E-08	1.04E-09	5.05E-10
28	496669.9	3605692	4.66E-08	2.31E-09	4.27E-08	1.04E-09	5.03E-10

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
197	496749.9	3605662	4.62E-08	2.29E-09	4.24E-08	1.03E-09	5.00E-10
240	496769.9	3605652	4.62E-08	2.29E-09	4.24E-08	1.03E-09	4.99E-10
90	496699.9	3605682	4.59E-08	2.27E-09	4.21E-08	1.03E-09	4.96E-10
7	496659.9	3605692	4.54E-08	2.25E-09	4.17E-08	1.01E-09	4.91E-10
132	496719.9	3605672	4.52E-08	2.24E-09	4.15E-08	1.01E-09	4.89E-10
261	496779.9	3605642	4.49E-08	2.22E-09	4.12E-08	1.00E-09	4.85E-10
306	496799.9	3605632	4.48E-08	2.22E-09	4.11E-08	1.00E-09	4.85E-10
69	496689.9	3605682	4.47E-08	2.21E-09	4.10E-08	9.99E-10	4.84E-10
175	496739.9	3605662	4.45E-08	2.20E-09	4.08E-08	9.93E-10	4.81E-10
218	496759.9	3605652	4.40E-08	2.18E-09	4.04E-08	9.84E-10	4.76E-10
110	496709.9	3605672	4.38E-08	2.17E-09	4.02E-08	9.78E-10	4.73E-10
48	496679.9	3605682	4.37E-08	2.16E-09	4.01E-08	9.76E-10	4.72E-10
283	496789.9	3605632	4.30E-08	2.13E-09	3.94E-08	9.59E-10	4.64E-10
153	496729.9	3605662	4.29E-08	2.12E-09	3.93E-08	9.57E-10	4.63E-10
27	496669.9	3605682	4.27E-08	2.11E-09	3.92E-08	9.54E-10	4.62E-10
196	496749.9	3605652	4.24E-08	2.10E-09	3.89E-08	9.47E-10	4.58E-10
239	496769.9	3605642	4.23E-08	2.09E-09	3.88E-08	9.44E-10	4.57E-10
89	496699.9	3605672	4.20E-08	2.08E-09	3.85E-08	9.38E-10	4.54E-10
6	496659.9	3605682	4.17E-08	2.07E-09	3.83E-08	9.32E-10	4.51E-10
131	496719.9	3605662	4.14E-08	2.05E-09	3.80E-08	9.26E-10	4.48E-10
68	496689.9	3605672	4.10E-08	2.03E-09	3.76E-08	9.15E-10	4.43E-10
260	496779.9	3605632	4.09E-08	2.03E-09	3.75E-08	9.13E-10	4.42E-10
174	496739.9	3605652	4.08E-08	2.02E-09	3.74E-08	9.11E-10	4.41E-10
217	496759.9	3605642	4.03E-08	2.00E-09	3.70E-08	9.01E-10	4.36E-10
109	496709.9	3605662	4.02E-08	1.99E-09	3.68E-08	8.97E-10	4.34E-10
47	496679.9	3605672	4.01E-08	1.98E-09	3.68E-08	8.95E-10	4.33E-10
152	496729.9	3605652	3.93E-08	1.95E-09	3.61E-08	8.78E-10	4.25E-10
26	496669.9	3605672	3.93E-08	1.94E-09	3.60E-08	8.77E-10	4.24E-10
195	496749.9	3605642	3.89E-08	1.93E-09	3.57E-08	8.69E-10	4.21E-10
88	496699.9	3605662	3.85E-08	1.91E-09	3.53E-08	8.59E-10	4.16E-10
5	496659.9	3605672	3.84E-08	1.90E-09	3.53E-08	8.58E-10	4.16E-10
238	496769.9	3605632	3.84E-08	1.90E-09	3.52E-08	8.57E-10	4.15E-10
130	496719.9	3605652	3.81E-08	1.89E-09	3.49E-08	8.50E-10	4.12E-10
67	496689.9	3605662	3.76E-08	1.86E-09	3.45E-08	8.40E-10	4.06E-10
173	496739.9	3605642	3.75E-08	1.86E-09	3.44E-08	8.38E-10	4.06E-10
108	496709.9	3605652	3.69E-08	1.83E-09	3.38E-08	8.24E-10	3.99E-10
46	496679.9	3605662	3.68E-08	1.82E-09	3.38E-08	8.22E-10	3.98E-10
216	496759.9	3605632	3.67E-08	1.82E-09	3.37E-08	8.20E-10	3.97E-10
151	496729.9	3605642	3.62E-08	1.79E-09	3.32E-08	8.09E-10	3.92E-10
25	496669.9	3605662	3.61E-08	1.79E-09	3.31E-08	8.07E-10	3.90E-10
194	496749.9	3605632	3.54E-08	1.75E-09	3.25E-08	7.91E-10	3.83E-10
4	496659.9	3605662	3.54E-08	1.75E-09	3.25E-08	7.91E-10	3.83E-10
87	496699.9	3605652	3.54E-08	1.75E-09	3.24E-08	7.90E-10	3.82E-10
129	496719.9	3605642	3.51E-08	1.74E-09	3.22E-08	7.84E-10	3.80E-10
66	496689.9	3605652	3.46E-08	1.71E-09	3.17E-08	7.72E-10	3.74E-10
172	496739.9	3605632	3.41E-08	1.69E-09	3.13E-08	7.63E-10	3.69E-10
107	496709.9	3605642	3.39E-08	1.68E-09	3.11E-08	7.57E-10	3.67E-10
45	496679.9	3605652	3.39E-08	1.68E-09	3.11E-08	7.56E-10	3.66E-10
24	496669.9	3605652	3.32E-08	1.65E-09	3.05E-08	7.42E-10	3.59E-10
150	496729.9	3605632	3.30E-08	1.64E-09	3.03E-08	7.38E-10	3.57E-10
3	496659.9	3605652	3.26E-08	1.62E-09	2.99E-08	7.29E-10	3.53E-10
86	496699.9	3605642	3.25E-08	1.61E-09	2.98E-08	7.27E-10	3.52E-10
65	496689.9	3605642	3.18E-08	1.58E-09	2.92E-08	7.11E-10	3.44E-10
128	496719.9	3605632	3.18E-08	1.58E-09	2.92E-08	7.10E-10	3.44E-10

REC	X	Y	RISK_SUM	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK
44	496679.9	3605642	3.12E-08	1.55E-09	2.86E-08	6.97E-10	3.37E-10
23	496669.9	3605642	3.06E-08	1.52E-09	2.81E-08	6.84E-10	3.31E-10
106	496709.9	3605632	3.05E-08	1.51E-09	2.80E-08	6.82E-10	3.30E-10
2	496659.9	3605642	3.00E-08	1.49E-09	2.75E-08	6.70E-10	3.24E-10
85	496699.9	3605632	2.93E-08	1.45E-09	2.69E-08	6.54E-10	3.17E-10
64	496689.9	3605632	2.86E-08	1.42E-09	2.63E-08	6.40E-10	3.10E-10
43	496679.9	3605632	2.82E-08	1.40E-09	2.59E-08	6.29E-10	3.05E-10
22	496669.9	3605632	2.77E-08	1.37E-09	2.54E-08	6.19E-10	3.00E-10
1	496659.9	3605632	2.71E-08	1.34E-09	2.49E-08	6.06E-10	2.93E-10