Appendix N

Sensitivity Study of the Worker Adjustment Factor using AERMOD

N.1. Introduction

The offsite worker health risk analysis begins with estimating the pollutant concentration at a receptor location. To estimate this concentration, the typical approach is to use the residential annual concentration that is modeled based on the adjacent facility's emission schedule. However, if the facility emissions are non-continuous, the residential concentration may not represent what the worker breathes during their work shift. In lieu of conducting additional special case modeling which can be time-consuming, the residential annual concentration is adjusted upwards using a worker adjustment factor based on the facility's emission schedule with respect to the worker's schedule. For an 8-hour work shift that coincides with an adjacent facility that emits eight hours per day, a worker adjustment factor of 4.2 (24 hours / 8 hours * 7 days / 5 days) is typically used for cancer risk assessment.

A possible problem with using this approach is that wind direction, wind speed, and atmospheric stability can vary throughout the day and night and straight scaling as above may skew the results. If the diurnal variation is considerable, the 4.2 adjustment could be an under- or overestimate depending on the time of day that the offsite worker shift begins and ends. The goal of this study is to test the validity of the 4.2 adjustment using five meteorological data sets from five different locations in California and with three different size point sources. The modeling is performed with 8-hour emissions coinciding with the offsite workers' schedule. The 8-hour shifts are modeled as starting every hour around the clock.

To perform this study, the AERMOD air dispersion model, meteorological data from five locations (i.e., Kearny Mesa, Palomar, Pomona, Redlands, and San Bernardino), and three different size point sources (small, medium, and large) are used. The AERMOD-ready meteorological datasets are selected to represent a range of meteorological conditions around the state. To mirror the assumptions used in the 4.2 worker adjustment factor, the emission rate of each source is simulated for eight continuous hours with 24 different start times for five days a week (Monday through Friday). This will simulate the conditions that result during an 8-hour work schedule starting any hour of the day. In addition, the emitting source and offsite worker are assumed to have coincident schedules.

Using the AERMOD air dispersion modeling results, the Point of Maximum Impact (PMI) is identified and the hourly raw concentrations are post-processed to calculate the long-term offsite worker concentration for each scenario. To test the validity of the worker adjustment factor, the calculated long-term offsite worker concentration is divided by the long term residential average to obtain a quotient that is unique to each

meteorological data location. The quotient is then compared to the 4.2 worker adjustment factor to see which is higher or more health protective.

Although this study is primarily based on an 8-hour work schedule, the actual duration that an offsite worker is present near the emitting source may vary when considering a lunch break or a longer work shift. Thus, 10-hour scenarios are also evaluated. The worker adjustment factor for ten hours is 3.4 (24 hours / 10 hours * 7 days / 5 days).

N.2. Background on the Worker Adjustment Factor for Inhalation Cancer Assessments

There are basically two approaches that can be used to calculate the offsite worker inhalation exposure for cancer assessments. One approach is to post-process the hourly dispersion modeling results and examine the coincident hours between the source's emission schedule and the worker's schedule. The second, and more commonly used approach, is to apply a worker adjustment factor to the modeled long-term residential concentration. While post-processing the hourly modeling output will offer a more representative worker concentration, it is very time consuming and requires the management of large amounts of data. Thus, the simplistic approach of applying a worker adjustment factor to estimate the worker inhalation exposure is typically used.

The worker adjustment factor is used together with the long-term residential concentration to estimate the offsite worker's inhalation exposure. This calculation is summarized below.

a. Obtain the long-term concentrations from air dispersion modeling as is typical for residential receptors (all hours of a year or multi-year analysis are used).

b. Determine the coincident hours per day and days per week between the source's emission schedule and the offsite worker's schedule.

c. Calculate the worker adjustment factor using Equation N.1. When assessing inhalation cancer health impacts, a discount factor (*DF*) may also be applied if the offsite worker's schedule partially overlaps with the source's emission schedule. The discount factor is based on the number of coincident hours per day and days per week between the source's emission schedule and the offsite worker's schedule (see Equation N.2).

Please note that worker adjustment factor does not apply if the source's emission schedule and the offsite worker's schedule do not overlap. Since the worker is not around during the time that the source is emitting, the worker is not exposed to the source's emission (i.e., the DF in Equation N.2 becomes 0).

$$WAF = \frac{H_{residential}}{H_{source}} \times \frac{D_{residential}}{D_{source}} \times DF$$

Eq. N.1

Where:

WAF = the worker adjustment factor

$H_{residential}$ = the number of hours per day the long-term residential concentration is based on (24)

H_{source} = the number of hours the source operates per day

$D_{residential}$ = the number of days per week the long-term residential concentration is based on (7).

D_{source} = the number of days the source operates per week.

DF = a discount factor for when the offsite worker's schedule partially overlaps the source's emission schedule. Use 1 if the offsite worker's schedule occurs within the source's emission schedule. If the offsite worker's schedule partially overlaps with the source's emission schedule, then calculate the discount factor using Equation N.2 below.

$$DF = \frac{H_{coincident}}{H_{worker}} \times \frac{D_{coincident}}{D_{worker}}$$

Eq. N.2

Where:

DF = *the discount factor for assessing cancer impacts*

$H_{coincident}$ = *the number of hours per day the offsite worker's schedule and the source's emission schedule overlap*

$D_{coincident}$ = *the number of days per week the offsite worker's schedule and the source's emission schedule overlap.*

H_{worker} = *the number of hours the offsite worker works per day*

D_{worker} = *the number of days the offsite worker works per week.*

d. The final step is to estimate the offsite worker inhalation exposure by multiplying the worker adjustment factor with the long-term residential concentration.

N.3. Method and Modeling Parameters

For this study, all scenarios are simulated using the AERMOD (Version 09292) air dispersion model. The modeling parameters input to AERMOD and methods used to process the model outputs are discussed below.

N.3.1. Point Source Release Parameters

This study uses three different size point sources representing small, medium, and large. The point source release parameters are shown in Table N.1.

Table N.1. Point Source Modeling Parameters

Source Size	Emission Rate (g/s)	Release Ht (m)	Diameter (m)	Exit Temp (K)	Exit Vel (m/s)	Building Dimensions L (m) x W (m) x H (m)	XBADJ YBADJ [1]
Large	1	30	3	400	10	15 x 15 x 6	7.5
Medium	1	10	1	400	10	12 x 12 x 6	6
Small	1	2.15	0.1	400	10	6 x 6 x 2	3

1 – The XBADJ and YBADJ are keywords defining the along-flow and across-flow distances from the stack to the center of the upwind face of the projected building, respectively (U.S. EPA, 2004).

N.3.2. Temporal Emission Rate

Each point source (i.e., small, medium, and large) is simulated with continuous emissions for eight hours a day from Monday through Friday. In addition, all starting hour combinations (24 scenarios) are evaluated by duplicating each source 24 times with unique start times. Table N.2 shows the 8-hour operating schedule for each scenario. All emissions for Saturday and Sunday are set at zero. This process will also be repeated for the 10-hour evaluation. Table N.3 shows the 10-hour operating schedule for each scenario.

Table N.2. 8-Hour Operating Schedule

Time	Scenario																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
12:00 AM	ON																	ON	ON	ON	ON	ON	ON	ON
1:00 AM	ON	ON																	ON	ON	ON	ON	ON	ON
2:00 AM	ON	ON	ON																	ON	ON	ON	ON	ON
3:00 AM	ON	ON	ON	ON																	ON	ON	ON	ON
4:00 AM	ON	ON	ON	ON	ON																	ON	ON	ON
5:00 AM	ON	ON	ON	ON	ON	ON																	ON	ON
6:00 AM	ON	ON	ON	ON	ON	ON	ON																	ON
7:00 AM	ON	ON	ON	ON	ON	ON	ON	ON																
8:00 AM		ON	ON	ON	ON	ON	ON	ON	ON															
9:00 AM			ON	ON	ON	ON	ON	ON	ON	ON														
10:00 AM				ON	ON	ON	ON	ON	ON	ON	ON													
11:00 AM					ON	ON	ON	ON	ON	ON	ON	ON												
12:00 PM						ON	ON	ON	ON	ON	ON	ON	ON											
1:00 PM							ON	ON	ON	ON	ON	ON	ON	ON										
2:00 PM								ON	ON	ON	ON	ON	ON	ON	ON									
3:00 PM									ON	ON	ON	ON	ON	ON	ON	ON								
4:00 PM										ON	ON	ON	ON	ON	ON	ON	ON							
5:00 PM											ON	ON	ON	ON	ON	ON	ON	ON						
6:00 PM												ON	ON	ON	ON	ON	ON	ON	ON					
7:00 PM													ON	ON	ON	ON	ON	ON	ON	ON				
8:00 PM														ON	ON	ON	ON	ON	ON	ON	ON			
9:00 PM															ON	ON	ON	ON	ON	ON	ON	ON		
10:00 PM																ON	ON	ON	ON	ON	ON	ON	ON	
11:00 PM																	ON	ON	ON	ON	ON	ON	ON	ON

Table N.3. 10-Hour Operating Schedule

Time	Scenario																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
12:00 AM	ON															ON	ON	ON	ON	ON	ON	ON	ON	ON
1:00 AM	ON	ON															ON	ON	ON	ON	ON	ON	ON	ON
2:00 AM	ON	ON	ON															ON	ON	ON	ON	ON	ON	ON
3:00 AM	ON	ON	ON	ON															ON	ON	ON	ON	ON	ON
4:00 AM	ON	ON	ON	ON	ON															ON	ON	ON	ON	ON
5:00 AM	ON	ON	ON	ON	ON	ON															ON	ON	ON	ON
6:00 AM	ON	ON	ON	ON	ON	ON	ON															ON	ON	ON
7:00 AM	ON	ON	ON	ON	ON	ON	ON	ON															ON	ON
8:00 AM	ON	ON	ON	ON	ON	ON	ON	ON	ON															ON
9:00 AM	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON														
10:00 AM		ON	ON	ON	ON	ON	ON	ON	ON	ON	ON													
11:00 AM			ON	ON	ON	ON	ON	ON	ON	ON	ON	ON												
12:00 PM				ON	ON	ON	ON	ON	ON	ON	ON	ON	ON											
1:00 PM					ON	ON	ON	ON	ON	ON	ON	ON	ON	ON										
2:00 PM						ON	ON	ON	ON	ON	ON	ON	ON	ON	ON									
3:00 PM							ON	ON	ON	ON	ON	ON	ON	ON	ON	ON								
4:00 PM								ON	ON	ON	ON	ON	ON	ON	ON	ON	ON							
5:00 PM									ON	ON	ON	ON	ON	ON	ON	ON	ON	ON						
6:00 PM										ON	ON	ON	ON	ON	ON	ON	ON	ON	ON					
7:00 PM											ON	ON	ON	ON	ON	ON	ON	ON	ON	ON				
8:00 PM												ON	ON	ON	ON	ON	ON	ON	ON	ON	ON			
9:00 PM													ON	ON	ON	ON	ON	ON	ON	ON	ON	ON		
10:00 PM														ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
11:00 PM															ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

N.3.3. Receptor Grid Parameters

A 1000 meter by 1000 meter receptor grid is centered over each source. The receptors are spaced in 50 meter increments resulting in 441 receptor points. All receptor flagpole heights are set at 1.2 meters above ground.

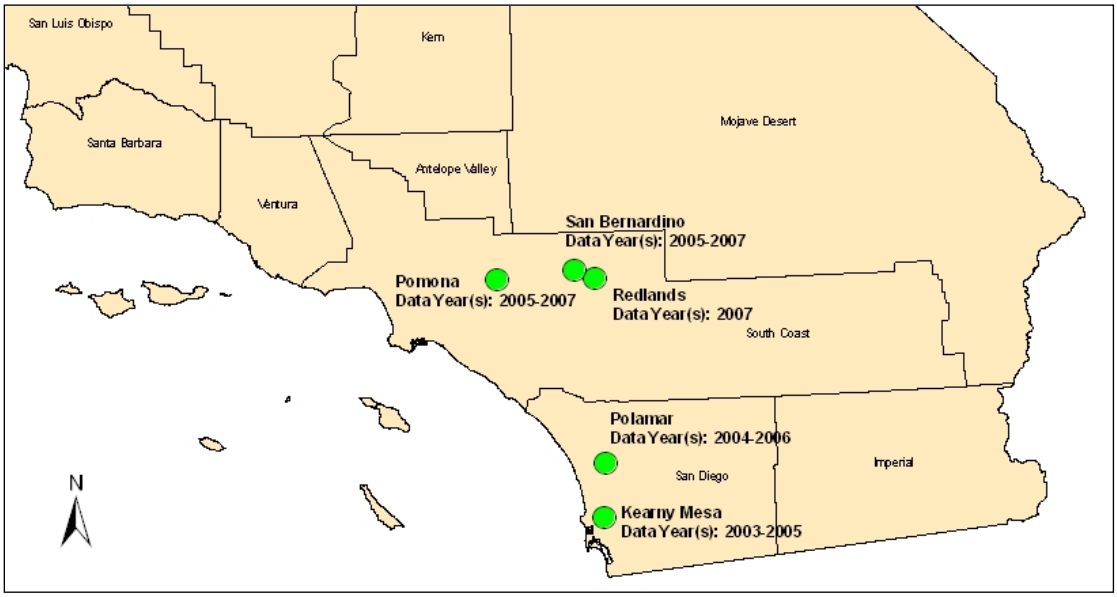
N.3.4. Meteorological Data

The meteorological data input to AERMOD were requested from two local air districts in California (ARB 2009a and ARB 2009b). The meteorological data that were provided by the Districts are, based on the Districts' observations and expertise, datasets that were likely to result in higher than average long-term impacts. The data includes four multi-year files and one single year file. Table N.4 shows the meteorological datasets used in this study. Figure N.1 shows the location of the meteorological station. The AERMOD profile base is defaulted to 10 meters above mean sea level for each meteorological file.

Table N.4. Meteorological Datasets

Data Provider	Area	Data Year(s)	Total Hours	Percent of Calm and Missing Hours	Avg. Wind Speed (m/s)
San Diego Air Pollution Control District	Kearny Mesa	2003-2005	26304	6.9	1.36
	Palomar	2004-2006	26304	8.7	1.36
South Coast Air Quality Management District	Pomona	2005-2007	26280	1.6	1.18
	Redlands	2007	8760	5.5	0.94
	San Bernardino	2005-2007	26280	4.9	1.44

Figure N.1. Meteorological Data Set Locations



N.3.5. Post-Processing the Period Average Concentrations for the Offsite Worker

The period average concentration represents the average concentration of all hours processed within the meteorological set. Equation N.3 shows how the period average is calculated in AERMOD including how calm and missing hours are processed (U.S. EPA, 2005).

$$C_{period_average} = \frac{\sum C_{hourly}}{N_{total_hrs} - N_{calm_hrs} - N_{missing_hrs}} \qquad \textbf{Eq. N.3}$$

Where:

C_{hourly} = the concentration that occurs at a given hour

N_{total_hrs} = the number of processed hours reported by AERMOD (e.g., 1 yr = 8760 hours)

N_{calm_hrs} = the number of calm hours reported by AERMOD

$N_{missing_hrs}$ = the number of missing hours reported by AERMOD

Normally to post-process hourly data, the off-site worker hours are extracted from the hourly model output files and then averaged. However, this sensitivity study assumes the hourly emissions are coincident with the off-site worker schedule. Since this is the case, the 8-hour period average for the offsite worker can simply be scaled from the period average reported by AERMOD (see Equation N.4). To make sure this calculation is accurate, a check was performed by processing the hourly concentrations for one receptor with the Pomona data. If the emission schedule was not 100%

coincident with the offsite worker, then all post-processing would have to be completed on an hourly basis. See Appendix M for more information on how to post-process worker concentrations using hourly raw results.

$$C_{worker_period_average} = C_{period_average} \times \frac{N_{total_hrs} - N_{calm_hrs} - N_{missing_hrs}}{N_{worker_hrs} - N_{worker_calm_hrs} - N_{worker_missing_hrs}} \qquad \textbf{Eq. N.4}$$

Where:

$C_{period_average}$	=	the period concentration reported by AERMOD
N_{total_hrs}	=	the total number of processed hours reported by AERMOD
N_{calm_hrs}	=	the total number of calm hours reported by AERMOD
$N_{missing_hrs}$	=	the total number of missing hours reported by AERMOD
N_{worker_hrs}[a]	=	the total number of hours that occurred during the worker's shift
$N_{worker_calm__hrs}$[b]	=	the number of calm hours that occurs during the worker's shift
$N_{worker_missing_hrs}$[b]	=	the number of missing hours that occurred during the worker's shift

a. The worker hours are determined by multiplying the number of weekdays (Monday through Friday) that occurs in the meteorological data set by the work shift duration (8 hours). For example, a meteorological data set ranging from 1/1/2003 to 12/31/2005 contains 783 weekdays. If you multiply the number weekdays by the work shift duration (8 hour/day), this will equal 6264 worker hours. The number of weekdays varies depending on the day of the week January 1st starts on.

b. Calm and missing hours are reported in the AERMOD Detailed Message Listing File. To determine the number of worker calm and missing hours, the calm and missing hours that occur during the worker shift are isolated and summed.

N.4. Results

To test the validity of the worker adjustment factor, the post-processed period average concentration for the offsite worker was divided by the modeled period residential average to obtain a quotient. This calculation was performed at the PMI of each scenario. If the quotient is smaller or equal to the worker adjustment factor, the worker adjustment factor is considered a suitable health protective approximation. If the quotient is greater, the worker adjustment factor will underestimate the long-term average concentration and would not be the most conservative estimation of what the worker breathes. For these scenarios, the 8-hour and 10-hour worker adjustment factors are 4.2 and 3.4, respectively. The results for this study are summarized in the figures and tables below. To view the details for every scenario, see Appendix N-1.

Figure N.2 shows how the post-processed period averages changes over 8-hour rolling work shifts. The value at each 8-hour work shift represents the quotient average across the five meteorological data sets. Values that fall on or below the thick dashed line (i.e., the 4.2 worker adjustment factor) indicate that the worker adjustment factor would be a health protective value. Based on the five metrological data sets, the worker adjustment factor is health protective for work shifts that start approximately between 8 am and 3 pm (i.e., 8-hour work shifts starting at 8 am and ending by 11 pm).

Figure N.2. Summary of the 8-Hour Scenarios

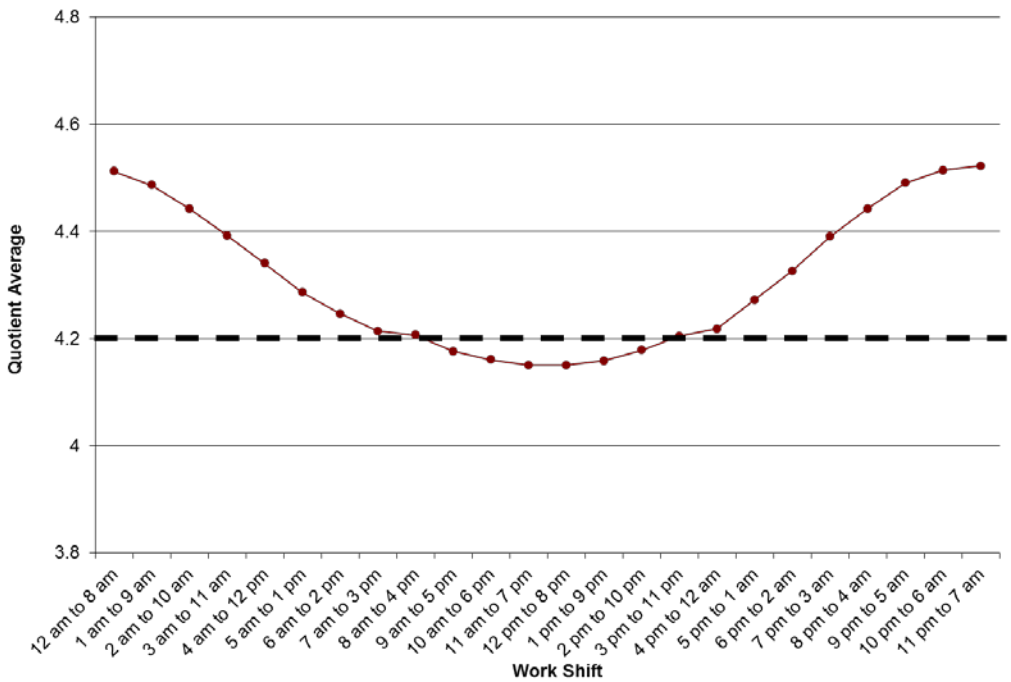


Figure N.3 shows relationship between the worker schedule and the percent of calm and missing hours that occurred during 8-hr work shifts. The figure shows the percent of calm and missing hours are higher during the early morning and evening hour start hours.

Figure N.3. Average Percent of Calm and Missing Hours for 8-Hour Work Shifts

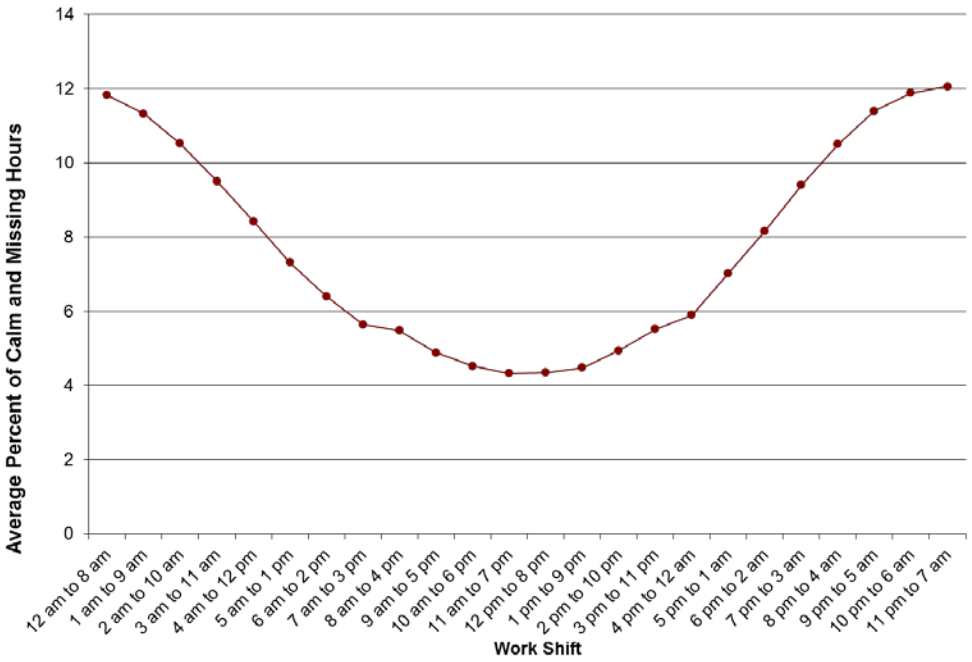


Figure N.4 shows how the post-processed period averages change over 10-hour rolling work shifts. The value at each 10-hour work shift represents the quotient average across the five meteorological data sets. Values that fall on or below the thick dashed line (i.e., the 3.4 worker adjustment factor) indicate that the worker adjustment factor would be a health protective value. Based on the five metrological data sets, the worker adjustment factor is health protective for work shifts that start approximately between 5 am and 4 pm (i.e., 10-hour work shifts starting at 5 am and ending by 2 am).

Figure N.4. Summary of the 10-Hour Scenarios

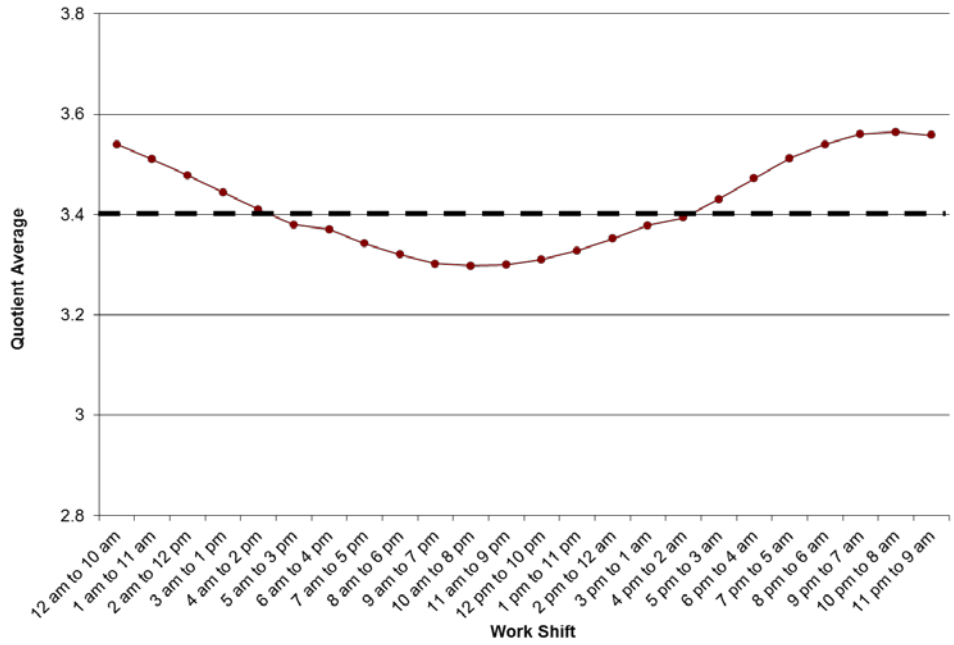


Figure N.5 shows relationship between the worker schedule and the percent of calm and missing hours that occurred during 10-hr work shifts. The figure shows the percent of calm and missing hours are higher during the early morning and evening hour start hours.

Figure N.5. Average Percent of Calm and Missing Hours for 10-Hour Work Shifts

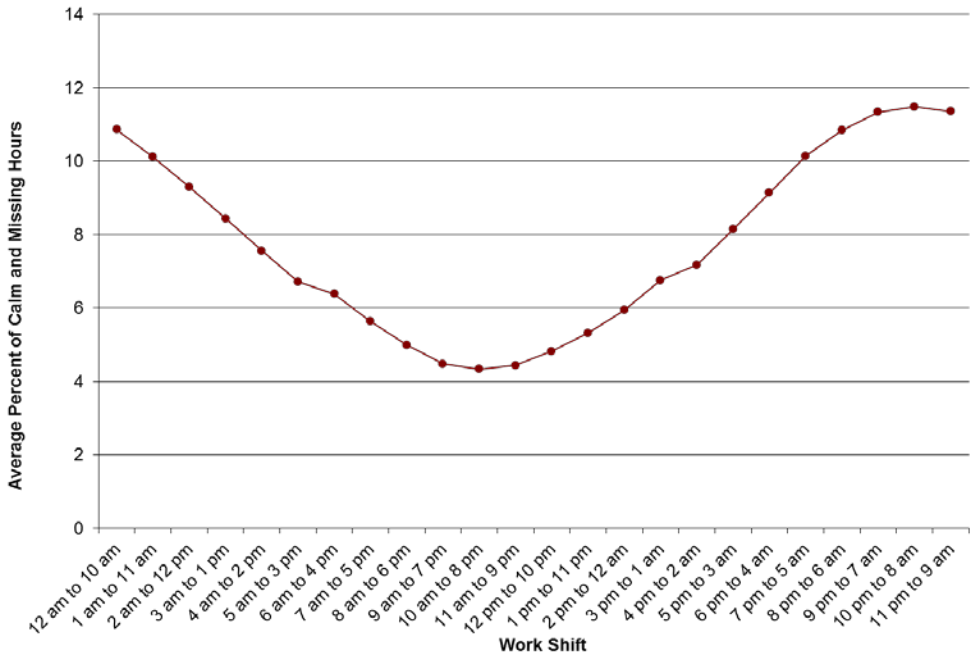


Table N.5 shows the average, minimum, and maximum quotients across all 24 8-hour work shifts for each point source size (i.e., small, medium, and large). The values in the parentheses are the range across the 24 work shifts for each meteorological data set.

Table N.5. Summary of the Average 8-Hour Scenarios by Point Source Size

Meteorological Set	Point Source Size			% Calm/Missing Hours During the Worker's Shift
	Small	Medium	Large	
Kearny Mesa	4.33 (4.19 to 4.43)	4.33 (4.19 to 4.43)	4.33 (4.19 to 4.43)	9.6 (6.8 to 11.8)
Palomar	4.38 (4.18 to 4.65)	4.38 (4.18 to 4.65)	4.38 (4.18 to 4.65)	12.2 (8.2 to 17.5)
Pomona	4.24 (4.23 to 4.25)	4.24 (4.23 to 4.25)	4.24 (4.23 to 4.25)	2.3 (2.1 to 2.5)
Redlands	4.31 (4.00 to 4.75)	4.31 (4.00 to 4.75)	4.31 (4.00 to 4.75)	7.6 (1.0 to 16.5)
San Bernardino	4.31 (4.06 to 4.65)	4.31 (4.06 to 4.65)	4.31 (4.06 to 4.65)	6.9 (1.4 to 14.1)

Table N.6 shows the average, minimum, and maximum quotients across all 24 10-hour work shifts for each point source size (i.e., small, medium, and large). The values in the parentheses are the range across the 24 work shifts for each meteorological data set.

Table N.6. Summary of the Average 10-Hour Scenarios by Point Source Size

Meteorological Set	Point Source Size			% Calm/Missing Hours During the Worker's Shift
	Small	Medium	Large	
Kearny Mesa	3.46 (3.38 to 3.54)	3.46 (3.38 to 3.54)	3.46 (3.38 to 3.54)	9.6 (7.5 to 11.6)
Palomar	3.50 (3.34 to 3.70)	3.50 (3.34 to 3.70)	3.50 (3.34 to 3.70)	12.2 (8.0 to 17.1)
Pomona	3.39 (3.38 to 3.39)	3.39 (3.38 to 3.39)	3.39 (3.38 to 3.39)	2.3 (2.2 to 2.5)
Redlands	3.45 (3.21 to 3.74)	3.45 (3.21 to 3.74)	3.45 (3.21 to 3.74)	7.6 (1.1 to 15.2)
San Bernardino	3.31 (3.12 to 3.54)	3.31 (3.12 to 3.54)	3.31 (3.12 to 3.54)	6.9 (1.5 to 13.1)

N.5. Conclusions

The goal of this study was to determine if the worker adjustment factor of 4.2 (8 hours/day, 5 days/week) or 3.4 (10 hours/day, 5 days/week) would always yield a more conservative or health protective approximation using five meteorological data sets. This study demonstrated that the worker adjustment factor does not always represent the most health protective approximation of long-term hourly model predictions. This is primarily observed during night conditions. Air Districts may wish to evaluate their meteorological data to determine an appropriate worker adjustment factor for their area using the methods described in this appendix.

Although the meteorological data used in this study are site-specific, several general conclusions and recommendations can be made. These conclusions and recommendations are summarized below.

- ***The worker adjustment factor is generally a suitable health protective approximation for daytime work shifts.***

  For the meteorological data used in this study, the results show that the worker adjustment factor is a suitable health protective approximation for work shifts that occur during the daytime hours. When comparing the 8-hour and 10-hour scenarios, the results show that the range of work shifts that were considered a more health protective approximation increased with the longer work shift duration.

- ***The size of the emitting source did not affect the long-term concentration approximated with the worker adjustment factor.***

  The size of the source was inconsequential in determining whether the worker adjustment factor is health protective. This is because the worker adjustment factor is applied to the modeling results after the air dispersion analysis has been completed. However, it should be noted that the size of the source does affect the location of the PMI during a specific time of day. This is shown in the scenario details in Appendix N-1.

- ***The worker adjustment factor may not represent the most conservative estimation of the worker's inhalation exposure for nighttime work shifts.***

  In most cases, the worker adjustment factor will represent a health protective approximation for work shifts that occur during the daytime. However, the worker adjustment factor may not represent the most conservative estimation when the source's emission schedule and offsite worker's schedules are 100% coincident at night. It is recommended that the offsite worker long-term average concentrations be post-processed using the hourly dispersion modeling results when examining work shifts occurring at night. Alternatively, a more conservative worker adjustment factor can be used to account for the calm hours (see the next bullet point below).

- ***Recommended worker adjustment factor for 8 and 10-hour work shifts***

  Based on the five meteorological data sets used in this study, the range of worker adjustment factors (WAF) was between 4.2 and 4.8. We recommend using the 4.2 WAF for most cases. In the event of predominant night time emissions and worker schedule or if only one year of meteorological data are available, then we recommend using 4.8 for the 8-hour WAF.

N.6. References

ARB (2009a). Harris, Gregory. "Aermod met data in San Diego." Email to Ralph Desina, San Diego Air Pollution Control District.

ARB (2009b). Harris, Gregory. "Aermod met data in SC." Email to Tom Chico, South Coast Air Quality Management District.

U.S. EPA (2004). User's Guide for the AMS/EPA Regulatory Model – AERMOD. EPA-454/B-03-001. U.S. Environmental Protection Agency, Research Triangle Park, NC.

U.S. EPA (2005). Guideline on Air Quality Models (Revised). 40 CFR 51, Appendix W.

APPENDIX N-1 – SCENARIO DATA DETAILS

KEARNY MESA - 8-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	500	0.02584	26304	1813	632.84744	6264	723	11.5	0.11421	**4.42**
2	0	300	0.05638	26304	1813	1380.80258	6264	739	11.8	0.24992	**4.43**
3	150	-150	0.10366	26304	1813	2538.73706	6264	729	11.6	0.45867	**4.42**
4	150	-100	0.19993	26304	1813	4896.48563	6264	718	11.5	0.88289	**4.42**
5	200	-100	0.33363	26304	1813	8170.93233	6264	700	11.2	1.46854	**4.40**
6	200	-100	0.48136	26304	1813	11788.98776	6264	688	11.0	2.11424	**4.39**
7	200	-100	0.62685	26304	1813	15352.18335	6264	684	10.9	2.75129	**4.39**
8	200	-100	0.76245	26304	1813	18673.16295	6264	681	10.9	3.34465	**4.39**
9	200	-100	0.85443	26304	1813	20925.84513	6264	665	10.6	3.73743	**4.37**
10	250	-100	0.89012	26304	1813	21799.92892	6264	618	9.9	3.86113	**4.34**
11	250	-100	0.85448	26304	1813	20927.06968	6264	568	9.1	3.67399	**4.30**
12	250	-100	0.76187	26304	1813	18658.95817	6264	517	8.3	3.24673	**4.26**
13	250	-100	0.63409	26304	1813	15529.49819	6264	488	7.8	2.68863	**4.24**
14	250	-100	0.48738	26304	1813	11936.42358	6264	467	7.5	2.05907	**4.22**
15	300	-150	0.34902	26304	1813	8547.84882	6264	454	7.2	1.47123	**4.22**
16	300	-150	0.20978	26304	1813	5137.72198	6264	433	6.9	0.88110	**4.20**
17	300	-150	0.09739	26304	1813	2385.17849	6264	425	6.8	0.40849	**4.19**
18	350	-200	0.02843	26304	1813	696.27913	6264	456	7.3	0.11988	**4.22**
19	0	500	0.00479	26304	1813	117.31189	6264	516	8.2	0.02041	**4.26**
20	-50	500	0.00491	26304	1813	120.25081	6264	578	9.2	0.02115	**4.31**
21	0	500	0.00512	26304	1813	125.39392	6264	625	10.0	0.02224	**4.34**
22	0	500	0.00513	26304	1813	125.63883	6264	658	10.5	0.02241	**4.37**
23	0	500	0.00528	26304	1813	129.31248	6264	675	10.8	0.02314	**4.38**
24	0	500	0.01002	26304	1813	245.39982	6264	699	11.2	0.04410	**4.40**

KEARNY MESA - 8-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	0	100	0.48213	26304	1813	11807.84583	6264	723	11.5	2.13100	**4.42**
2	0	100	0.99949	26304	1813	24478.50959	6264	739	11.8	4.43050	**4.43**
3	50	50	1.69544	26304	1813	41523.02104	6264	729	11.6	7.50190	**4.42**
4	50	50	2.6458	26304	1813	64798.28780	6264	718	11.5	11.68379	**4.42**
5	50	50	3.51528	26304	1813	86092.72248	6264	700	11.2	15.47317	**4.40**
6	50	50	4.24949	26304	1813	104074.25959	6264	688	11.0	18.66468	**4.39**
7	100	-50	5.33685	26304	1813	130704.79335	6264	684	10.9	23.42380	**4.39**
8	100	-50	6.51541	26304	1813	159568.90631	6264	681	10.9	28.58121	**4.39**
9	100	-50	7.325	26304	1813	179396.57500	6264	665	10.6	32.04082	**4.37**
10	100	-50	7.60514	26304	1813	186257.48374	6264	618	9.9	32.98928	**4.34**
11	100	-50	7.28086	26304	1813	178315.54226	6264	568	9.1	31.30540	**4.30**
12	100	-50	6.51093	26304	1813	159459.18663	6264	517	8.3	27.74651	**4.26**
13	100	-50	5.53256	26304	1813	135497.92696	6264	488	7.8	23.45878	**4.24**
14	100	-50	4.37499	26304	1813	107147.88009	6264	467	7.5	18.48333	**4.22**
15	100	-50	3.13098	26304	1813	76680.83118	6264	454	7.2	13.19808	**4.22**
16	100	-50	1.92339	26304	1813	47105.74449	6264	433	6.9	8.07850	**4.20**
17	150	-50	0.97341	26304	1813	23839.78431	6264	425	6.8	4.08285	**4.19**
18	200	-100	0.37344	26304	1813	9145.91904	6264	456	7.3	1.57471	**4.22**
19	0	150	0.19509	26304	1813	4777.94919	6264	516	8.2	0.83124	**4.26**
20	0	150	0.18348	26304	1813	4493.60868	6264	578	9.2	0.79029	**4.31**
21	0	150	0.17623	26304	1813	4316.04893	6264	625	10.0	0.76539	**4.34**
22	0	150	0.16448	26304	1813	4028.27968	6264	658	10.5	0.71857	**4.37**
23	0	150	0.16295	26304	1813	3990.80845	6264	675	10.8	0.71405	**4.38**
24	0	150	0.22443	26304	1813	5496.51513	6264	699	11.2	0.98769	**4.40**

KEARNY MESA - 8-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	0	50	56.94704	26304	1813	1394689.95664	6264	723	11.5	251.70366	**4.42**
2	0	50	63.90855	26304	1813	1565184.29805	6264	739	11.8	283.29128	**4.43**
3	0	50	72.78622	26304	1813	1782607.31402	6264	729	11.6	322.06094	**4.42**
4	0	50	80.59339	26304	1813	1973812.71449	6264	718	11.5	355.89843	**4.42**
5	0	50	86.44869	26304	1813	2117214.86679	6264	700	11.2	380.52029	**4.40**
6	50	0	96.25147	26304	1813	2357294.75177	6264	688	11.0	422.75731	**4.39**
7	50	0	117.66867	26304	1813	2881823.39697	6264	684	10.9	516.45581	**4.39**
8	50	0	138.64904	26304	1813	3395653.63864	6264	681	10.9	608.21308	**4.39**
9	50	0	156.76654	26304	1813	3839369.33114	6264	665	10.6	685.72412	**4.37**
10	50	0	172.75048	26304	1813	4230832.00568	6264	618	9.9	749.35034	**4.34**
11	50	0	184.10847	26304	1813	4509000.53877	6264	568	9.1	791.60824	**4.30**
12	50	0	190.80885	26304	1813	4673099.54535	6264	517	8.3	813.13721	**4.26**
13	50	0	183.97723	26304	1813	4505786.33993	6264	488	7.8	780.08766	**4.24**
14	50	0	168.91026	26304	1813	4136781.17766	6264	467	7.5	713.60724	**4.22**
15	50	0	150.42213	26304	1813	3683988.38583	6264	454	7.2	634.07717	**4.22**
16	50	-50	146.48297	26304	1813	3587514.41827	6264	433	6.9	615.24857	**4.20**
17	50	-50	144.08415	26304	1813	3528764.91765	6264	425	6.8	604.34405	**4.19**
18	50	-50	130.6006	26304	1813	3198539.29460	6264	456	7.3	550.71269	**4.22**
19	50	-50	111.9118	26304	1813	2740831.89380	6264	516	8.2	476.83227	**4.26**
20	50	-50	86.25428	26304	1813	2112453.57148	6264	578	9.2	371.51839	**4.31**
21	50	-50	65.37008	26304	1813	1600978.62928	6264	625	10.0	283.91180	**4.34**
22	0	50	56.60048	26304	1813	1386202.35568	6264	658	10.5	247.27120	**4.37**
23	0	50	53.20196	26304	1813	1302969.20236	6264	675	10.8	233.13101	**4.38**
24	-100	-100	54.24037	26304	1813	1328400.90167	6264	699	11.2	238.70636	**4.40**

PALOMAR - 8-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	250	0.02363	26304	2291	567.42719	6256	1096	17.5	0.10997	**4.65**
2	100	150	0.0631	26304	2291	1515.22030	6256	1090	17.4	0.29331	**4.65**
3	150	50	0.14317	26304	2291	3437.94121	6256	1050	16.8	0.66038	**4.61**
4	150	50	0.27432	26304	2291	6587.24616	6256	971	15.5	1.24640	**4.54**
5	200	50	0.42859	26304	2291	10291.73167	6256	879	14.1	1.91403	**4.47**
6	200	50	0.58751	26304	2291	14107.87763	6256	788	12.6	2.58008	**4.39**
7	200	0	0.73867	26304	2291	17737.68271	6256	701	11.2	3.19310	**4.32**
8	200	0	0.87304	26304	2291	20964.30952	6256	628	10.0	3.72500	**4.27**
9	250	0	0.96493	26304	2291	23170.86409	6256	679	10.9	4.15472	**4.31**
10	250	0	0.99791	26304	2291	23962.81283	6256	589	9.4	4.22848	**4.24**
11	250	0	0.9484	26304	2291	22773.92920	6256	540	8.6	3.98424	**4.20**
12	250	0	0.83614	26304	2291	20078.22982	6256	518	8.3	3.49917	**4.18**
13	250	0	0.68595	26304	2291	16471.71735	6256	517	8.3	2.87014	**4.18**
14	250	0	0.51501	26304	2291	12366.93513	6256	523	8.4	2.15715	**4.19**
15	300	0	0.34888	26304	2291	8377.65544	6256	550	8.8	1.46822	**4.21**
16	300	-50	0.20229	26304	2291	4857.58977	6256	596	9.5	0.85823	**4.24**
17	300	-100	0.10109	26304	2291	2427.47417	6256	516	8.2	0.42290	**4.18**
18	300	-150	0.0311	26304	2291	746.80430	6256	612	9.8	0.13232	**4.25**
19	-450	-200	0.00583	26304	2291	139.99579	6256	701	11.2	0.02520	**4.32**
20	-400	-150	0.00576	26304	2291	138.31488	6256	802	12.8	0.02536	**4.40**
21	-400	-200	0.00503	26304	2291	120.78539	6256	895	14.3	0.02253	**4.48**
22	-400	-200	0.00427	26304	2291	102.53551	6256	980	15.7	0.01943	**4.55**
23	-400	-200	0.00323	26304	2291	77.56199	6256	1040	16.6	0.01487	**4.60**
24	-500	-500	0.0081	26304	2291	194.50530	6256	1067	17.1	0.03748	**4.63**

PALOMAR - 8-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	50	0.39916	26304	2291	9585.02908	6256	1096	17.5	1.85756	**4.65**
2	50	50	1.1355	26304	2291	27266.76150	6256	1090	17.4	5.27812	**4.65**
3	50	50	2.23922	26304	2291	53770.38986	6256	1050	16.8	10.32854	**4.61**
4	50	50	3.46481	26304	2291	83200.48253	6256	971	15.5	15.74276	**4.54**
5	100	0	5.01511	26304	2291	120427.83643	6256	879	14.1	22.39685	**4.47**
6	100	0	7.1387	26304	2291	171421.60310	6256	788	12.6	31.34996	**4.39**
7	100	0	9.3361	26304	2291	224187.76930	6256	701	11.2	40.35783	**4.32**
8	100	0	11.30065	26304	2291	271362.50845	6256	628	10.0	48.21651	**4.27**
9	100	0	12.55274	26304	2291	301428.94562	6256	679	10.9	54.04858	**4.31**
10	100	0	12.9907	26304	2291	311945.67910	6256	589	9.4	55.04600	**4.24**
11	100	0	12.32253	26304	2291	295900.91289	6256	540	8.6	51.76713	**4.20**
12	100	0	10.99232	26304	2291	263958.58016	6256	518	8.3	46.00184	**4.18**
13	100	0	9.16435	26304	2291	220063.53655	6256	517	8.3	38.34528	**4.18**
14	100	0	7.04288	26304	2291	169120.67744	6256	523	8.4	29.49951	**4.19**
15	100	0	4.85232	26304	2291	116518.76016	6256	550	8.8	20.42039	**4.21**
16	100	0	2.83666	26304	2291	68116.71658	6256	596	9.5	12.03476	**4.24**
17	150	0	1.4789	26304	2291	35512.82570	6256	516	8.2	6.18690	**4.18**
18	150	0	0.51952	26304	2291	12475.23376	6256	612	9.8	2.21035	**4.25**
19	500	100	0.16252	26304	2291	3902.59276	6256	701	11.2	0.70254	**4.32**
20	-100	-50	0.13578	26304	2291	3260.48514	6256	802	12.8	0.59782	**4.40**
21	-100	-50	0.12284	26304	2291	2949.75692	6256	895	14.3	0.55023	**4.48**
22	-100	-50	0.10491	26304	2291	2519.20383	6256	980	15.7	0.47748	**4.55**
23	-150	-50	0.08895	26304	2291	2135.95635	6256	1040	16.6	0.40950	**4.60**
24	-100	0	0.15313	26304	2291	3677.11069	6256	1067	17.1	0.70864	**4.63**

PALOMAR - 8-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	0	62.23758	26304	2291	1494511.00854	6256	1096	17.5	289.63392	**4.65**
2	-50	0	67.07392	26304	2291	1610646.04096	6256	1090	17.4	311.77817	**4.65**
3	-50	0	69.58692	26304	2291	1670990.70996	6256	1050	16.8	320.97401	**4.61**
4	50	0	76.6273	26304	2291	1840051.35490	6256	971	15.5	348.16487	**4.54**
5	50	0	101.35151	26304	2291	2433753.80963	6256	879	14.1	452.62299	**4.47**
6	50	0	132.881	26304	2291	3190871.45300	6256	788	12.6	583.55367	**4.39**
7	50	0	166.85749	26304	2291	4006748.90737	6256	701	11.2	721.28693	**4.32**
8	50	0	199.35655	26304	2291	4787148.83515	6256	628	10.0	850.59503	**4.27**
9	50	0	227.0465	26304	2291	5452067.60450	6256	679	10.9	977.59864	**4.31**
10	50	0	258.20597	26304	2291	6200299.95761	6256	589	9.4	1094.10622	**4.24**
11	50	0	284.95975	26304	2291	6842738.47675	6256	540	8.6	1197.12010	**4.20**
12	50	0	306.84919	26304	2291	7368369.59947	6256	518	8.3	1284.13552	**4.18**
13	50	0	305.48615	26304	2291	7335638.91995	6256	517	8.3	1278.20856	**4.18**
14	50	0	284.9321	26304	2291	6842074.51730	6256	523	8.4	1193.45448	**4.19**
15	50	0	255.29701	26304	2291	6130447.10113	6256	550	8.8	1074.38610	**4.21**
16	50	0	222.46841	26304	2291	5342133.92933	6256	596	9.5	943.83992	**4.24**
17	50	0	190.65477	26304	2291	4578192.99201	6256	516	8.2	797.59460	**4.18**
18	50	0	149.99496	26304	2291	3601828.97448	6256	612	9.8	638.16956	**4.25**
19	50	0	109.43689	26304	2291	2627908.03957	6256	701	11.2	473.07075	**4.32**
20	50	0	71.34752	26304	2291	1713267.99776	6256	802	12.8	314.13055	**4.40**
21	50	0	47.98635	26304	2291	1152296.22255	6256	895	14.3	214.94054	**4.48**
22	-50	50	46.33971	26304	2291	1112755.45623	6256	980	15.7	210.90892	**4.55**
23	-50	0	48.61618	26304	2291	1167420.33034	6256	1040	16.6	223.81525	**4.60**
24	-50	0	55.01306	26304	2291	1321028.60978	6256	1067	17.1	254.58250	**4.63**

POMONA - 8-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	300	-100	0.0378	26280	432	977.05440	6248	138	2.2	0.15991	**4.23**
2	200	-50	0.08941	26280	432	2311.06968	6248	140	2.2	0.37837	**4.23**
3	200	-50	0.18145	26280	432	4690.11960	6248	142	2.3	0.76812	**4.23**
4	200	-50	0.30538	26280	432	7893.46224	6248	145	2.3	1.29337	**4.24**
5	200	-50	0.4489	26280	432	11603.16720	6248	147	2.4	1.90185	**4.24**
6	200	0	0.59344	26280	432	15339.23712	6248	152	2.4	2.51628	**4.24**
7	200	0	0.72765	26280	432	18808.29720	6248	154	2.5	3.08636	**4.24**
8	250	0	0.84968	26280	432	21962.52864	6248	157	2.5	3.60573	**4.24**
9	250	0	0.93127	26280	432	24071.46696	6248	159	2.5	3.95327	**4.25**
10	250	0	0.9478	26280	432	24498.73440	6248	158	2.5	4.02278	**4.24**
11	250	0	0.89255	26280	432	23070.63240	6248	157	2.5	3.78766	**4.24**
12	250	0	0.7753	26280	432	20039.95440	6248	154	2.5	3.28847	**4.24**
13	300	0	0.63398	26280	432	16387.11504	6248	149	2.4	2.68685	**4.24**
14	300	0	0.49462	26280	432	12784.93776	6248	145	2.3	2.09486	**4.24**
15	300	50	0.35974	26280	432	9298.55952	6248	142	2.3	1.52286	**4.23**
16	350	50	0.22753	26280	432	5881.19544	6248	139	2.2	0.96271	**4.23**
17	350	50	0.11619	26280	432	3003.27912	6248	135	2.2	0.49129	**4.23**
18	400	0	0.03912	26280	432	1011.17376	6248	134	2.1	0.16539	**4.23**
19	0	-50	0.0042	26280	432	108.56160	6248	133	2.1	0.01775	**4.23**
20	0	-50	0.00468	26280	432	120.96864	6248	133	2.1	0.01978	**4.23**
21	0	-50	0.0052	26280	432	134.40960	6248	136	2.2	0.02199	**4.23**
22	0	-50	0.00567	26280	432	146.55816	6248	135	2.2	0.02397	**4.23**
23	0	-50	0.00623	26280	432	161.03304	6248	136	2.2	0.02635	**4.23**
24	500	-250	0.01616	26280	432	417.70368	6248	136	2.2	0.06834	**4.23**

POMONA - 8-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	100	-50	0.59146	26280	432	15288.05808	6248	138	2.2	2.50214	**4.23**
2	100	0	1.20437	26280	432	31130.55576	6248	140	2.2	5.09669	**4.23**
3	100	0	2.08811	26280	432	53973.46728	6248	142	2.3	8.83941	**4.23**
4	100	0	3.14746	26280	432	81355.54608	6248	145	2.3	13.33042	**4.24**
5	100	0	4.34608	26280	432	112337.47584	6248	147	2.4	18.41296	**4.24**
6	100	0	5.57952	26280	432	144219.43296	6248	152	2.4	23.65804	**4.24**
7	100	0	6.79151	26280	432	175546.95048	6248	154	2.5	28.80652	**4.24**
8	100	0	7.82163	26280	432	202173.49224	6248	157	2.5	33.19217	**4.24**
9	100	0	8.41525	26280	432	217517.38200	6248	159	2.5	35.72301	**4.25**
10	100	0	8.44758	26280	432	218353.04784	6248	158	2.5	35.85436	**4.24**
11	100	0	7.8987	26280	432	204165.59760	6248	157	2.5	33.51922	**4.24**
12	100	0	6.84909	26280	432	177035.27832	6248	154	2.5	29.05075	**4.24**
13	100	0	5.65066	26280	432	146058.25968	6248	149	2.4	23.94790	**4.24**
14	100	0	4.41875	26280	432	114215.85000	6248	145	2.3	18.71471	**4.24**
15	100	0	3.20379	26280	432	82811.56392	6248	142	2.3	13.56233	**4.23**
16	150	0	2.10868	26280	432	54505.16064	6248	139	2.2	8.92211	**4.23**
17	150	0	1.168	26280	432	30190.46400	6248	135	2.2	4.93873	**4.23**
18	200	0	0.48016	26280	432	12411.17568	6248	134	2.1	2.02996	**4.23**
19	500	-200	0.19471	26280	432	5032.86408	6248	133	2.1	0.82304	**4.23**
20	500	0	0.07366	26280	432	1903.96368	6248	133	2.1	0.31136	**4.23**
21	0	-50	0.04644	26280	432	1200.38112	6248	136	2.2	0.19640	**4.23**
22	0	-50	0.05041	26280	432	1302.99768	6248	135	2.2	0.21315	**4.23**
23	0	-50	0.05369	26280	432	1387.77912	6248	136	2.2	0.22706	**4.23**
24	100	-50	0.21115	26280	432	5457.80520	6248	136	2.2	0.89297	**4.23**

POMONA - 8-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	100	-50	65.9476	26280	432	1704613.56480	6248	138	2.2	278.98749	**4.23**
2	50	0	58.23568	26280	432	1505275.85664	6248	140	2.2	246.44333	**4.23**
3	50	0	70.24739	26280	432	1815754.53672	6248	142	2.3	297.37218	**4.23**
4	50	0	88.80241	26280	432	2295364.69368	6248	145	2.3	376.10432	**4.24**
5	50	0	111.03137	26280	432	2869938.85176	6248	147	2.4	470.40466	**4.24**
6	50	0	135.13711	26280	432	3493024.01928	6248	152	2.4	573.00263	**4.24**
7	50	0	158.47651	26280	432	4096300.83048	6248	154	2.5	672.18589	**4.24**
8	50	0	179.27428	26280	432	4633881.58944	6248	157	2.5	760.77517	**4.24**
9	50	0	197.23857	26280	432	5098222.55736	6248	159	2.5	837.28405	**4.25**
10	50	0	218.81575	26280	432	5655949.50600	6248	158	2.5	928.72734	**4.24**
11	50	0	244.03622	26280	432	6307848.21456	6248	157	2.5	1035.60141	**4.24**
12	50	0	270.93265	26280	432	7003067.13720	6248	154	2.5	1149.17413	**4.24**
13	50	0	285.34864	26280	432	7375691.64672	6248	149	2.4	1209.32803	**4.24**
14	50	0	285.77704	26280	432	7386764.92992	6248	145	2.3	1210.34982	**4.24**
15	50	0	275.07823	26280	432	7110222.08904	6248	142	2.3	1164.46480	**4.23**
16	50	0	256.69684	26280	432	6635099.92032	6248	139	2.2	1086.11883	**4.23**
17	50	0	236.76058	26280	432	6119787.47184	6248	135	2.2	1001.11033	**4.23**
18	50	0	207.98698	26280	432	5376047.45904	6248	134	2.1	879.30119	**4.23**
19	50	0	170.7548	26280	432	4413670.07040	6248	133	2.1	721.77761	**4.23**
20	100	-50	154.35448	26280	432	3989754.59904	6248	133	2.1	652.45374	**4.23**
21	100	-50	130.80712	26280	432	3381102.43776	6248	136	2.2	553.19084	**4.23**
22	100	-50	109.58201	26280	432	2832475.79448	6248	135	2.2	463.35282	**4.23**
23	100	-50	93.63298	26280	432	2420225.26704	6248	136	2.2	395.97926	**4.23**
24	100	-50	78.6095	26280	432	2031898.35600	6248	136	2.2	332.44410	**4.23**

REDLANDS - 8-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-500	0	0.04181	8760	478	346.27042	2088	291	13.9	0.19269	**4.61**
2	150	-100	0.08511	8760	478	704.88102	2088	250	12.0	0.38350	**4.51**
3	150	-100	0.18241	8760	478	1510.71962	2088	209	10.0	0.80400	**4.41**
4	150	-100	0.31173	8760	478	2581.74786	2088	167	8.0	1.34396	**4.31**
5	150	-100	0.45602	8760	478	3776.75764	2088	125	6.0	1.92397	**4.22**
6	200	-100	0.60555	8760	478	5015.16510	2088	84	4.0	2.50258	**4.13**
7	200	-50	0.75634	8760	478	6264.00788	2088	51	2.4	3.07511	**4.07**
8	200	-100	0.88379	8760	478	7319.54878	2088	31	1.5	3.55836	**4.03**
9	200	-50	0.9679	8760	478	8016.14780	2088	25	1.2	3.88568	**4.01**
10	250	-50	0.99231	8760	478	8218.31142	2088	20	1.0	3.97404	**4.00**
11	250	-50	0.94769	8760	478	7848.76858	2088	20	1.0	3.79534	**4.00**
12	250	-50	0.83365	8760	478	6904.28930	2088	21	1.0	3.34025	**4.01**
13	250	-50	0.69935	8760	478	5792.01670	2088	35	1.7	2.82125	**4.03**
14	300	-50	0.54905	8760	478	4547.23210	2088	53	2.5	2.23451	**4.07**
15	300	-50	0.40803	8760	478	3379.30446	2088	83	4.0	1.68544	**4.13**
16	300	-50	0.27569	8760	478	2283.26458	2088	120	5.7	1.16020	**4.21**
17	350	-50	0.15386	8760	478	1274.26852	2088	162	7.8	0.66161	**4.30**
18	400	-50	0.05645	8760	478	467.51890	2088	208	10.0	0.24868	**4.41**
19	-50	0	0.00342	8760	478	28.32444	2088	249	11.9	0.01540	**4.50**
20	-50	0	0.00391	8760	478	32.38262	2088	290	13.9	0.01801	**4.61**
21	-50	0	0.0043	8760	478	35.61260	2088	318	15.2	0.02012	**4.68**
22	-50	0	0.0046	8760	478	38.09720	2088	341	16.3	0.02181	**4.74**
23	-50	0	0.00521	8760	478	43.14922	2088	344	16.5	0.02474	**4.75**
24	-500	50	0.01975	8760	478	163.56950	2088	327	15.7	0.09288	**4.70**

REDLANDS - 8-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	WORKER PERIOD AVE CONC	% WORKER CALM & MISSING HRS	QUOTIENT (FACTOR)
1	-50	0	0.52894	8760	478	4380.68108	2088	291	2.43777	13.9	**4.61**
2	50	-50	1.22841	8760	478	10173.69162	2088	250	5.53520	12.0	**4.51**
3	50	-50	2.14057	8760	478	17728.20074	2088	209	9.43491	10.0	**4.41**
4	50	-50	3.12441	8760	478	25876.36362	2088	167	13.47026	8.0	**4.31**
5	100	-50	4.19282	8760	478	34724.93524	2088	125	17.68973	6.0	**4.22**
6	100	-50	5.31036	8760	478	43980.40152	2088	84	21.94631	4.0	**4.13**
7	100	-50	6.45196	8760	478	53435.13272	2088	51	26.23227	2.4	**4.07**
8	100	-50	7.43242	8760	478	61555.30244	2088	31	29.92479	1.5	**4.03**
9	100	-50	7.96745	8760	478	65986.42090	2088	25	31.98566	1.2	**4.01**
10	100	-50	7.90056	8760	478	65432.43792	2088	20	31.64044	1.0	**4.00**
11	100	-50	7.20298	8760	478	59655.08036	2088	20	28.84675	1.0	**4.00**
12	100	-50	6.14084	8760	478	50858.43688	2088	21	24.60495	1.0	**4.01**
13	100	0	5.07104	8760	478	41998.35328	2088	35	20.45706	1.7	**4.03**
14	150	-50	4.07763	8760	478	33770.93166	2088	53	16.59505	2.5	**4.07**
15	150	0	3.14168	8760	478	26019.39376	2088	83	12.97725	4.0	**4.13**
16	150	0	2.23696	8760	478	18526.50272	2088	120	9.41387	5.7	**4.21**
17	150	0	1.32077	8760	478	10938.61714	2088	162	5.67945	7.8	**4.30**
18	150	0	0.517	8760	478	4281.79400	2088	208	2.27755	10.0	**4.41**
19	500	-100	0.07352	8760	478	608.89264	2088	249	0.33110	11.9	**4.50**
20	-50	0	0.04779	8760	478	395.79678	2088	290	0.22013	13.9	**4.61**
21	-50	0	0.05202	8760	478	430.82964	2088	318	0.24341	15.2	**4.68**
22	-50	0	0.05512	8760	478	456.50384	2088	341	0.26131	16.3	**4.74**
23	-50	0	0.05897	8760	478	488.38954	2088	344	0.28004	16.5	**4.75**
24	-50	0	0.18742	8760	478	1552.21244	2088	327	0.88144	15.7	**4.70**

REDLANDS - 8-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-300	50	45.47894	8760	478	376656.58108	2088	291	13.9	209.60299	**4.61**
2	-50	0	45.80464	8760	478	379354.02848	2088	250	12.0	206.39501	**4.51**
3	-50	0	53.94402	8760	478	446764.37364	2088	209	10.0	237.76710	**4.41**
4	50	0	74.29323	8760	478	615296.53086	2088	167	8.0	320.30012	**4.31**
5	50	0	96.44381	8760	478	798747.63442	2088	125	6.0	406.90149	**4.22**
6	50	0	123.94464	8760	478	1026509.50848	2088	84	4.0	512.23029	**4.13**
7	50	0	151.19332	8760	478	1252183.07624	2088	51	2.4	614.71923	**4.07**
8	50	0	175.86202	8760	478	1456489.24964	2088	31	1.5	708.06478	**4.03**
9	50	0	200.54185	8760	478	1660887.60170	2088	25	1.2	805.08367	**4.01**
10	50	0	230.43001	8760	478	1908421.34282	2088	20	1.0	922.83431	**4.00**
11	50	0	263.81094	8760	478	2184882.20508	2088	20	1.0	1056.51944	**4.00**
12	50	0	299.22627	8760	478	2478191.96814	2088	21	1.0	1198.93177	**4.01**
13	50	0	298.91289	8760	478	2475596.55498	2088	35	1.7	1205.84343	**4.03**
14	50	0	277.77399	8760	478	2300524.18518	2088	53	2.5	1130.47872	**4.07**
15	50	0	252.24911	8760	478	2089127.12902	2088	83	4.0	1041.95867	**4.13**
16	50	0	224.21967	8760	478	1856987.30694	2088	120	5.7	943.59111	**4.21**
17	50	0	190.84881	8760	478	1580609.84442	2088	162	7.8	820.66970	**4.30**
18	50	0	147.20039	8760	478	1219113.62998	2088	208	10.0	648.46470	**4.41**
19	50	0	96.70574	8760	478	800916.93868	2088	249	11.9	435.51764	**4.50**
20	100	-50	65.67926	8760	478	543955.63132	2088	290	13.9	302.53372	**4.61**
21	100	-50	44.74535	8760	478	370580.98870	2088	318	15.2	209.36779	**4.68**
22	-300	50	46.41385	8760	478	384399.50570	2088	341	16.3	220.03406	**4.74**
23	-300	50	48.26296	8760	478	399713.83472	2088	344	16.5	229.19371	**4.75**
24	-300	50	48.06504	8760	478	398074.66128	2088	327	15.7	226.05035	**4.70**

SAN BERNARDINO - 8-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	200	350	0.04085	26280	1292	1020.75980	6248	872	14.0	0.18987	**4.65**
2	100	200	0.09946	26280	1292	2485.30648	6248	823	13.2	0.45812	**4.61**
3	100	150	0.20057	26280	1292	5011.84316	6248	744	11.9	0.91058	**4.54**
4	100	150	0.33332	26280	1292	8329.00016	6248	636	10.2	1.48414	**4.45**
5	150	150	0.48464	26280	1292	12110.18432	6248	526	8.4	2.11643	**4.37**
6	150	150	0.64456	26280	1292	16106.26528	6248	414	6.6	2.76076	**4.28**
7	150	150	0.79252	26280	1292	19803.48976	6248	312	5.0	3.33617	**4.21**
8	150	150	0.92034	26280	1292	22997.45592	6248	206	3.3	3.80627	**4.14**
9	200	200	1.02323	26280	1292	25568.47124	6248	138	2.2	4.18469	**4.09**
10	200	200	1.0794	26280	1292	26972.04720	6248	99	1.6	4.38641	**4.06**
11	200	200	1.04725	26280	1292	26168.68300	6248	87	1.4	4.24747	**4.06**
12	200	200	0.92541	26280	1292	23124.14508	6248	91	1.5	3.75575	**4.06**
13	200	200	0.78218	26280	1292	19545.11384	6248	92	1.5	3.17497	**4.06**
14	250	250	0.6348	26280	1292	15862.38240	6248	109	1.7	2.58387	**4.07**
15	250	250	0.49254	26280	1292	12307.58952	6248	150	2.4	2.01830	**4.10**
16	250	250	0.34312	26280	1292	8573.88256	6248	208	3.3	1.41952	**4.14**
17	300	300	0.19921	26280	1292	4977.85948	6248	282	4.5	0.83437	**4.19**
18	300	300	0.08024	26280	1292	2005.03712	6248	370	5.9	0.34111	**4.25**
19	500	500	0.0042	26280	1292	104.94960	6248	461	7.4	0.01814	**4.32**
20	500	-400	0.00275	26280	1292	68.71700	6248	565	9.0	0.01209	**4.40**
21	-50	0	0.00279	26280	1292	69.71652	6248	674	10.8	0.01251	**4.48**
22	-50	0	0.00305	26280	1292	76.21340	6248	769	12.3	0.01391	**4.56**
23	500	-450	0.00363	26280	1292	90.70644	6248	830	13.3	0.01674	**4.61**
24	500	-400	0.01549	26280	1292	387.06412	6248	878	14.1	0.07208	**4.65**

SAN BERNARDINO - 8-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	100	0.61923	26280	1292	15473.31924	6248	872	14.0	2.87822	**4.65**
2	50	50	1.30694	26280	1292	32657.81672	6248	823	13.2	6.01987	**4.61**
3	50	50	2.2765	26280	1292	56885.18200	6248	744	11.9	10.33524	**4.54**
4	50	50	3.33493	26280	1292	83333.23084	6248	636	10.2	14.84911	**4.45**
5	50	50	4.37187	26280	1292	109244.28756	6248	526	8.4	19.09198	**4.37**
6	50	50	5.37512	26280	1292	134313.49856	6248	414	6.6	23.02254	**4.28**
7	50	100	6.31892	26280	1292	157897.17296	6248	312	5.0	26.59993	**4.21**
8	100	100	7.24372	26280	1292	181006.07536	6248	206	3.3	29.95797	**4.14**
9	100	100	8.1813	26280	1292	204434.32440	6248	138	2.2	33.45897	**4.09**
10	100	100	8.82249	26280	1292	220456.38012	6248	99	1.6	35.85240	**4.06**
11	100	100	8.99277	26280	1292	224711.33676	6248	87	1.4	36.47319	**4.06**
12	100	100	8.30546	26280	1292	207536.83448	6248	91	1.5	33.70746	**4.06**
13	100	100	7.26975	26280	1292	181656.51300	6248	92	1.5	29.50886	**4.06**
14	100	100	6.13035	26280	1292	153185.18580	6248	109	1.7	24.95279	**4.07**
15	100	100	4.96832	26280	1292	124148.38016	6248	150	2.4	20.35887	**4.10**
16	100	100	3.72613	26280	1292	93108.53644	6248	208	3.3	15.41532	**4.14**
17	100	100	2.45722	26280	1292	61401.01336	6248	282	4.5	10.29182	**4.19**
18	150	150	1.45646	26280	1292	36394.02248	6248	370	5.9	6.19157	**4.25**
19	250	300	0.78676	26280	1292	19659.55888	6248	461	7.4	3.39719	**4.32**
20	400	500	0.34453	26280	1292	8609.11564	6248	565	9.0	1.51489	**4.40**
21	400	500	0.1543	26280	1292	3855.64840	6248	674	10.8	0.69172	**4.48**
22	150	-100	0.09964	26280	1292	2489.80432	6248	769	12.3	0.45443	**4.56**
23	150	-100	0.1332	26280	1292	3328.40160	6248	830	13.3	0.61432	**4.61**
24	150	-100	0.22779	26280	1292	5692.01652	6248	878	14.1	1.05997	**4.65**

SAN BERNARDINO - 8-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	100	63.46595	26280	1292	1585887.15860	6248	872	14.0	294.99389	**4.65**
2	0	50	55.96467	26280	1292	1398445.17396	6248	823	13.2	257.77791	**4.61**
3	0	50	65.81835	26280	1292	1644668.92980	6248	744	11.9	298.81340	**4.54**
4	0	50	76.94855	26280	1292	1922790.36740	6248	636	10.2	342.62123	**4.45**
5	0	50	88.11255	26280	1292	2201756.39940	6248	526	8.4	384.78791	**4.37**
6	0	50	98.59945	26280	1292	2463803.05660	6248	414	6.6	422.31797	**4.28**
7	0	50	107.32754	26280	1292	2681900.56952	6248	312	5.0	451.80266	**4.21**
8	0	50	112.73519	26280	1292	2817026.92772	6248	206	3.3	466.24080	**4.14**
9	50	50	120.54293	26280	1292	3012126.73484	6248	138	2.2	492.98310	**4.09**
10	50	50	141.77071	26280	1292	3542566.50148	6248	99	1.6	576.12075	**4.06**
11	50	50	169.40463	26280	1292	4233082.89444	6248	87	1.4	687.07724	**4.06**
12	50	50	207.02118	26280	1292	5173045.24584	6248	91	1.5	840.18926	**4.06**
13	50	50	237.14305	26280	1292	5925730.53340	6248	92	1.5	962.59430	**4.06**
14	50	50	260.28953	26280	1292	6504114.77564	6248	109	1.7	1059.47463	**4.07**
15	50	50	274.82077	26280	1292	6867221.40076	6248	150	2.4	1126.14323	**4.10**
16	50	50	274.32052	26280	1292	6854721.15376	6248	208	3.3	1134.88761	**4.14**
17	50	50	267.24594	26280	1292	6677941.54872	6248	282	4.5	1119.33315	**4.19**
18	50	50	247.00929	26280	1292	6172268.13852	6248	370	5.9	1050.06263	**4.25**
19	50	50	216.76584	26280	1292	5416544.80992	6248	461	7.4	935.98493	**4.32**
20	50	100	173.1904	26280	1292	4327681.71520	6248	565	9.0	761.51359	**4.40**
21	50	100	149.39248	26280	1292	3733019.29024	6248	674	10.8	669.72000	**4.48**
22	50	100	121.76981	26280	1292	3042784.01228	6248	769	12.3	555.35390	**4.56**
23	50	100	100.07427	26280	1292	2500655.85876	6248	830	13.3	461.54593	**4.61**
24	50	100	79.55709	26280	1292	1987972.56492	6248	878	14.1	370.19973	**4.65**

KEARNY MESA - 10-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	150	-150	0.08297	26304	1813	2032.01827	7830	910	11.6	0.29364	**3.54**
2	150	-100	0.15998	26304	1813	3918.07018	7830	907	11.6	0.56595	**3.54**
3	200	-100	0.26694	26304	1813	6537.62754	7830	886	11.3	0.94148	**3.53**
4	200	-100	0.38512	26304	1813	9431.97392	7830	872	11.1	1.35556	**3.52**
5	200	-100	0.50152	26304	1813	12282.72632	7830	856	10.9	1.76122	**3.51**
6	200	-100	0.61064	26304	1813	14955.18424	7830	848	10.8	2.14196	**3.51**
7	200	-100	0.69021	26304	1813	16903.93311	7830	849	10.8	2.42142	**3.51**
8	250	-100	0.73932	26304	1813	18106.68612	7830	817	10.4	2.58187	**3.49**
9	250	-100	0.75042	26304	1813	18378.53622	7830	755	9.6	2.59767	**3.46**
10	250	-100	0.72932	26304	1813	17861.77612	7830	685	8.7	2.49990	**3.43**
11	250	-100	0.68371	26304	1813	16744.74161	7830	645	8.2	2.33051	**3.41**
12	250	-100	0.60961	26304	1813	14929.95851	7830	621	7.9	2.07102	**3.40**
13	250	-100	0.50731	26304	1813	12424.52921	7830	610	7.8	1.72085	**3.39**
14	250	-100	0.38994	26304	1813	9550.02054	7830	593	7.6	1.31961	**3.38**
15	300	-150	0.27924	26304	1813	6838.86684	7830	590	7.5	0.94459	**3.38**
16	300	-150	0.16786	26304	1813	4111.05926	7830	592	7.6	0.56798	**3.38**
17	300	-150	0.07795	26304	1813	1909.07345	7830	606	7.7	0.26427	**3.39**
18	350	-200	0.02278	26304	1813	557.90498	7830	645	8.2	0.07765	**3.41**
19	0	500	0.00482	26304	1813	118.04662	7830	702	9.0	0.01656	**3.44**
20	0	500	0.00483	26304	1813	118.29153	7830	762	9.7	0.01674	**3.47**
21	0	500	0.00496	26304	1813	121.47536	7830	797	10.2	0.01727	**3.48**
22	-50	500	0.00874	26304	1813	214.05134	7830	825	10.5	0.03056	**3.50**
23	-50	500	0.02154	26304	1813	527.53614	7830	859	11.0	0.07568	**3.51**
24	0	300	0.04544	26304	1813	1112.87104	7830	898	11.5	0.16054	**3.53**

KEARNY MESA - 10-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	50	1.35817	26304	1813	33262.94147	7830	910	11.6	4.80678	**3.54**
2	50	50	2.11813	26304	1813	51875.12183	7830	907	11.6	7.49316	**3.54**
3	50	50	2.81323	26304	1813	68898.81593	7830	886	11.3	9.92206	**3.53**
4	50	50	3.40099	26304	1813	83293.64609	7830	872	11.1	11.97092	**3.52**
5	100	-50	4.27704	26304	1813	104748.98664	7830	856	10.9	15.01993	**3.51**
6	100	-50	5.2404	26304	1813	128342.63640	7830	848	10.8	18.38193	**3.51**
7	100	-50	6.03015	26304	1813	147684.40365	7830	849	10.8	21.15519	**3.51**
8	100	-50	6.5101	26304	1813	159438.85910	7830	817	10.4	22.73476	**3.49**
9	100	-50	6.57622	26304	1813	161058.20402	7830	755	9.6	22.76441	**3.46**
10	100	-50	6.3076	26304	1813	154479.43160	7830	685	8.7	21.62063	**3.43**
11	100	-50	5.84464	26304	1813	143141.07824	7830	645	8.2	19.92221	**3.41**
12	100	-50	5.22149	26304	1813	127879.51159	7830	621	7.9	17.73887	**3.40**
13	100	-50	4.43399	26304	1813	108592.84909	7830	610	7.8	15.04056	**3.39**
14	100	-50	3.50471	26304	1813	85833.85261	7830	593	7.6	11.86042	**3.38**
15	100	-50	2.50936	26304	1813	61456.73576	7830	590	7.5	8.48850	**3.38**
16	100	-50	1.54547	26304	1813	37850.10577	7830	592	7.6	5.22936	**3.38**
17	150	-50	0.78926	26304	1813	19329.76666	7830	606	7.7	2.67577	**3.39**
18	200	-100	0.30774	26304	1813	7536.86034	7830	645	8.2	1.04897	**3.41**
19	0	150	0.18342	26304	1813	4492.13922	7830	702	9.0	0.63021	**3.44**
20	0	150	0.16993	26304	1813	4161.75563	7830	762	9.7	0.58882	**3.47**
21	0	150	0.16545	26304	1813	4052.03595	7830	797	10.2	0.57615	**3.48**
22	0	150	0.21125	26304	1813	5173.72375	7830	825	10.5	0.73858	**3.50**
23	0	100	0.41536	26304	1813	10172.58176	7830	859	11.0	1.45927	**3.51**
24	0	100	0.83705	26304	1813	20500.19155	7830	898	11.5	2.95733	**3.53**

KEARNY MESA - 10-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	0	50	68.76835	26304	1813	1684205.65985	7830	910	11.6	243.38232	**3.54**
2	0	50	74.07187	26304	1813	1814094.16817	7830	907	11.6	262.03874	**3.54**
3	0	50	78.4778	26304	1813	1921999.79980	7830	886	11.3	276.78569	**3.53**
4	50	0	81.98311	26304	1813	2007848.34701	7830	872	11.1	288.56688	**3.52**
5	50	0	99.45639	26304	1813	2435786.44749	7830	856	10.9	349.26677	**3.51**
6	50	0	117.63254	26304	1813	2880938.53714	7830	848	10.8	412.62368	**3.51**
7	50	0	134.71148	26304	1813	3299218.85668	7830	849	10.8	472.59975	**3.51**
8	50	0	151.26253	26304	1813	3704570.62223	7830	817	10.4	528.24335	**3.49**
9	50	0	164.57775	26304	1813	4030673.67525	7830	755	9.6	569.70653	**3.46**
10	50	0	175.05832	26304	1813	4287353.31512	7830	685	8.7	600.04945	**3.43**
11	50	0	176.15086	26304	1813	4314110.71226	7830	645	8.2	600.43295	**3.41**
12	50	0	169.94269	26304	1813	4162066.42079	7830	621	7.9	577.34310	**3.40**
13	50	0	158.91434	26304	1813	3891971.10094	7830	610	7.8	539.05417	**3.39**
14	50	0	144.4592	26304	1813	3537950.26720	7830	593	7.6	488.86973	**3.38**
15	50	-50	129.79889	26304	1813	3178904.61499	7830	590	7.5	439.07522	**3.38**
16	50	-50	127.14583	26304	1813	3113928.52253	7830	592	7.6	430.21947	**3.38**
17	50	-50	122.72119	26304	1813	3005564.66429	7830	606	7.7	416.05269	**3.39**
18	50	-50	111.89165	26304	1813	2740338.40015	7830	645	8.2	381.39713	**3.41**
19	50	-50	97.37192	26304	1813	2384735.69272	7830	702	9.0	334.55888	**3.44**
20	50	-50	76.25987	26304	1813	1867680.47617	7830	762	9.7	264.24455	**3.47**
21	0	50	59.92054	26304	1813	1467513.94514	7830	797	10.2	208.66116	**3.48**
22	0	50	56.81233	26304	1813	1391390.77403	7830	825	10.5	198.62823	**3.50**
23	0	50	58.33987	26304	1813	1428801.75617	7830	859	11.0	204.96367	**3.51**
24	0	50	63.14546	26304	1813	1546495.46086	7830	898	11.5	223.09513	**3.53**

PALOMAR - 10-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	150	50	0.11461	26304	2291	2752.12993	7820	1313	16.8	0.42295	**3.69**
2	150	50	0.21952	26304	2291	5271.33376	7820	1235	15.8	0.80051	**3.65**
3	200	50	0.34291	26304	2291	8234.29783	7820	1156	14.8	1.23564	**3.60**
4	200	50	0.47006	26304	2291	11287.55078	7820	1071	13.7	1.67248	**3.56**
5	200	0	0.59099	26304	2291	14191.44287	7820	985	12.6	2.07629	**3.51**
6	200	0	0.70014	26304	2291	16812.46182	7820	902	11.5	2.43025	**3.47**
7	250	0	0.78328	26304	2291	18808.90264	7820	951	12.2	2.73823	**3.50**
8	250	0	0.83593	26304	2291	20073.18709	7820	858	11.0	2.88325	**3.45**
9	250	0	0.84409	26304	2291	20269.13317	7820	757	9.7	2.86976	**3.40**
10	250	0	0.8161	26304	2291	19597.00930	7820	663	8.5	2.73816	**3.36**
11	250	0	0.75885	26304	2291	18222.26505	7820	623	8.0	2.53193	**3.34**
12	250	0	0.66899	26304	2291	16064.45687	7820	623	8.0	2.23210	**3.34**
13	250	0	0.54882	26304	2291	13178.81466	7820	656	8.4	1.83959	**3.35**
14	250	0	0.41206	26304	2291	9894.79678	7820	710	9.1	1.39167	**3.38**
15	300	0	0.27978	26304	2291	6718.35714	7820	766	9.8	0.95242	**3.40**
16	300	-50	0.16245	26304	2291	3900.91185	7820	842	10.8	0.55903	**3.44**
17	300	-100	0.08094	26304	2291	1943.61222	7820	779	10.0	0.27604	**3.41**
18	300	-150	0.02496	26304	2291	599.36448	7820	876	11.2	0.08631	**3.46**
19	-450	-200	0.00494	26304	2291	118.62422	7820	978	12.5	0.01734	**3.51**
20	-400	-150	0.00466	26304	2291	111.90058	7820	1085	13.9	0.01661	**3.57**
21	-400	-200	0.00408	26304	2291	97.97304	7820	1179	15.1	0.01475	**3.62**
22	-500	-250	0.00734	26304	2291	176.25542	7820	1254	16.0	0.02684	**3.66**
23	-50	250	0.01896	26304	2291	455.28648	7820	1312	16.8	0.06996	**3.69**
24	100	150	0.05053	26304	2291	1213.37689	7820	1336	17.1	0.18713	**3.70**

PALOMAR - 10-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	50	1.79401	26304	2291	43079.56213	7820	1313	16.8	6.62050	**3.69**
2	50	50	2.7745	26304	2291	66624.06850	7820	1235	15.8	10.11755	**3.65**
3	100	0	4.02097	26304	2291	96555.55261	7820	1156	14.8	14.48913	**3.60**
4	100	0	5.71297	26304	2291	137185.54861	7820	1071	13.7	20.32680	**3.56**
5	100	0	7.47105	26304	2291	179402.32365	7820	985	12.6	26.24760	**3.51**
6	100	0	9.08402	26304	2291	218134.57226	7820	902	11.5	31.53145	**3.47**
7	100	0	10.25315	26304	2291	246208.89095	7820	951	12.2	35.84348	**3.50**
8	100	0	10.98429	26304	2291	263765.75577	7820	858	11.0	37.88649	**3.45**
9	100	0	11.11226	26304	2291	266838.69938	7820	757	9.7	37.77980	**3.40**
10	100	0	10.70486	26304	2291	257055.80318	7820	663	8.5	35.91670	**3.36**
11	100	0	9.8762	26304	2291	237157.19060	7820	623	8.0	32.95223	**3.34**
12	100	0	8.79903	26304	2291	211291.10739	7820	623	8.0	29.35822	**3.34**
13	100	0	7.34081	26304	2291	176274.87053	7820	656	8.4	24.60565	**3.35**
14	100	0	5.64239	26304	2291	135490.71107	7820	710	9.1	19.05636	**3.38**
15	100	0	3.89019	26304	2291	93415.13247	7820	766	9.8	13.24286	**3.40**
16	100	0	2.28302	26304	2291	54822.15926	7820	842	10.8	7.85643	**3.44**
17	150	0	1.19218	26304	2291	28627.81834	7820	779	10.0	4.06587	**3.41**
18	150	0	0.42743	26304	2291	10263.87659	7820	876	11.2	1.47809	**3.46**
19	500	100	0.13519	26304	2291	3246.31747	7820	978	12.5	0.47447	**3.51**
20	-100	-50	0.11603	26304	2291	2786.22839	7820	1085	13.9	0.41369	**3.57**
21	-100	-50	0.1019	26304	2291	2446.92470	7820	1179	15.1	0.36846	**3.62**
22	-100	0	0.13253	26304	2291	3182.44289	7820	1254	16.0	0.48469	**3.66**
23	-50	50	0.32155	26304	2291	7721.38015	7820	1312	16.8	1.18644	**3.69**
24	50	50	0.91054	26304	2291	21864.79702	7820	1336	17.1	3.37212	**3.70**

PALOMAR - 10-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	0	64.60191	26304	2291	1551285.66483	7820	1313	16.8	238.40259	**3.69**
2	50	0	67.16566	26304	2291	1612848.99358	7820	1235	15.8	244.92771	**3.65**
3	50	0	86.7754	26304	2291	2083737.68020	7820	1156	14.8	312.68573	**3.60**
4	50	0	111.35187	26304	2291	2673892.45431	7820	1071	13.7	396.19091	**3.56**
5	50	0	139.09175	26304	2291	3340010.19275	7820	985	12.6	488.66279	**3.51**
6	50	0	167.58523	26304	2291	4024224.12799	7820	902	11.5	581.70340	**3.47**
7	50	0	194.22411	26304	2291	4663903.55343	7820	951	12.2	678.97853	**3.50**
8	50	0	224.85236	26304	2291	5399379.72068	7820	858	11.0	775.55009	**3.45**
9	50	0	252.42285	26304	2291	6061429.89705	7820	757	9.7	858.19480	**3.40**
10	50	0	275.34655	26304	2291	6611896.70515	7820	663	8.5	923.83634	**3.36**
11	50	0	282.82242	26304	2291	6791414.77146	7820	623	8.0	943.64524	**3.34**
12	50	0	277.9957	26304	2291	6675510.74410	7820	623	8.0	927.54075	**3.34**
13	50	0	262.24815	26304	2291	6297364.82595	7820	656	8.4	879.02915	**3.35**
14	50	0	239.25516	26304	2291	5745234.15708	7820	710	9.1	808.04981	**3.38**
15	50	0	213.26193	26304	2291	5121058.72509	7820	766	9.8	725.97941	**3.40**
16	50	0	185.3631	26304	2291	4451124.12030	7820	842	10.8	637.87964	**3.44**
17	50	0	158.33517	26304	2291	3802102.43721	7820	779	10.0	539.99467	**3.41**
18	50	0	125.85979	26304	2291	3022271.13727	7820	876	11.2	435.23490	**3.46**
19	50	0	93.2437	26304	2291	2239060.96810	7820	978	12.5	327.25241	**3.51**
20	50	0	62.12509	26304	2291	1491809.78617	7820	1085	13.9	221.50108	**3.57**
21	-50	0	47.17899	26304	2291	1132909.08687	7820	1179	15.1	170.59315	**3.62**
22	-50	0	51.9114	26304	2291	1246548.44820	7820	1254	16.0	189.84899	**3.66**
23	-50	0	57.95502	26304	2291	1391673.89526	7820	1312	16.8	213.84049	**3.69**
24	-50	0	62.2143	26304	2291	1493951.98590	7820	1336	17.1	230.40592	**3.70**

POMONA - 10-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	100	0	1.67498	26280	432	43294.88304	7810	175	2.2	5.67058	**3.39**
2	100	0	2.52254	26280	432	65202.61392	7810	179	2.3	8.54444	**3.39**
3	100	0	3.48087	26280	432	89973.52776	7810	183	2.3	11.79671	**3.39**
4	100	0	4.46874	26280	432	115507.99152	7810	188	2.4	15.15455	**3.39**
5	100	0	5.44049	26280	432	140625.78552	7810	189	2.4	18.45241	**3.39**
6	100	0	6.37933	26280	432	164892.92184	7810	192	2.5	21.64517	**3.39**
7	100	0	7.16963	26280	432	185320.59624	7810	193	2.5	24.32987	**3.39**
8	100	0	7.58985	26280	432	196182.44280	7810	193	2.5	25.75587	**3.39**
9	100	0	7.54073	26280	432	194912.78904	7810	194	2.5	25.59254	**3.39**
10	100	0	7.03831	26280	432	181926.23688	7810	193	2.5	23.88424	**3.39**
11	100	0	6.33091	26280	432	163641.36168	7810	190	2.4	21.47524	**3.39**
12	100	0	5.48577	26280	432	141796.18296	7810	188	2.4	18.60354	**3.39**
13	100	0	4.52666	26280	432	117005.10768	7810	184	2.4	15.34292	**3.39**
14	100	0	3.53869	26280	432	91468.05912	7810	179	2.3	11.98638	**3.39**
15	100	0	2.56683	26280	432	66347.42184	7810	174	2.2	8.68877	**3.39**
16	150	0	1.68973	26280	432	43676.14104	7810	170	2.2	5.71677	**3.38**
17	150	0	0.93943	26280	432	24282.38664	7810	168	2.2	3.17749	**3.38**
18	200	0	0.38972	26280	432	10073.48256	7810	168	2.2	1.31817	**3.38**
19	500	-200	0.15933	26280	432	4118.36184	7810	169	2.2	0.53898	**3.38**
20	500	0	0.06427	26280	432	1661.25096	7810	169	2.2	0.21741	**3.38**
21	0	-50	0.04922	26280	432	1272.23856	7810	171	2.2	0.16655	**3.38**
22	100	-50	0.17372	26280	432	4490.31456	7810	170	2.2	0.58774	**3.38**
23	100	-50	0.47768	26280	432	12347.07264	7810	170	2.2	1.61611	**3.38**
24	100	0	0.96732	26280	432	25003.28736	7810	171	2.2	3.27311	**3.38**

POMONA - 10-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	200	-50	0.14539	26280	432	3758.04072	7810	175	2.2	0.49221	**3.39**
2	200	-50	0.24454	26280	432	6320.86992	7810	179	2.3	0.82831	**3.39**
3	200	-50	0.35936	26280	432	9288.73728	7810	183	2.3	1.21788	**3.39**
4	200	0	0.475	26280	432	12277.80000	7810	188	2.4	1.61084	**3.39**
5	200	0	0.58245	26280	432	15055.16760	7810	189	2.4	1.97548	**3.39**
6	250	0	0.68649	26280	432	17744.39352	7810	192	2.5	2.32927	**3.39**
7	250	0	0.77125	26280	432	19935.27000	7810	193	2.5	2.61721	**3.39**
8	250	0	0.81936	26280	432	21178.81728	7810	193	2.5	2.78047	**3.39**
9	250	0	0.82376	26280	432	21292.54848	7810	194	2.5	2.79577	**3.39**
10	250	0	0.78241	26280	432	20223.73368	7810	193	2.5	2.65508	**3.39**
11	250	0	0.7142	26280	432	18460.64160	7810	190	2.4	2.42266	**3.39**
12	250	0	0.62035	26280	432	16034.80680	7810	188	2.4	2.10375	**3.39**
13	300	0	0.50729	26280	432	13112.43192	7810	184	2.4	1.71944	**3.39**
14	300	0	0.39583	26280	432	10231.41384	7810	179	2.3	1.34077	**3.39**
15	300	50	0.28793	26280	432	7442.41464	7810	174	2.2	0.97465	**3.39**
16	350	50	0.18215	26280	432	4708.21320	7810	170	2.2	0.61626	**3.38**
17	350	50	0.09308	26280	432	2405.93184	7810	168	2.2	0.31483	**3.38**
18	400	0	0.03142	26280	432	812.14416	7810	168	2.2	0.10627	**3.38**
19	0	-50	0.00464	26280	432	119.93472	7810	169	2.2	0.01570	**3.38**
20	0	-50	0.00508	26280	432	131.30784	7810	169	2.2	0.01718	**3.38**
21	0	-50	0.00569	26280	432	147.07512	7810	171	2.2	0.01925	**3.38**
22	500	-250	0.01302	26280	432	336.54096	7810	170	2.2	0.04405	**3.38**
23	300	-100	0.0304	26280	432	785.77920	7810	170	2.2	0.10285	**3.38**
24	200	-50	0.07176	26280	432	1854.85248	7810	171	2.2	0.24281	**3.38**

POMONA - 10-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKE HRS PROCESSE D	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	0	66.88293	26280	432	1728789.97464	7810	175	2.2	226.42960	**3.39**
2	50	0	78.93616	26280	432	2040341.86368	7810	179	2.3	267.37542	**3.39**
3	50	0	94.94525	26280	432	2454144.82200	7810	183	2.3	321.77066	**3.39**
4	50	0	113.62804	26280	432	2937057.57792	7810	188	2.4	385.33949	**3.39**
5	50	0	133.76259	26280	432	3457495.42632	7810	189	2.4	453.68002	**3.39**
6	50	0	155.21512	26280	432	4012000.42176	7810	192	2.5	526.64747	**3.39**
7	50	0	174.83572	26280	432	4519153.69056	7810	193	2.5	593.29837	**3.39**
8	50	0	196.43289	26280	432	5077397.34072	7810	193	2.5	666.58755	**3.39**
9	50	0	221.2805	26280	432	5719658.36400	7810	194	2.5	751.00556	**3.39**
10	50	0	249.09373	26280	432	6438574.73304	7810	193	2.5	845.29011	**3.39**
11	50	0	267.02625	26280	432	6902094.51000	7810	190	2.4	905.78668	**3.39**
12	50	0	271.20773	26280	432	7010177.40504	7810	188	2.4	919.72939	**3.39**
13	50	0	265.00007	26280	432	6849721.80936	7810	184	2.4	898.20637	**3.39**
14	50	0	252.4629	26280	432	6525661.03920	7810	179	2.3	855.15149	**3.39**
15	50	0	237.46298	26280	432	6137943.10704	7810	174	2.2	803.81654	**3.39**
16	50	0	219.40304	26280	432	5671129.77792	7810	170	2.2	742.29447	**3.38**
17	50	0	200.09348	26280	432	5172016.27104	7810	168	2.2	676.78831	**3.38**
18	50	0	174.28381	26280	432	4504887.92088	7810	168	2.2	589.49070	**3.38**
19	100	-50	148.72624	26280	432	3844275.85152	7810	169	2.2	503.11162	**3.38**
20	100	-50	136.06151	26280	432	3516917.91048	7810	169	2.2	460.26932	**3.38**
21	100	-50	116.42089	26280	432	3009247.16472	7810	171	2.2	393.93208	**3.38**
22	100	-50	95.89973	26280	432	2478816.22104	7810	170	2.2	324.45238	**3.38**
23	100	-50	79.98215	26280	432	2067378.61320	7810	170	2.2	270.59929	**3.38**
24	100	-50	67.81091	26280	432	1752776.40168	7810	171	2.2	229.45103	**3.38**

REDLANDS - 10-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	150	-100	0.14613	8760	478	1210.24866	2610	303	11.6	0.52460	**3.59**
2	150	-100	0.24958	8760	478	2067.02156	2610	258	9.9	0.87884	**3.52**
3	150	-100	0.36502	8760	478	3023.09564	2610	216	8.3	1.26278	**3.46**
4	200	-100	0.4846	8760	478	4013.45720	2610	172	6.6	1.64621	**3.40**
5	200	-50	0.6053	8760	478	5013.09460	2610	128	4.9	2.01978	**3.34**
6	200	-100	0.71152	8760	478	5892.80864	2610	86	3.3	2.33471	**3.28**
7	200	-50	0.79696	8760	478	6600.42272	2610	54	2.1	2.58233	**3.24**
8	250	-50	0.85358	8760	478	7069.34956	2610	36	1.4	2.74645	**3.22**
9	250	-50	0.87022	8760	478	7207.16204	2610	32	1.2	2.79564	**3.21**
10	250	-50	0.82892	8760	478	6865.11544	2610	29	1.1	2.65987	**3.21**
11	250	-50	0.75826	8760	478	6279.90932	2610	42	1.6	2.44545	**3.23**
12	250	-50	0.66701	8760	478	5524.17682	2610	58	2.2	2.16465	**3.25**
13	250	-50	0.55959	8760	478	4634.52438	2610	86	3.3	1.83618	**3.28**
14	300	-50	0.43933	8760	478	3638.53106	2610	122	4.7	1.46243	**3.33**
15	300	-50	0.32652	8760	478	2704.23864	2610	165	6.3	1.10603	**3.39**
16	300	-50	0.22066	8760	478	1827.50612	2610	213	8.2	0.76241	**3.46**
17	350	-50	0.12319	8760	478	1020.25958	2610	256	9.8	0.43342	**3.52**
18	400	-50	0.04524	8760	478	374.67768	2610	299	11.5	0.16213	**3.58**
19	-50	0	0.0038	8760	478	31.47160	2610	340	13.0	0.01386	**3.65**
20	-50	0	0.00417	8760	478	34.53594	2610	378	14.5	0.01547	**3.71**
21	-50	0	0.00479	8760	478	39.67078	2610	395	15.1	0.01791	**3.74**
22	-500	50	0.01591	8760	478	131.76662	2610	396	15.2	0.05952	**3.74**
23	-500	0	0.03356	8760	478	277.94392	2610	373	14.3	0.12425	**3.70**
24	150	-100	0.06827	8760	478	565.41214	2610	343	13.1	0.24941	**3.65**

REDLANDS - 10-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	-50	1.71658	8760	478	14216.71556	2610	303	11.6	6.16243	**3.59**
2	50	-50	2.50366	8760	478	20735.31212	2610	258	9.9	8.81603	**3.52**
3	100	-50	3.35706	8760	478	27803.17092	2610	216	8.3	11.61369	**3.46**
4	100	-50	4.25095	8760	478	35206.36790	2610	172	6.6	14.44068	**3.40**
5	100	-50	5.1653	8760	478	42779.01460	2610	128	4.9	17.23570	**3.34**
6	100	-50	6.01292	8760	478	49799.00344	2610	86	3.3	19.73019	**3.28**
7	100	-50	6.72041	8760	478	55658.43562	2610	54	2.1	21.77560	**3.24**
8	100	-50	7.11772	8760	478	58948.95704	2610	36	1.4	22.90169	**3.22**
9	100	-50	7.01506	8760	478	58098.72692	2610	32	1.2	22.53636	**3.21**
10	100	-50	6.50262	8760	478	53854.69884	2610	29	1.1	20.86583	**3.21**
11	100	-50	5.76643	8760	478	47757.57326	2610	42	1.6	18.59719	**3.23**
12	100	-50	4.91534	8760	478	40708.84588	2610	58	2.2	15.95174	**3.25**
13	100	0	4.05934	8760	478	33619.45388	2610	86	3.3	13.31991	**3.28**
14	150	-50	3.26436	8760	478	27035.42952	2610	122	4.7	10.86633	**3.33**
15	150	0	2.51516	8760	478	20830.55512	2610	165	6.3	8.51965	**3.39**
16	150	0	1.79145	8760	478	14836.78890	2610	213	8.2	6.18973	**3.46**
17	150	0	1.05852	8760	478	8766.66264	2610	256	9.8	3.72416	**3.52**
18	150	0	0.41545	8760	478	3440.75690	2610	299	11.5	1.48886	**3.58**
19	500	-100	0.05953	8760	478	493.02746	2610	340	13.0	0.21719	**3.65**
20	-50	0	0.05022	8760	478	415.92204	2610	378	14.5	0.18635	**3.71**
21	-50	0	0.05482	8760	478	454.01924	2610	395	15.1	0.20497	**3.74**
22	-50	0	0.15882	8760	478	1315.34724	2610	396	15.2	0.59410	**3.74**
23	-50	0	0.43321	8760	478	3587.84522	2610	373	14.3	1.60386	**3.70**
24	50	-50	0.98664	8760	478	8171.35248	2610	343	13.1	3.60448	**3.65**

REDLANDS - 10-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	-50	0	45.3508	8760	478	375595.32560	2610	303	11.6	162.80682	**3.59**
2	50	0	60.52773	8760	478	501290.65986	2610	258	9.9	213.13378	**3.52**
3	50	0	78.2791	8760	478	648307.50620	2610	216	8.3	270.80514	**3.46**
4	50	0	100.35242	8760	478	831118.74244	2610	172	6.6	340.90186	**3.40**
5	50	0	123.30279	8760	478	1021193.70678	2610	128	4.9	411.43985	**3.34**
6	50	0	147.25117	8760	478	1219534.18994	2610	86	3.3	483.17519	**3.28**
7	50	0	173.53484	8760	478	1437215.54488	2610	54	2.1	562.29090	**3.24**
8	50	0	204.41071	8760	478	1692929.50022	2610	36	1.4	657.70377	**3.22**
9	50	0	237.08429	8760	478	1963532.08978	2610	32	1.2	761.64938	**3.21**
10	50	0	270.99063	8760	478	2244344.39766	2610	29	1.1	869.56389	**3.21**
11	50	0	274.80034	8760	478	2275896.41588	2610	42	1.6	886.25250	**3.23**
12	50	0	263.13703	8760	478	2179300.88246	2610	58	2.2	853.95803	**3.25**
13	50	0	247.94703	8760	478	2053497.30246	2610	86	3.3	813.58847	**3.28**
14	50	0	227.47119	8760	478	1883916.39558	2610	122	4.7	757.20112	**3.33**
15	50	0	205.25923	8760	478	1699956.94286	2610	165	6.3	695.27891	**3.39**
16	50	0	181.48141	8760	478	1503029.03762	2610	213	8.2	627.04591	**3.46**
17	50	0	154.0154	8760	478	1275555.54280	2610	256	9.8	541.86727	**3.52**
18	50	0	118.85346	8760	478	984344.35572	2610	299	11.5	425.93871	**3.58**
19	50	0	78.48865	8760	478	650042.99930	2610	340	13.0	286.36255	**3.65**
20	100	-50	55.02469	8760	478	455714.48258	2610	378	14.5	204.17316	**3.71**
21	-300	50	46.19985	8760	478	382627.15770	2610	395	15.1	172.74364	**3.74**
22	-300	50	45.56241	8760	478	377347.87962	2610	396	15.2	170.43716	**3.74**
23	-300	50	43.32203	8760	478	358793.05246	2610	373	14.3	160.39028	**3.70**
24	-300	50	40.49639	8760	478	335391.10198	2610	343	13.1	147.94491	**3.65**

SAN BERNARDINO - 10-HOUR ANALYSIS - LARGE POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	100	150	0.16062	26280	2291	3853.11318	7810	945	12.1	0.56127	**3.49**
2	100	150	0.26681	26280	2291	6400.50509	7810	857	11.0	0.92054	**3.45**
3	150	150	0.38784	26280	2291	9303.89376	7810	768	9.8	1.32120	**3.41**
4	150	150	0.51578	26280	2291	12373.04642	7810	659	8.4	1.73025	**3.35**
5	150	150	0.63431	26280	2291	15216.46259	7810	547	7.0	2.09507	**3.30**
6	150	150	0.74255	26280	2291	17813.03195	7810	433	5.5	2.41467	**3.25**
7	200	200	0.84805	26280	2291	20343.87145	7810	332	4.3	2.72050	**3.21**
8	200	200	0.92818	26280	2291	22266.11002	7810	229	2.9	2.93709	**3.16**
9	200	200	0.95389	26280	2291	22882.86721	7810	160	2.0	2.99122	**3.14**
10	200	200	0.91165	26280	2291	21869.57185	7810	125	1.6	2.84575	**3.12**
11	200	200	0.83833	26280	2291	20110.69837	7810	116	1.5	2.61382	**3.12**
12	200	200	0.74042	26280	2291	17761.93538	7810	132	1.7	2.31335	**3.12**
13	200	200	0.6259	26280	2291	15014.71510	7810	171	2.2	1.96553	**3.14**
14	250	250	0.50812	26280	2291	12189.29068	7810	227	2.9	1.60745	**3.16**
15	250	250	0.39411	26280	2291	9454.30479	7810	302	3.9	1.25923	**3.20**
16	250	250	0.27457	26280	2291	6586.65973	7810	393	5.0	0.88805	**3.23**
17	300	300	0.15944	26280	2291	3824.80616	7810	483	6.2	0.52202	**3.27**
18	300	300	0.06426	26280	2291	1541.53314	7810	591	7.6	0.21354	**3.32**
19	500	500	0.00341	26280	2291	81.80249	7810	703	9.0	0.01151	**3.38**
20	-50	0	0.00273	26280	2291	65.48997	7810	810	10.4	0.00936	**3.43**
21	500	-400	0.00355	26280	2291	85.16095	7810	909	11.6	0.01234	**3.48**
22	500	-400	0.01276	26280	2291	306.09964	7810	996	12.8	0.04492	**3.52**
23	200	350	0.03276	26280	2291	785.87964	7810	1024	13.1	0.11581	**3.54**
24	100	200	0.07971	26280	2291	1912.16319	7810	1008	12.9	0.28112	**3.53**

SAN BERNARDINO - 10-HOUR ANALYSIS - MEDIUM POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	50	50	1.82487	26280	2291	43776.80643	7810	945	12.1	6.37681	**3.49**
2	50	50	2.67182	26280	2291	64094.28998	7810	857	11.0	9.21822	**3.45**
3	50	50	3.50148	26280	2291	83997.00372	7810	768	9.8	11.92800	**3.41**
4	50	50	4.30472	26280	2291	103265.92808	7810	659	8.4	14.44077	**3.35**
5	50	100	5.06866	26280	2291	121592.08474	7810	547	7.0	16.74130	**3.30**
6	100	100	5.91978	26280	2291	142009.60242	7810	433	5.5	19.25032	**3.25**
7	100	100	6.91876	26280	2291	165974.13364	7810	332	4.3	22.19499	**3.21**
8	100	100	7.75458	26280	2291	186024.61962	7810	229	2.9	24.53827	**3.16**
9	100	100	8.257	26280	2291	198077.17300	7810	160	2.0	25.89244	**3.14**
10	100	100	8.0456	26280	2291	193005.89840	7810	125	1.6	25.11463	**3.12**
11	100	100	7.431	26280	2291	178262.25900	7810	116	1.5	23.16900	**3.12**
12	100	100	6.66787	26280	2291	159955.53343	7810	132	1.7	20.83297	**3.12**
13	100	100	5.82847	26280	2291	139819.16683	7810	171	2.2	18.30333	**3.14**
14	100	100	4.91446	26280	2291	117892.98094	7810	227	2.9	15.54701	**3.16**
15	100	100	3.97902	26280	2291	95452.71078	7810	302	3.9	12.71347	**3.20**
16	100	100	2.9845	26280	2291	71595.17050	7810	393	5.0	9.65285	**3.23**
17	100	100	1.96987	26280	2291	47255.21143	7810	483	6.2	6.44946	**3.27**
18	150	150	1.16932	26280	2291	28050.81748	7810	591	7.6	3.88569	**3.32**
19	250	300	0.63256	26280	2291	15174.48184	7810	703	9.0	2.13515	**3.38**
20	400	500	0.28079	26280	2291	6735.87131	7810	810	10.4	0.96227	**3.43**
21	400	500	0.14007	26280	2291	3360.13923	7810	909	11.6	0.48691	**3.48**
22	150	-100	0.19283	26280	2291	4625.79887	7810	996	12.8	0.67887	**3.52**
23	50	100	0.50387	26280	2291	12087.33743	7810	1024	13.1	1.78122	**3.54**
24	50	50	1.0492	26280	2291	25169.25880	7810	1008	12.9	3.70027	**3.53**

SAN BERNARDINO - 10-HOUR ANALYSIS - SMALL POINT SOURCE

SCENARIO	X	Y	MODELED PERIOD AVE CONC	TOTAL HRS PROCESSED REPORTED BY AERMOD	NO. CALM & MISSING HRS REPORTED BY AERMOD	SUM HRLY CONC	TOTAL WORKER HRS PROCESSED	WORKER NO. CALM & MISSING HRS	% WORKER CALM & MISSING HRS	WORKER PERIOD AVE CONC	QUOTIENT (FACTOR)
1	0	50	60.43292	26280	2291	1449725.31788	7810	945	12.1	211.17630	**3.49**
2	0	50	69.41259	26280	2291	1665138.62151	7810	857	11.0	239.48492	**3.45**
3	0	50	77.69048	26280	2291	1863716.92472	7810	768	9.8	264.65733	**3.41**
4	0	50	85.534	26280	2291	2051875.12600	7810	659	8.4	286.93541	**3.35**
5	0	50	93.35436	26280	2291	2239477.74204	7810	547	7.0	308.34060	**3.30**
6	0	50	100.18756	26280	2291	2403399.37684	7810	433	5.5	325.79631	**3.25**
7	50	50	106.42361	26280	2291	2552995.98029	7810	332	4.3	341.40091	**3.21**
8	50	50	125.22838	26280	2291	3004103.60782	7810	229	2.9	396.26746	**3.16**
9	50	50	150.67387	26280	2291	3614515.46743	7810	160	2.0	472.48568	**3.14**
10	50	50	184.43774	26280	2291	4424476.94486	7810	125	1.6	575.72895	**3.12**
11	50	50	211.62126	26280	2291	5076582.40614	7810	116	1.5	659.81055	**3.12**
12	50	50	232.56731	26280	2291	5579057.19959	7810	132	1.7	726.62897	**3.12**
13	50	50	246.19103	26280	2291	5905876.61867	7810	171	2.2	773.12169	**3.14**
14	50	50	248.55743	26280	2291	5962644.18827	7810	227	2.9	786.31731	**3.16**
15	50	50	246.83969	26280	2291	5921437.32341	7810	302	3.9	788.68371	**3.20**
16	50	50	238.7665	26280	2291	5727769.56850	7810	393	5.0	772.24883	**3.23**
17	50	50	227.65219	26280	2291	5461148.38591	7810	483	6.2	745.34576	**3.27**
18	50	50	209.04015	26280	2291	5014664.15835	7810	591	7.6	694.64803	**3.32**
19	50	50	182.12183	26280	2291	4368920.57987	7810	703	9.0	614.73485	**3.38**
20	50	100	150.39433	26280	2291	3607809.58237	7810	810	10.4	515.40137	**3.43**
21	50	100	130.14718	26280	2291	3122100.70102	7810	909	11.6	452.41280	**3.48**
22	50	100	105.33813	26280	2291	2526956.40057	7810	996	12.8	370.84773	**3.52**
23	50	100	85.36188	26280	2291	2047746.13932	7810	1024	13.1	301.76041	**3.54**
24	50	100	68.96638	26280	2291	1654434.48982	7810	1008	12.9	243.22765	**3.53**