

***Appendix E***  
***Revised Evaluation of Air Impacts***

---

*Revised Report*  
Evaluation of Impacts  
Associated with Emissions of  
Carbon Monoxide and Toxic Air  
Pollutants

King's River Sand and Gravel  
Fresno County, California

October 29, 2007

*Prepared for:*  
Resource Design Technology, Inc.  
4990 Hillsdale Circle, Suite 400  
El Dorado Hills, California 95762

*Prepared By:*  
Air Permitting Specialists  
12247 Welch Road  
Wilton, California 95693  
Phone: 916-687-8352  
E-Mail: ray.kapahi@gmail.com

## TABLE OF CONTENTS

INTRODUCTION .....	2
SECTION 1 - ESTIMATE OF PUBLIC HEALTH RISKS	
1.1 ESTIMATE OF DIESEL PM .....	4
1.2 EXPOSURE ASSESSMENT .....	6
1.3 RISK CHARACTERIZATION .....	9
SECTION 2 - IMPACTS OF CO EMISSIONS	
2.1 Estimate of CO Emissions.....	11
2.2 Locations of Intersections.....	13
2.3 Localized CO Concentrations.....	14
CONCLUSIONS.....	15
REFERENCES .....	16
APPENDIX	
Copy of EMFAC Emissions Model Output	
Copy of Dispersion Model Output	

## **INTRODUCTION**

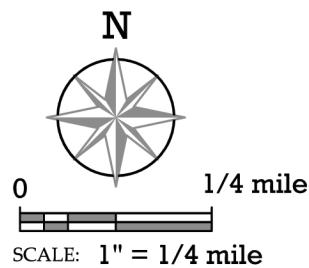
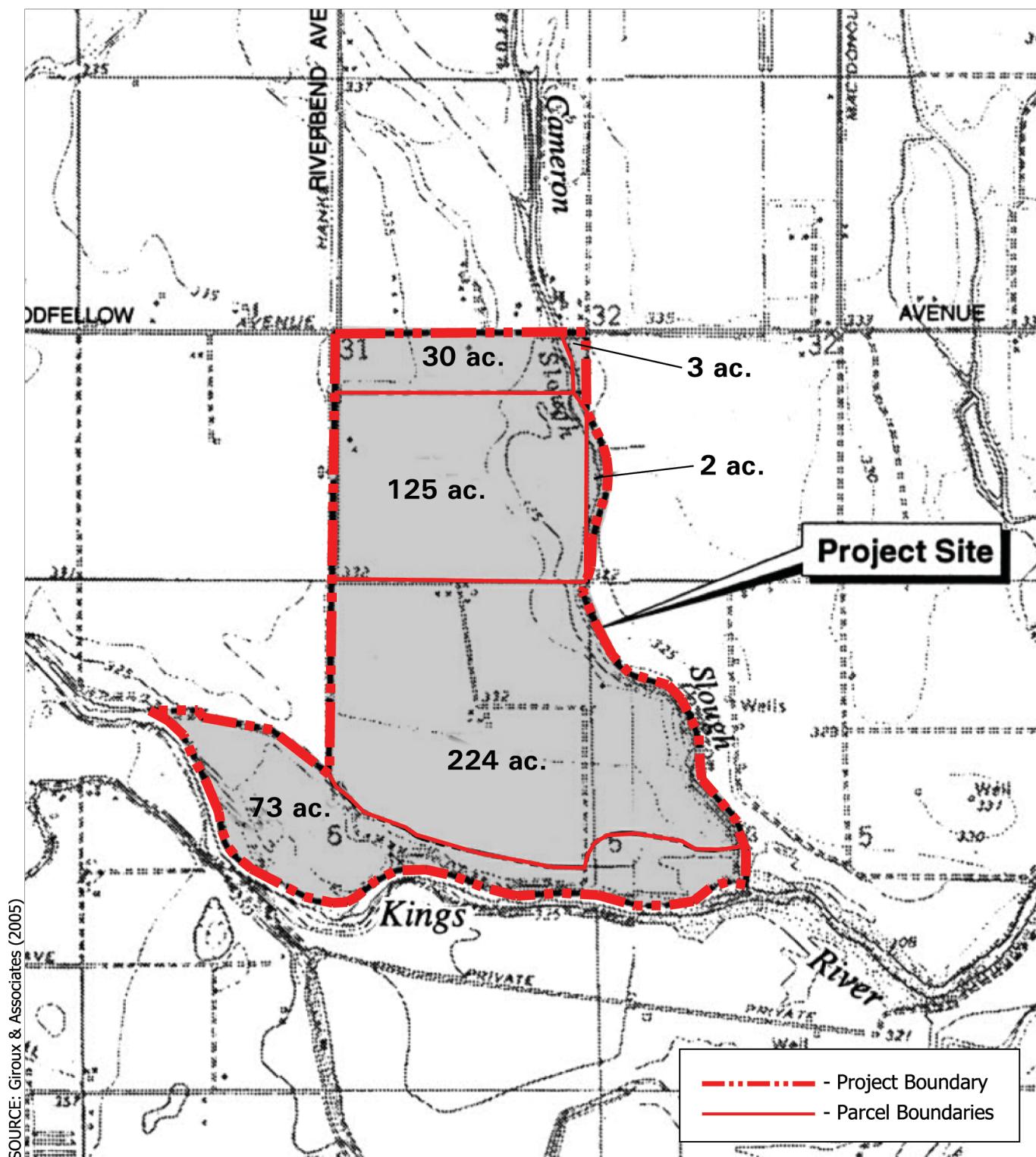
Air Permitting Specialists (APS) has been retained by Resource Design Technology, Inc., to evaluate air quality impacts and health risks associated with the proposed King's River Sand and Gravel Project in Fresno County, California.

The proposed would be located in the unincorporated part of Fresno County South of Goodfellow Avenue and East of King's River. The site is an irregularly shaped area of 457 acres. Of the 457 acres project site, only 315 acres is approved for mining. The site is relatively flat with elevations ranging from 335 feet above mean sea level in the northwest corner to 320 feet along the Kings River. See Figure 1 for the location of the project site.

Increases in public health risks are associated with exposure to toxic air pollutants. The main toxic air pollutant released from the proposed project would be diesel particulate. This is a component of diesel exhaust from trucks and various construction equipment. Health risks were estimated on the basis of annual equipment usage over 30 years.

The scope of the air quality analysis evaluates emissions of carbon monoxide (CO) from increased traffic. CO impacts were evaluated at selected intersections for traffic volumes identified in the traffic study (Section 3.5, Supplemental Draft Environmental Impact Report) for this project. The objective of this phase of the study was to determine if an increase in CO emissions would violate 1-hour or 8-hour ambient air quality standards.

This report consists of 2 main sections. Section 1 discusses emissions of toxic air pollutants associated with project operations and the health risks associated with exposure to such pollutants. Section 1 has been updated since the circulation of the Supplemental Draft Environmental Impact Report based on comments made by the San Joaquin Valley Air Pollution Control District regarding the appropriate modeling for health risk assessment performed for the project. Section 2 presents an analysis of CO emissions and concentrations at key intersections. Detailed calculations and model output are provided in the tables and in the appendix.



**Figure 1**  
**Site Location**  
**KINGS RIVER**  
**SAND AND GRAVEL PROJECT**

**RESOURCE DESIGN**  
TECHNOLOGY, INC.

## **SECTION 1**

### **ESTIMATE OF PUBLIC HEALTH RISKS**

The proposed project would involve extraction and processing of sand and gravel as well as a reclamation plan. This involves the use of diesel fuelled trucks, excavators, graders, dozers, etc., at the project site. Under current regulations, the California Air Resources Board (CARB) has identified diesel particulate (PM), a component of diesel exhaust, as a toxic air pollutant. This Section of the report provides an estimate of diesel PM emissions and its concentration in the vicinity of the project location. This information is used to calculate a lifetime cancer risk in the vicinity of the project site due to exposure from diesel PM.

#### **1.1 ESTIMATE OF DIESEL PARTICULATE EMISSIONS**

Project operations involve use of various diesel fuelled trucks and equipment. The following would be used at the project site:

Equipment	No. of Units	HP	Daily Hrs	Annual Hours
Excavator	1	425	2	624
Scraper (#1)	1	475	0.4	124.8
Scraper (#2)	1	475	0.4	124.8
Pit Truck (#1)	1	650	0.05	15.6
Pit Truck (#2)	1	650	0.05	15.6
Pit Truck (#3)	1	650	0.05	15.6
Loader	1	430	8	2496
Water Truck	1	250	2.5	780
Dozer	1	305	0.75	234
Motor Grader	1	150	0.5	156
Maintenance/Lube Truck	1	250	1	312
Foreman's Vehicle	1	200	1	312
Plant Pick Up	1	200	1	312

An emission rate of 0.6 grams per horsepower hour (g/hp-hr) was used to calculate overall emissions. This is a conservative estimate of current emission rate of diesel PM. For example, most off-road engines above 300 horsepower emit between 0.15 to 0.4 g/hp-hr. Overall annual emissions are summarized in Table 1.

**TABLE 1**  
Summary of Current Diesel Particulate Emissions

Equipment	#	HP	Daily Hrs	Annual Hours	Capacity Factor	Diesel Particulate Matter (PM) (g/hp-hr) (lbs/hr) (lbs/yr)
Excavator	1	425	2	624	45%	0.60
Scraper (#1)	1	475	0.4	124.8	45%	0.60
Scraper (#2)	1	475	0.4	124.8	45%	0.60
Pit Truck (#1)	1	650	0.05	15.6	45%	0.60
Pit Truck (#2)	1	650	0.05	15.6	45%	0.60
Pit Truck (#3)	1	650	0.05	15.6	45%	0.60
Loader	1	430	8	2496	45%	0.60
Water Truck	1	250	2.5	780	45%	0.60
Dozer	1	305	0.75	234	45%	0.60
Motor Grader	1	150	0.5	156	45%	0.60
Maintenance/Lube Truck	1	250	1	312	45%	0.60
Foreman's Vehicle	1	200	1	312	45%	0.60
Plant Pick up	1	200	1	312	45%	0.60
					Totals	3.04
						1178
Annual Usage:					Daily Hours x 312 days/yr	
Emissions (lbs/hr) = Emission Factor (g/hp-hr) x HP x Capacity Factor						
Emissions (lbs/yr) = Hourly Emissions (lbs/hr) x Annual Hours						
					Tons/year	0.589

The results in Table 1 indicate that approximately 0.6 tons of diesel PM would be released annually. This emission rate is used to calculate the concentration of diesel PM in the vicinity of the project location.

## 1.2 EXPOSURE ASSESSMENT

Cancer risk is related to the exposure concentration, for example in grams/cubic meter, of diesel PM. Exposure can occur via inhalation, ingestion and dermal pathways. For this study, it is assumed that the primary exposure pathway will be via inhalation.

The ambient air concentration of diesel PM at a given location depends on its distance from the equipment, the emission rate of diesel PM and the local wind pattern. An air dispersion model that incorporates these variables and parameters was used to calculate the concentration of diesel PM in the vicinity of the project site.

Currently, CARB is establishing new regulations that would reduce future diesel PM by 95% over current levels. Therefore, the emission rates calculated in Table 2 would be significantly reduced over the next ten (10) years. For this analysis, an average reduction of 65% over current emissions was assumed for the duration of this project. Actual emission reductions are expected to be closer to 90+% over current levels. Therefore, the risk estimates based on 65% diesel PM reduction should be interpreted as representing an upper limit of cancer risk. Actual risk is expected to be lower.

The EPA model, known as AERMOD was used to estimate the concentration of diesel PM. Emissions were modeled as a single 30 acre square area source. Concentrations were estimated every 100 meters in rectangular grid extending 1,200 meters in each direction. A total of 576 grid receptors and three (3) discrete receptors were used. The discrete receptors represent location of nearby homes. The modeling grid is shown in Figure 2.

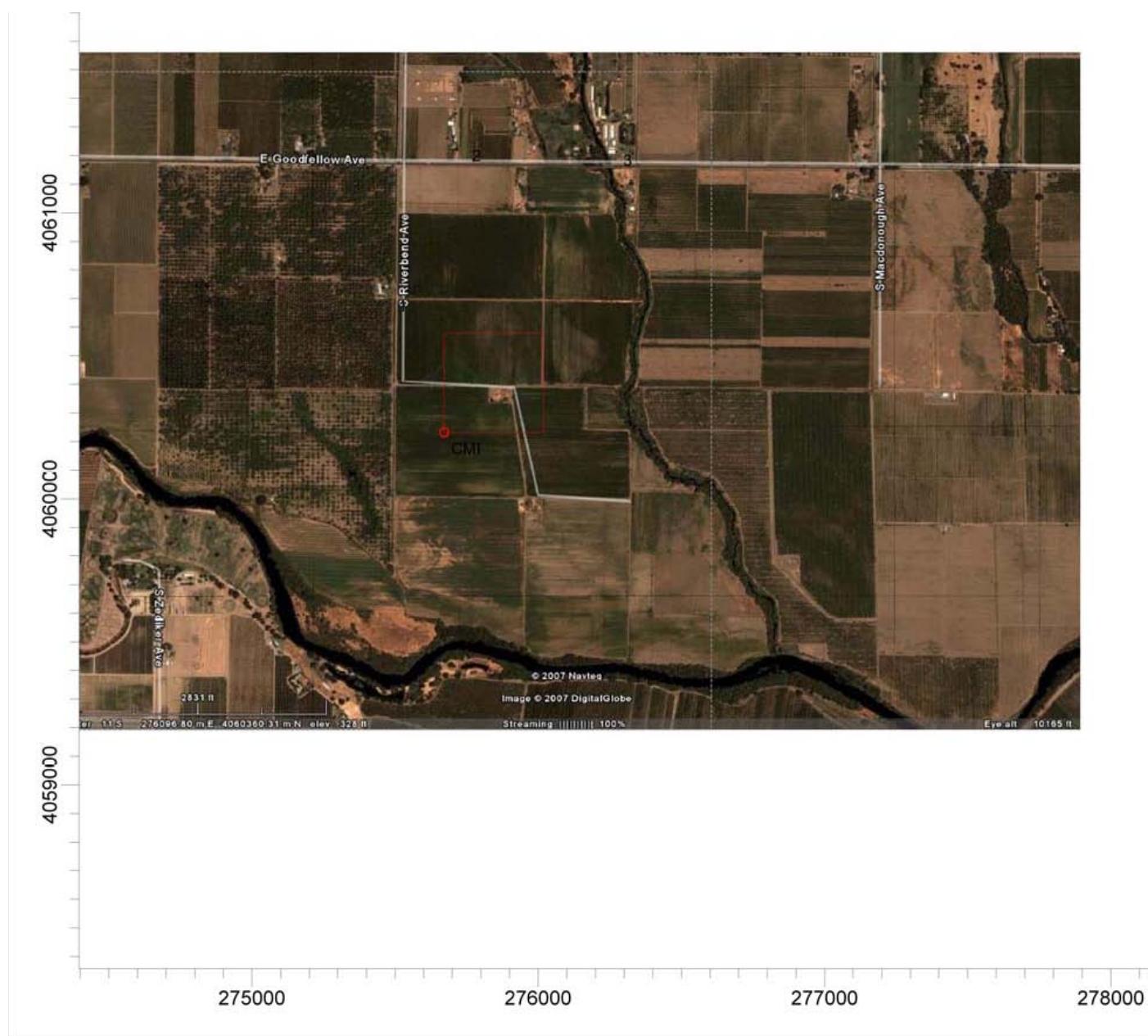
Specific model inputs used to model the diesel PM emissions are as follows:

Model	AERMOD Version 07026
Emission Source	Area Source
Emission Rate (Assumes 65% Reduction From Current Emissions)	$6.28 \times 10^{-6}$ grams/sq meter-sec
Release Height	0 feet
Rural/Urban Mode	Rural
Grid Resolution	100 meters (328 feet)
Grid Extent	2.4 km x 2.4 km (1.5 miles x 1.5 miles)
Number of Receptors	576
Regulatory Option	Option Used

Meteorological Data	3 years of hourly data from Fresno Total of 26,280 hours modeled
Averaging Time	Annual
Model Output	Cancer Risk/million

The model was run using hourly wind data for 3 years and the highest annual concentration was calculated at each receptor. These concentrations were used to calculate cancer risk. This is discussed in the next subsection.

Figure 2  
Layout of Modeling Grid Showing Area Source  
(Coordinates are in UTMs)



### 1.3 RISK CHARACTERIZATION

Risk characterization refers to the process of quantifying the risk associated with a given exposure to a toxic air pollutant. In the present study, we have focused on the inhalation pathway as the primary route of exposure. Therefore, risk characterization involves using the atmospheric concentration of diesel PM with toxicity data (diesel PM unit risk factor) to establish lifetime (70 year) cancer risk. The recommended unit risk factor (by CARB) is  $3.0 \times 10^{-4}$ . For example, if the concentration of diesel PM at a given receptor is 0.5 micrograms per cubic meter, then the 70 year cancer risk associated with this concentration is:

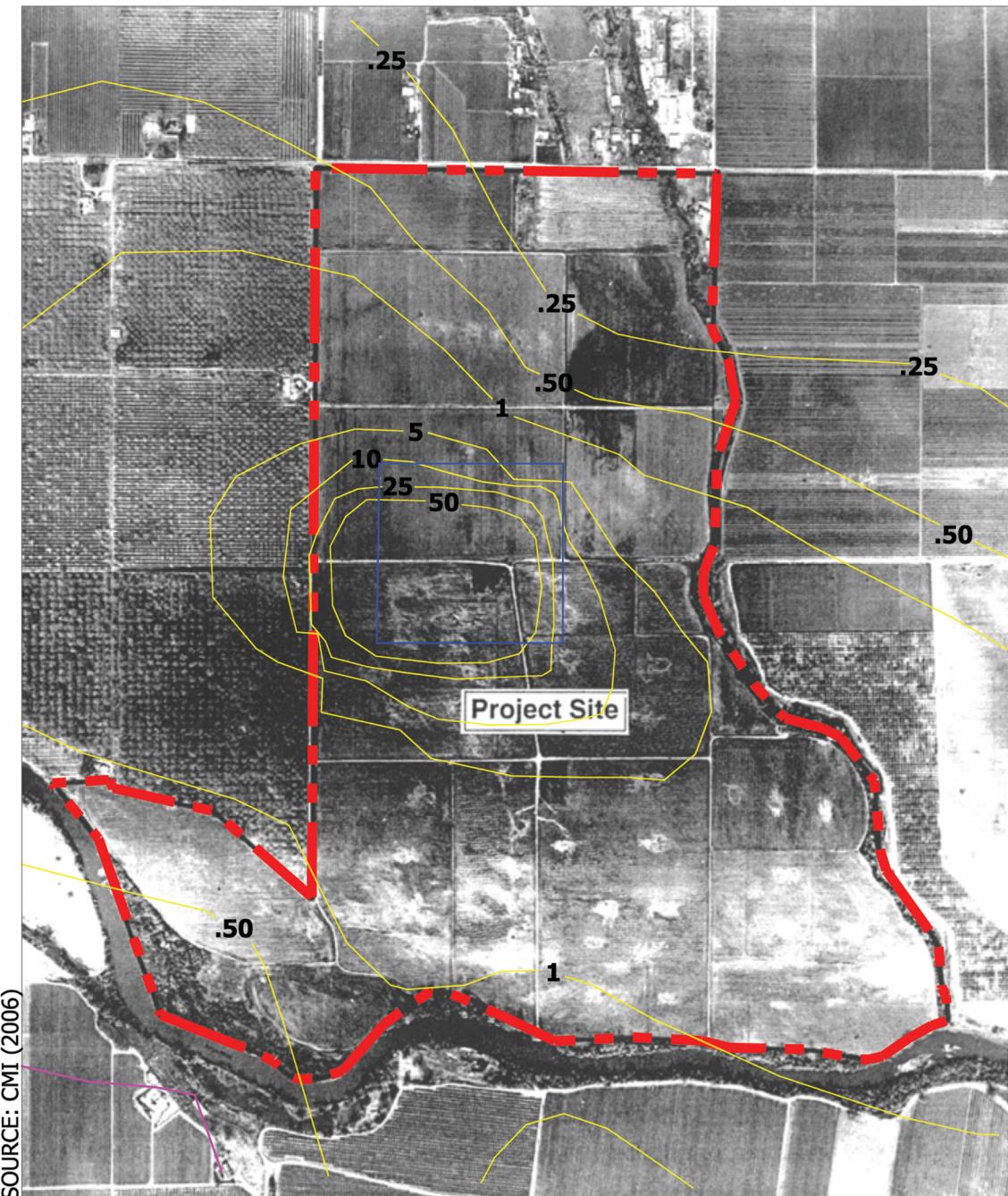
$$\text{Risk (70 year)} = 0.5 \text{ micrograms/cubic meter} \times 3.0 \times 10^{-4} \text{ (micrograms/cubic meter)}^{-1}$$

$$= 0.15 \times 10^{-4} \text{ cancers or } 15 \text{ cancers per million.}$$

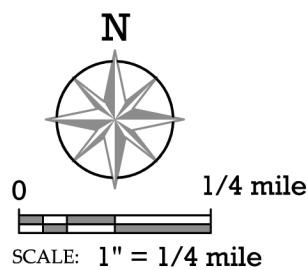
Since the project duration will be 30 years, the cancer risk is reduced by a factor of  $30 \text{ yrs} / 70 \text{ yrs} = 0.43$ .

$$\text{30 Year Risk} = 15 \times 0.43 = 6.45 \text{ cancers per million.}$$

The spatial variation in cancer risk in the vicinity of the project is shown in Figure 3. Risk assessments were run based on meteorological data from 2002, 2003, and 2004. The assessment for this Project is based on using 2002 meteorological data from Fresno. Risk associated with 2003 and 2004 meteorological data are lower. The numbers on the contours indicate cancer risk per million. The innermost contour represents labeled 50 cancers/million and is entirely within the project property boundaries. The next contour represents 25 cancers/million and a small portion of this contour (to the West) lies outside the property boundary. Risk at all residences is estimated to be less than 10 in a million. In fact, the cancer risk at the nearest residence located west of the Project site is between 1 and 5 cancers risks in a million (see Figure 3).



- - Property Boundary
- 5 — - Cancer Per Million Contour
- - Average Area of Concentrated Mobile Equipment Activity



**Figure 3**  
**Health Risk Assessment**  
**70-Year Inhalation Carcinogenic Health Risk**  
**KINGS RIVER**  
**SAND AND GRAVEL PROJECT**

## **SECTION 2**

### **IMPACTS OF CARBON MONOXIDE EMISSIONS**

#### **2.1 MODELING METHODOLOGY**

The increase in traffic associated with the proposed project has the potential to violate short-term carbon monoxide (CO) concentrations, especially, at signalized intersections. We note that both 1-hour and 8-hour CO concentrations in Stanislaus County remain well below the State standards. These standards are:

Maximum 1-Hour Standard: 20 parts per million (ppm)

Maximum 8-Hour Standard: 9 ppm

Therefore, it is reasonable to project that the small increase in traffic volumes predicted in the traffic study (see the Revised Traffic Impact Study, which is Appendix G to the Supplemental Draft EIR) would not violate either of the two State CO standards. However, there remains the possibility some localized ("hotspots") CO concentrations may exceed the ambient standards even though there may not be a significant increase in regional CO concentrations.

To evaluate the significance of short-term CO impacts, a screening level analysis based on the CALINE4 dispersion model was conducted. This simplified procedure was originally developed by the Bay Area Air Quality Management District (BAAQMD December 1999) to identify potential CO hotspots near roadways and intersections. If a hotspot is identified, then a more rigorous analysis is conducted to refine estimates of CO concentrations.

The methodology used in the current analysis utilizes worst-case conditions. These conditions are:

- Wind direction parallel to the roadway;
- Wind Speed of 1 meter/sec;
- Extremely stable atmospheric condition (stability "F");
- Receptor located at edge of roadway.

The contributions from one roadway is calculated by using the formula:

$$C_i = C_{ri} \times \frac{V_i \times EF_i}{100,000}$$

$C_i$  = CO concentration contributed from the  $i^{\text{th}}$  roadway (*ppm*)

$C_{ri}$  = Reference case concentration for the  $i^{\text{th}}$  roadway (*ppm*)

$V_i$  = Traffic volume,  $i^{\text{th}}$  roadway (*vehicles/hour*)

$EF_i$  = Emission factor,  $i^{\text{th}}$  roadway (*gram/mile*)

The hotspots analysis was conducted for the following six (6) traffic scenarios:

1. Existing and Near-Term Impacts (*Peak AM and PM Conditions*)
2. Project and Cumulative Impacts (*Peak AM and PM Conditions*)
3. Cumulative Impacts from Detour Segments (*AM and PM Conditions*)

Traffic volumes were obtained from Tables 3.5-1 to 3.5-20 in Section 3.5 of the Supplemental Draft EIR. The analysis used emission factors for 2007 and 2008 fleet mix. The following emission factors were used in the analysis as per BAAQMD screening procedure (*Ref: BAAQMD CEQA Guidelines, Dec 1999. Section 3.4*):

2007 Emission Factor      4.24 gram/mile per vehicle

2008 Emission Factor      4.04 grams/mile per vehicle

Screening level 1-hour CO impacts at the edge of the roadway for at-grade 2-lane and 4-lane roadways is estimated to be 14 ppm and 11.9 ppm respectively for 1,000 vehicles per hour. Eight-hour impacts are estimated to be  $0.7 \times 1\text{-hour impacts}$ .

For example, existing traffic volume at State Route 99 Northbound ramp to Chesnut Street is estimated to be 640 vehicles per hour.

The peak 1-hour CO concentration would equal:

$$\begin{aligned} \text{1-hour CO (ppm)} &= \frac{640 \text{ veh/hr} \times 11.9 \text{ ppm} \times 4.24 \text{ gram/mile}}{100,000} \\ &= 0.323 \text{ ppm} \end{aligned}$$

8-hour concentration would equal:  $0.323 \text{ ppm} \times 0.7 = 0.226 \text{ ppm}$

The following six (6) scenarios were modeled:

- Existing and Near-Term Impacts (AM and PM)
- Cumulative CO Impacts with and without the project (AM and PM)
- Cumulative CO Impacts with and without detour (AM and PM)

## 2.2 LOCATION OF INTERSECTIONS

CO impacts at the following intersections were evaluated.

Scenario No Detours	Existing	Year 2008 No Project	Year 2008 with Project
Road and Direction	Volume	Volume	Volume
Segment	(Veh/Hr)	(Veh/Hr)	(Veh/Hr)
<b>Central Avenue EB</b>			
SR 99 NB Ramp to Chesnut	640	679	684
Chesnut to Golden State	380	403	408
Golden State to Willow	293	311	316
Willow to Clovis	182	193	198
Clovis to Temperance	76	81	87
Temperance to McCall	58	62	69
McCall to Bethel	65	69	81
Bethel to Academy	79	82	94
Academy to Newmark	106	109	127
<b>Goodfellow Avenue EB</b>			
Newmark to Riverbend	132	136	154
<b>Goodfellow Avenue WB</b>			
Riverbend to Newmark	118	121	139
<b>Central Avenue WB</b>			
Newmark to Academy	109	112	130
Academy to Bethel	110	115	127
Bethel to McCall	104	110	122
McCall to Temperance	127	135	142
Temperance to Clovis	140	149	155
Clovis to Willow	250	265	270
Willow to Golden State	263	279	284
Golden State to Chesnut	315	334	339
Chesnut to SR 99 NB Ramp	503	534	539

Several road detours may occur due to the planned construction of a bridge over the King's River. As a result, several additional intersections were also evaluated. These are:

Scenario With Detours	Cumulative No Project	Cumulative with Project
<i>Road and Direction Segment</i>	<i>Volume (Veh/Hr)</i>	<i>Volume (Veh/Hr)</i>
Riverbend Avenue NB		
Goodfellow to Annadale	117	135
Riverbend Avenue SB		
Annadale to Goodfellow	143	143
Annadale Avenue WB		
Riverbend to Newmark	241	259
Annadale Avenue EB		
Newmark to Riverbend	226	259
Newmark Avenue NB		
Central to Annadale	154	170
Newmark Avenue SB		
Annadale to Central	168	184

## 2.3 LOCALIZED CONCENTRATIONS

The results of the screening level analysis are shown in Tables 2-1 through 2-6 of the Supplemental Draft EIR. The results indicate that CO impacts are as follows:

1-Hour CO Impacts: 0.03 to 0.70 ppm (state standard is 20 ppm)

8-Hour CO Impacts: 0.037 to 0.50 ppm (state standard is 9 ppm)

These results indicate that increase in traffic at various intersections would not lead to a significant increase in CO concentrations. Therefore, a more refined analysis is not required.

## **CONCLUSIONS**

The results of this analysis indicates the following:

With the exception of a small area that lies outside the project boundary, maximum cancer risk is less than 10 in a million, including risk at nearby homes (see Figure 3). Since the threshold of significance is 10 cancers in a million, emissions of diesel PM from on-site trucks and equipment would not lead to a significant impact to public health.

CO emissions at nearby intersection with and without future road detours were evaluated. Maximum 1-hour and 8-hour CO concentrations are estimated to be well below the states ambient air quality standards. Therefore, CO emissions from increased traffic would not lead to a significant air quality impact.

## **REFERENCES**

BAAQMD (1999) "BAAQMD CEQA Guidelines", Bay Area Air Quality Management District, San Francisco, CA.

EPA (1995) "User's Guide for the Industrial Source Complex (ISC) Models", Environmental Protection Agency, Research Triangle Park, NC.

Turner, D.B., "Workbook of Atmospheric Dispersion Estimates", 2<sup>nd</sup> Edition, Lewis Publishers, Boca Raton, FL.

# APPENDIX

Input Data for AERMOD Model Run

Copy of AERMOD Model Output

# Calculation of Emission Rates and ISCST3 Model Inputs

## King's River Sand Gravel Project

---

### Modeling Area

---

Area	30	acre	
	121,410	sq meter	
Length	348	m	
Width	348	m	
Q=	1	gram/sec	
Q/A=	8.24E-06	g/sec-sq m	Yields Concentration
	2.47E-09		Yields Risk
	2.47E-03		Yields Risk per Million

---

### Actual Emission Rate of Diesel PM(*from equipment*)

---

Annual Q=	0.589	tons/yr	
	1178	lbs/yr	
	534,608	grams/yr	
	1464.7	grams/day	
	1.70E-02	grams/sec	
Q/A=	1.40E-07	gram/sec-sq m	Yields Concentration
	4.19E-11		Yields Risk
	4.19E-05		Yields Risk per Million

Adjustment for  
Reduced Exposure    30/70 Years    0.4285714

Reduction In Future  
DIESEL PM                          65%

Net Diesel PM  
Emission Rate                      6.28E-06    *Yields results in risk/million in ISCST Model*

Diesel Risk Factor                    3.00E-04

```

*** AERMOD - VERSION 07026 ***   *** King's River / CMI AERMOD Modelling 2002 Met Data from Fresno
*** File:CMI_02.ADI                                         **** 10/29/07
                                         **** 04:04:32
                                         PAGE 1

**MODELOPTS:
CONC                                         ***** MODEL SETUP OPTIONS SUMMARY ****
                                         *****

**Model Is Setup For Calculation of Average CONCntration Values.

-- DEPOSITION LOGIC --
**Model USES NO DRY DEPLETION. DDDELETE = F
**Model USES NO WET DEPLETION. WDDELETE = F
**NO GAS DRY DEPOSITION Data Provided.

**Model USES RURAL Dispersion Only.

**Model USES Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay

**Model Assumes NO FLAGPOLE Receptor Heights.

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

**This Run Includes: 1 Source(s); 1 Source Group(s); and 788 Receptor(s)

**The Model Assumes A Pollutant Type of: PM

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

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                         m for Missing Hours
                                         b for Both Calm and Missing Hours

**MISC. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 1.2 MB of RAM.

```

```

*** AERMOD - VERSION 07026 ***      *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
                                         *** File:CMI_02.ADI

*MODELOPTS:
CONC                                     DEFAULT ELEV

```

10/29/07  
04:04:32  
PAGE 2

```

      *** SOURCE IDS DEFINING SOURCE GROUPS ***
      SOURCE TDS
      GROUP TD

```

AMT 211

\*\*\* AERMOD - VERSION 07026 \*\*\*      \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
\*\*\* File:CMI\_02.ADI

10/29/07  
04:04:32  
PAGE 4

\*\*MODELOPTS:  
CONC  
DFAULT ELEV

\*\*\* GRIDDED RECEPTOR NETWORK SUMMARY \*\*\*  
  
\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*  
  
\*\*\* X-COORDINATES OF GRID \*\*\*  
(METERS)  
  
274100.0, 274200.0, 274300.0, 274400.0, 274500.0, 274600.0, 274700.0, 274800.0, 274900.0, 275000.0,  
275100.0, 275200.0, 275300.0, 275400.0, 275500.0, 275600.0, 275700.0, 275800.0, 275900.0, 276000.0,  
276100.0, 276200.0, 276300.0, 276400.0, 276500.0, 276600.0, 276700.0, 276800.0, 276900.0, 277000.0,  
  
\*\*\* Y-COORDINATES OF GRID \*\*\*  
(METERS)  
  
4059200.0, 4059300.0, 4059400.0, 4059500.0, 4059600.0, 4059700.0, 4059800.0, 4059900.0, 4060000.0, 4060100.0,  
4060200.0, 4060300.0, 4060400.0, 4060500.0, 4060600.0, 4060700.0, 4060800.0, 4060900.0, 4061000.0, 4061100.0,  
4061200.0, 4061300.0, 4061400.0, 4061500.0, 4061600.0, 4061700.0,

10/29/07  
04:04:32  
PAGE 5

\* \* \*

\*\*\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*



\*\*\* AERMOD - VERSION 07026 \*\*\*    \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
\*\*\* File:CMI\_02.ADI

10/29/07  
04:04:32  
PAGE 7

\*\*\*

\*\*MODELOPTS:  
CONC  
DFAULT ELEV

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

		* ELEVATION HEIGHTS IN METERS *					
		X-COORD (METERS)					
Y-COORD (METERS)		275900.00	276000.00	276100.00	276200.00	276300.00	276400.00
4061700.00		0.00	0.00	0.00	0.00	0.00	0.00
4061600.00		0.00	0.00	0.00	0.00	0.00	0.00
4061500.00		0.00	0.00	0.00	0.00	0.00	0.00
4061400.00		0.00	0.00	0.00	0.00	0.00	0.00
4061300.00		0.00	0.00	0.00	0.00	0.00	0.00
4061200.00		0.00	0.00	0.00	0.00	0.00	0.00
4061100.00		0.00	0.00	0.00	0.00	0.00	0.00
4061000.00		0.00	0.00	0.00	0.00	0.00	0.00
4060900.00		0.00	0.00	0.00	0.00	0.00	0.00
4060800.00		0.00	0.00	0.00	0.00	0.00	0.00
4060700.00		0.00	0.00	0.00	0.00	0.00	0.00
4060600.00		0.00	0.00	0.00	0.00	0.00	0.00
4060500.00		0.00	0.00	0.00	0.00	0.00	0.00
4060400.00		0.00	0.00	0.00	0.00	0.00	0.00
4060300.00		0.00	0.00	0.00	0.00	0.00	0.00
4060200.00		0.00	0.00	0.00	0.00	0.00	0.00
4060100.00		0.00	0.00	0.00	0.00	0.00	0.00
4060000.00		0.00	0.00	0.00	0.00	0.00	0.00
4059900.00		0.00	0.00	0.00	0.00	0.00	0.00
4059800.00		0.00	0.00	0.00	0.00	0.00	0.00
4059700.00		0.00	0.00	0.00	0.00	0.00	0.00
4059600.00		0.00	0.00	0.00	0.00	0.00	0.00
4059500.00		0.00	0.00	0.00	0.00	0.00	0.00
4059400.00		0.00	0.00	0.00	0.00	0.00	0.00
4059300.00		0.00	0.00	0.00	0.00	0.00	0.00
4059200.00		0.00	0.00	0.00	0.00	0.00	0.00

```
*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
*** File:CMI_02.ADI
```

10/29/07  
04:04:32  
PAGE 8

* ELEVATION HEIGHTS IN METERS *			
Y-COORD (METERS)	276800.00	276900.00	277000.00
4061700.00	0.00	0.00	0.00
4061600.00	0.00	0.00	0.00
4061500.00	0.00	0.00	0.00
4061400.00	0.00	0.00	0.00
4061300.00	0.00	0.00	0.00
4061200.00	0.00	0.00	0.00
4061100.00	0.00	0.00	0.00
4061000.00	0.00	0.00	0.00
4060900.00	0.00	0.00	0.00
4060800.00	0.00	0.00	0.00
4060700.00	0.00	0.00	0.00
4060600.00	0.00	0.00	0.00
4060500.00	0.00	0.00	0.00
4060400.00	0.00	0.00	0.00
4060300.00	0.00	0.00	0.00
4060200.00	0.00	0.00	0.00
4060100.00	0.00	0.00	0.00
4060000.00	0.00	0.00	0.00
4059900.00	0.00	0.00	0.00
4059800.00	0.00	0.00	0.00
4059700.00	0.00	0.00	0.00
4059600.00	0.00	0.00	0.00
4059500.00	0.00	0.00	0.00
4059400.00	0.00	0.00	0.00
4059300.00	0.00	0.00	0.00
4059200.00	0.00	0.00	0.00

10/29/07  
04:04:32  
PAGE 9

\* \* \*

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE : GRIDCART \*\*\*

\* HEIGHT SCALES IN METERS \*

10/29/07  
04:04:32  
PAGE 10

\* \* \*

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE : GRIDCART \*\*\*

\* HILL HEIGHT SCALES IN METERS \*

10/29/07  
04:04:32  
PAGE 11

\* \* \*

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE : GRIDCART \*\*\*

\* HILL HEIGHT SCATTERS THE METEORS

```
*** * AERMOD - VERSION 07026 ****
*** King's River / CMMI AERMOD Modeling 2002 Met Data from Fresno
*** PM10.CMMT02.ADT
```

10/29/07  
04:04:32  
PAGE 12

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE : GRIDCART \*\*\*

\* HILL HEIGHT SCALES IN METERS \*

X-COORD (METERS) | Y-COORD

(METERS)	276800.00	276900.00	277000.00
4061700.00	0.00	0.00	0.00
4061600.00	0.00	0.00	0.00
4061500.00	0.00	0.00	0.00
4061400.00	0.00	0.00	0.00
4061300.00	0.00	0.00	0.00
4061200.00	0.00	0.00	0.00
4061100.00	0.00	0.00	0.00
4061000.00	0.00	0.00	0.00
4060900.00	0.00	0.00	0.00
4060800.00	0.00	0.00	0.00
4060700.00	0.00	0.00	0.00
4060600.00	0.00	0.00	0.00
4060500.00	0.00	0.00	0.00
4060400.00	0.00	0.00	0.00
4060300.00	0.00	0.00	0.00
4060200.00	0.00	0.00	0.00
4060100.00	0.00	0.00	0.00
4060000.00	0.00	0.00	0.00
4059900.00	0.00	0.00	0.00
4059800.00	0.00	0.00	0.00
4059700.00	0.00	0.00	0.00
4059600.00	0.00	0.00	0.00
4059500.00	0.00	0.00	0.00
4059400.00	0.00	0.00	0.00
4059300.00	0.00	0.00	0.00
4059200.00	0.00	0.00	0.00

\*\*\* AERMOD - VERSION 07026 \*\*\*    \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
\*\*\* File:CMI\_02.ADI

10/29/07  
04:04:32  
PAGE 13

\*\*\*

\*\*MODELOPTS:  
CONC

DEFAULT ELEV

\*\*\* DISCRETE CARTESIAN RECEPATORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHLL, ZFLAG)  
(METERS)

( 275485.0, 4060729.0,	0.0,	0.0,	0.0 );	{ 275743.0, 4061255.0,	0.0,	0.0,	0.0 );
( 276272.0, 4061239.0,	0.0,	0.0,	0.0 );	{ 275586.0, 4061193.0,	0.0,	0.0,	0.0 );
( 276285.0, 4061170.0,	0.0,	0.0,	0.0 );	{ 276826.0, 4059345.0,	0.0,	0.0,	0.0 );
( 275723.0, 4059493.0,	0.0,	0.0,	0.0 );	{ 275517.0, 4059743.0,	0.0,	0.0,	0.0 );

```
*** AERMOD - VERSION 07026 ***      *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
*** File:CML_02.ADI
```

10/29/07  
04:04:32  
PAGE 14

\* \* \*

CONC ELEV  
DFAULT MODELOPTS :

\*\*\*\*\* METEOROLOGICAL DAYS SELECTED FOR PROCESSING \*\*\*  
(1 = YES; 0 = NO)

METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 0 0 0  
AND END DATE: 9999 99 99 24

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES \*\*\*  
 (METERS/SEC)

1 54 3 09 5 14 8 23 10 80

\*\*\* AERMOD - VERSION 07026 \*\*\*    \*\*\* King's River / CMI AERMOD Modeling 2002 Met Data from Fresno  
 \*\*\* File:CMI\_02.ADI

10/29/07  
 04:04:32  
 PAGE 15

\*\*MODELOPTS:  
 CONC

DEFAULT ELEV

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

Surface file: C:\OLD\DE~3\AERMOD~1\Fresno02\FRESNO02.SFC  
 Profile file: C:\OLD\DE~3\AERMOD~1\Fresno02\FRESNO02.PFL  
 Surface format: (3(I2,1X),I3,1X,I2,1X,F6.1,1X,3(F6.3,1X),2(F5.0,1X),F8.1,1X,F6.3,1X,2(F6.2,1X),F7.2,1X,F5.0,3(1X,F6.1))  
 Profile format: (4(I2,1X),F6.1,1X,I1,1X,F5.0,1X,F7.2,1X,F6.1,1X,F7.2)  
 Surface station no.: 93193  
 Name: FRESNO/AIR\_TERMINAL  
 Year: 2002

Upper air station no.: 23230  
 Name: OAKLAND/WSO\_AP  
 Year: 2002

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
02	01	01	1	01	-22.9	-105	-9.000	-9.000	594.	262.6	0.93	4.60	1.00	2.60	81.	10.0	282.0	2.0				
02	01	01	1	02	-999.0	-9.000	-9.000	-9.000	999.	-9999.0	0.72	3.76	1.00	999.00	999.	0.0	283.1	2.0				
02	01	01	1	03	-6.8	0.120	-9.000	-9.000	95.	22.8	0.59	3.20	1.00	1.50	94.	10.0	282.0	2.0				
02	01	01	1	04	-999.0	-9.000	-9.000	-9.000	999.	-9999.0	0.72	3.76	1.00	999.00	999.	0.0	282.0	2.0				
02	01	01	1	05	-15.7	0.142	-9.000	-9.000	999.	124.	16.6	0.52	3.40	1.00	2.10	143.	10.0	282.0	2.0			
02	01	01	1	06	-20.3	0.302	-9.000	-9.000	999.	381.	122.2	0.93	4.60	1.00	2.10	72.	10.0	282.0	2.0			
02	01	01	1	07	-13.6	0.241	-9.000	-9.000	999.	273.	92.6	0.52	3.40	1.00	2.10	155.	10.0	282.0	2.0			
02	01	01	1	08	-10.0	0.183	-9.000	-9.000	999.	181.	55.3	0.93	4.60	0.66	1.50	33.	10.0	283.1	2.0			
02	01	01	1	09	-1.7	0.246	-9.000	-9.000	999.	280.	771.3	0.93	4.60	0.37	1.50	67.	10.0	284.2	2.0			
02	01	01	1	10	17.0	-9.000	-9.000	-9.000	64.	-999.	-9999.0	0.72	3.76	0.27	0.00	10.	0	284.9	2.0			
02	01	01	1	11	30.7	0.391	0.511	0.007	157.	562.	-176.1	0.59	3.20	0.22	0.00	10.	0	285.9	2.0			
02	01	01	1	12	84.9	0.414	0.887	0.006	298.	612.	-75.5	0.59	3.20	0.21	2.60	106.	10.0	288.1	2.0			
02	01	01	1	13	85.7	0.478	1.014	0.005	439.	759.	-115.1	0.59	3.20	0.21	3.10	123.	10.0	288.8	2.0			
02	01	01	1	14	33.2	0.458	0.776	0.005	509.	713.	-261.5	0.59	3.20	0.22	3.10	129.	10.0	289.2	2.0			
02	01	01	1	15	49.6	0.465	0.935	0.005	596.	730.	-183.4	0.59	3.20	0.25	3.10	132.	10.0	289.2	2.0			
02	01	01	1	16	24.6	0.322	0.744	0.006	604.	434.	-122.9	0.59	3.20	0.34	2.10	104.	10.0	288.8	2.0			
02	01	01	1	17	-19.5	0.333	-9.000	-9.000	999.	442.	170.9	0.59	3.20	0.61	2.60	101.	10.0	287.0	2.0			
02	01	01	1	18	-19.8	0.203	-9.000	-9.000	999.	218.	38.0	0.59	3.20	1.00	2.10	107.	10.0	285.9	2.0			
02	01	01	1	19	-29.8	0.305	-9.000	-9.000	999.	387.	85.8	0.59	3.20	1.00	2.60	94.	10.0	285.4	2.0			
02	01	01	1	20	-31.7	0.297	-9.000	-9.000	999.	373.	74.8	0.59	3.20	1.00	2.60	107.	10.0	285.4	2.0			
02	01	01	1	21	-45.7	0.468	-9.000	-9.000	999.	737.	202.9	0.59	3.20	1.00	3.60	120.	10.0	285.9	2.0			
02	01	01	1	22	-16.7	0.220	-9.000	-9.000	999.	295.	57.3	0.52	3.40	1.00	2.10	142.	10.0	284.9	2.0			
02	01	01	1	23	-27.2	0.406	-9.000	-9.000	999.	595.	222.2	0.59	3.20	1.00	3.10	110.	10.0	283.1	2.0			
02	01	01	1	24	-21.9	0.328	-9.000	-9.000	999.	435.	145.3	0.59	3.20	1.00	2.60	110.	10.0	284.2	2.0			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
02	01	01	10.0	1	81.	2.60	282.1	99.0	-99.00	-99.00	-99.00

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

```
***** AERMOD - VERSION 07026 ****  *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
***** File:CMI_02.ADI  ***
```

10/29/07  
04:04:32  
PAGE 16

\*\*\*\*\* THE PERIOD ( 8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL  
TNC(TDNC SOURCE(S): CMT

DEFAULT ELEV

\*\*\* THE PERIOD ( 8760 HRS ) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP : ALL  
 INCLUDING SOURCE(S) : CMI ,

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

	Y-COORD (METERS)	X-COORD (METERS)	IN MICROGRAMS/M**3	*						
** CONC OF PM	274100.00	274200.00	274300.00	274400.00	274500.00	274600.00	274700.00	274800.00	274900.00	274900.00
	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
4061700.00	0.22126	0.22900	0.24015	0.25208	0.26247	0.27230	0.28374	0.29495	0.30138	0.30138
4061600.00	0.24556	0.25225	0.26107	0.27319	0.28689	0.30025	0.31364	0.32785	0.34010	0.34010
4061500.00	0.26563	0.27874	0.28951	0.30089	0.31484	0.33085	0.34797	0.36580	0.38349	0.38349
4061400.00	0.27226	0.29602	0.31655	0.33398	0.35044	0.36798	0.38754	0.40966	0.43308	0.43308
4061300.00	0.27110	0.29981	0.33030	0.35974	0.38683	0.41208	0.43659	0.46228	0.49161	0.49161
4061200.00	0.28218	0.30566	0.33620	0.37214	0.41080	0.45014	0.48899	0.52610	0.56306	0.56306
4061100.00	0.31744	0.33438	0.35786	0.38957	0.42956	0.47651	0.52926	0.58659	0.64457	0.64457
4061000.00	0.36885	0.38649	0.40733	0.43414	0.46968	0.51539	0.57117	0.63780	0.71729	0.71729
4060900.00	0.42196	0.44841	0.47594	0.50599	0.54155	0.58671	0.64493	0.71710	0.80407	0.80407
4060800.00	0.46861	0.50607	0.54686	0.59077	0.63834	0.69181	0.75614	0.83832	0.94368	0.94368
4060700.00	0.51912	0.56441	0.61634	0.67586	0.74371	0.82053	0.90783	1.01019	1.13769	1.13769
4060600.00	0.57544	0.62855	0.69027	0.76261	0.84824	0.95046	1.07322	1.22115	1.40127	1.40127
4060500.00	0.61115	0.6933	0.73718	0.81712	0.91242	1.02752	1.16869	1.34479	1.56858	1.56858
4060400.00	0.60114	0.65841	0.72523	0.80401	0.89800	1.01169	1.15141	1.32635	1.55024	1.55024
4060300.00	0.54673	0.59800	0.65793	0.72867	0.81303	0.91478	1.03895	1.19262	1.38633	1.38633
4060200.00	0.47635	0.51910	0.56834	0.62526	0.69142	0.76897	0.86106	0.97269	1.11142	1.11142
4060100.00	0.41808	0.45235	0.49076	0.53418	0.58403	0.64239	0.71204	0.79609	0.89707	0.89707
4059600.00	0.37214	0.39893	0.42905	0.46352	0.50352	0.55009	0.60371	0.65378	0.72864	0.72864
4059500.00	0.32964	0.35114	0.37575	0.40395	0.43594	0.47141	0.50927	0.54791	0.58629	0.58629
4059400.00	0.29092	0.30976	0.33122	0.35509	0.38056	0.40602	0.42963	0.45037	0.46798	0.46798
4059300.00	0.26202	0.27958	0.29816	0.31640	0.33253	0.34525	0.35470	0.3602	0.36912	0.36912
4059200.00	0.24178	0.25544	0.26719	0.27582	0.28114	0.28436	0.28735	0.29199	0.30303	0.30303
4059100.00	0.22058	0.22694	0.23032	0.23140	0.23190	0.23367	0.23790	0.24513	0.25580	0.25580
4059000.00	0.19334	0.19245	0.19269	0.19432	0.19873	0.20158	0.20348	0.22466	0.22466	0.22466
4059300.00	0.16397	0.16249	0.16246	0.16486	0.16947	0.17158	0.17893	0.19983	0.217166	0.217166
4059200.00	0.14235	0.14702	0.14702	0.15199	0.15682	0.16285	0.16789	0.18257	0.19983	0.19983
4059100.00	0.13879	0.13936	0.13936	0.14235	0.14702	0.15199	0.15682	0.16285	0.17166	0.17166

\*\*\* AERMOD - VERSION 07026 \*\*\*    \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
 \*\*\* File:CMI\_02.ADI

10/29/07  
 04:04:32  
 PAGE 17

\*\*MODELOPTS:  
 CONC

DEFAULT ELEV

\*\*\* THE PERIOD ( 8760 HRS) AVERAGE CONCENTRATION    VALUES FOR SOURCE GROUP: ALL  
 INCLUDING SOURCE(S): CMI ,

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

\*\*\* CONC OF PM    IN MICROGRAMS/M\*\*3

	Y-COORD (METERS)	X-COORD (METERS)	CONC OF PM	IN MICROGRAMS/M**3
-	-	-	-	-
4061700.00	0.29912	0.28204	0.25679	0.23457
4061600.00	0.34540	0.33699	0.31120	0.28346
4061500.00	0.39699	0.39901	0.38054	0.34789
4061400.00	0.45540	0.46976	0.46417	0.43739
4061300.00	0.52238	0.55097	0.56391	0.54535
4061200.00	0.60391	0.64531	0.68175	0.68818
4061100.00	0.70224	0.76344	0.82234	0.86676
4061000.00	0.80648	0.90086	1.00015	1.09133
4060900.00	0.91173	1.04466	1.20136	1.37371
4060800.00	1.07418	1.23584	1.44146	1.70941
4060700.00	1.30501	1.52572	1.81654	2.20385
4060600.00	1.62658	1.92679	2.34817	2.96198
4060500.00	1.85828	2.24184	2.77271	3.56740
4060400.00	1.84432	2.2489	2.80421	3.63496
4060300.00	1.63682	1.97249	2.44214	3.13078
4060200.00	1.28778	1.51474	1.80811	2.19576
4060100.00	1.01584	1.15231	1.30917	1.49260
4060000.00	0.79723	0.87029	0.94739	1.02979
4059900.00	0.62355	0.65806	0.69280	0.73725
4059800.00	0.48296	0.49992	0.52621	0.56443
4059700.00	0.37975	0.39800	0.42566	0.45673
4059600.00	0.31405	0.33444	0.35901	0.37620
4059500.00	0.27090	0.28997	0.30635	0.31191
4059400.00	0.23935	0.25416	0.26180	0.25994
4059300.00	0.21400	0.22307	0.22297	0.21853
4059200.00	0.19189	0.19457	0.18951	0.18679

\*\*\* AERMOD - VERSION 07026 \*\*\*    \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
 \*\*\* File:CMI\_02.ADI

10/29/07  
 04:04:32  
 PAGE 18

\*\*\*MODELOPTS:  
 CONC

DEFAULT ELEV

\*\*\* THE PERIOD ( 8760 HRS) AVERAGE CONCENTRATION    VALUES FOR SOURCE GROUP: ALL  
 INCLUDING SOURCE(S): CMI ,

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

   \*\* CONC OF PM    IN MICROGRAMS/M\*\*3

	Y-COORD (METERS)	X-COORD (METERS)	Y-COORD (METERS)	X-COORD (METERS)	IN MICROGRAMS/M**3
-	-	-	-	-	-
4061700.00	0.11565	0.08041	0.05396	0.04464	0.04399
4061600.00	0.13141	0.08988	0.06075	0.05164	0.05175
4061500.00	0.15130	0.10189	0.06967	0.06072	0.06213
4061400.00	0.17700	0.11772	0.08149	0.07302	0.07579
4061300.00	0.21129	0.13926	0.09757	0.09013	0.09260
4061200.00	0.25907	0.16949	0.12038	0.11345	0.11164
4061100.00	0.32961	0.21376	0.15348	0.14348	0.13295
4061000.00	0.44201	0.28231	0.20080	0.18216	0.16187
4060900.00	0.64149	0.39361	0.27212	0.24225	0.21453
4060800.00	1.05590	0.59793	0.40830	0.35994	0.33331
4060700.00	2.25670	1.13086	0.75481	0.66518	0.60474
4060600.00	10.17885	4.75631	1.95571	1.34993	1.03036
4060500.00	97.37489	84.26590	9.14564	3.96943	2.37434
4060400.00	104.53209	92.24633	15.45335	7.63198	4.46620
4060300.00	104.44006	94.39844	18.15355	10.08915	6.28263
4060200.00	23.63061	24.05444	16.27683	10.56538	7.23371
4060100.00	7.57995	8.90707	8.88871	8.00317	6.43905
4060000.00	3.77517	4.42830	4.86772	5.21890	4.98932
4059900.00	2.38464	2.56496	2.82592	3.29233	3.53263
4059800.00	1.70378	1.69730	1.78471	2.11141	2.42185
4059700.00	1.31049	1.22340	1.23042	1.42502	1.67188
4059600.00	1.05622	0.93973	0.90019	1.01959	1.19587
4059500.00	0.87834	0.75788	0.69121	0.75875	0.89035
4059400.00	0.74700	0.63323	0.55442	0.58321	0.67995
4059300.00	0.64629	0.54269	0.46138	0.46316	0.52965
4059200.00	0.56681	0.47388	0.39512	0.38000	0.42131

```

*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Net Data from Fresno
*** File:CMI_02.ADI
*** MODELOPTS:
CONC          DFAULT ELEV
              *** THE PERIOD ( 8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
              INCLUDING SOURCE(S): CMI
              *** NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART ***
              ** CONC OF PM   IN MICROGRAMS/M**3
              ** CONC OF PM   IN MICROGRAMS/M**3
Y-COORD (METERS) | X-COORD (METERS)
- - - - - | - - - - -
4061700.00      | 276800.00    276900.00    277000.00
4061600.00      | 0.04270     0.03565     0.02941
4061500.00      | 0.04275     0.03521     0.03072
4061500.00      | 0.04282     0.03708     0.03599
4061400.00      | 0.04571     0.04421     0.04723
4061300.00      | 0.05563     0.05912     0.06441
4061200.00      | 0.07565     0.08110     0.08478
4061100.00      | 0.10485     0.10825     0.10952
4061000.00      | 0.14534     0.14709     0.14720
4060900.00      | 0.20845     0.20432     0.19771
4060800.00      | 0.28304     0.26159     0.24046
4060700.00      | 0.33684     0.29783     0.26292
4060600.00      | 0.41255     0.35336     0.30459
4060500.00      | 0.60029     0.50035     0.42520
4060400.00      | 0.94680     0.77571     0.64987
4060300.00      | 1.42151     1.15708     0.95660
4060200.00      | 1.78247     1.47053     1.23147
4060100.00      | 1.97048     1.63638     1.38346
4060000.00      | 1.99716     1.68366     1.43693
4059900.00      | 1.93840     1.64460     1.41522
4059900.00      | 1.87641     1.61024     1.38753
4059700.00      | 1.75297     1.55510     1.36269
4059600.00      | 1.56704     1.45282     1.30972
4059500.00      | 1.33442     1.30771     1.22698
4059400.00      | 1.08829     1.12399     1.11125
4059300.00      | 0.87237     0.92744     0.96219
4059200.00      | 0.70757     0.75343     0.80157

```

10/29/07  
 04:04:32  
 PAGE 19

```

*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Net Data from Fresno
*** File:CMI_02.ADI
*** MODELOPTS:
CONC
      DEFAULT ELEV
      *** THE PERIOD ( 8760 HRS ) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
      INCLUDING SOURCE(S) : CMI ,
      *** DISCRETE CARTESIAN RECEPTOR POINTS ***
      ** CONC OF PM   IN MICROGRAMS/M**3
      X-COORD (M)    Y-COORD (M)    CONC          X-COORD (M)    Y-COORD (M)    CONC
      - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      275485.00    4060729.00   2.98047      275743.00   4061255.00   0.36555
      276272.00    4061239.00   0.10455      275586.00   4061193.00   0.54078
      276285.00    4061170.00   0.11897      276826.00   4059345.00   0.97906
      275723.00    4059493.00   0.79465      275517.00   4059743.00   0.58400

```

\*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
\*\*\* File:CMI\_02.ADI  
\*\*\* MODELOPTS:  
CONC  
 DEFAULT ELEV  
 \*\*\* THE PERIOD ( 8760 HRS ) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL  
 INCLUDING SOURCE(S) : CMI ,  
 \*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*  
 \*\* CONC OF PM IN MICROGRAMS/M\*\*3

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
275485.00	4060729.00	2.98047	275743.00	4061255.00	0.36555
276272.00	4061239.00	0.10455	275586.00	4061193.00	0.54078
276285.00	4061170.00	0.11897	276826.00	4059345.00	0.97906
275723.00	4059493.00	0.79465	275517.00	4059743.00	0.58400

\*\*\*

10/29/07  
04:04:32  
PAGE 20

```
***** AERMOD - VERSION 07026 ****  *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
***** File:CMI_02.ADI  ***
```

10/29/07  
04:04:32  
PAGE 21

\*\*\*  
\*\*\* \* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL  
INCLUDING SOURCE(S): CMI

DEFAULT ELEV

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

\*\* CONIC OF BM IN MICROGRAMS/M\*\*3

Y-COORD (METERS)		X-COORD (METERS)								
274100.00	274300.00	274200.00	274400.00							
0.61700.0	43.77981	(02020103)	44.00241	(02020103)	45.17175	(02011102)	65.75968	(02011102)	77.25150	(02011102)
0.61600.0	45.69625	(02121823)	45.64797	(02020103)	48.46484	(02020103)	46.74694	(02011102)	69.81068	(02011102)
0.61500.0	46.02932	(02129060)	48.72960	(02121823)	49.07241	(02121823)	52.69226	(02020103)	49.97831	(02020103)
0.61400.0	47.37921	(02120722)	48.11666	(02012902)	50.78455	(02012902)	54.59687	(02121823)	56.46070	(02020103)
0.61300.0	48.26350	(02020606)	50.69540	(02120722)	52.36085	(02120722)	55.02236	(02012902)	58.87250	(02121823)
0.61200.0	49.39667	(02012506)	51.64616	(02012506)	54.06151	(02020606)	57.24640	(02120722)	58.24585	(02120722)
0.61100.0	48.22747	(02030904)	50.13403	(02030904)	54.85584	(02012506)	58.33627	(02012506)	61.21017	(02020606)
0.61000.0	50.96188	(02111623)	53.52238	(02122501)	55.56149	(02122501)	57.03593	(02030904)	61.41495	(02012506)
0.60900.0	48.39463	(02010206)	52.31705	(02120406)	56.62355	(02120406)	59.95053	(02011623)	63.46610	(02122501)
0.60800.0	51.19946	(02011522)	53.73201	(02011522)	55.60258	(02011522)	56.74291	(0203224)	61.9553	(02012026)
0.60700.0	51.56383	(02120401)	53.51742	(02120401)	55.26790	(02120401)	58.54212	(02011522)	63.14511	(02011522)
0.60600.0	66.11324	(02120317)	69.36942	(02120317)	72.89799	(02120317)	76.73228	(02120317)	80.91768	(02120317)
0.60500.0	92.64018	(02120317)	99.01701	(02120317)	106.18670	(02120317)	114.29611	(02120317)	123.54534	(02120317)
0.60400.0	106.92262	(02120317)	114.91247	(02120317)	123.97232	(02120317)	134.28706	(02120317)	146.14196	(02120317)
0.60300.0	101.94739	(02120317)	108.85822	(02120317)	116.57403	(02120317)	125.25417	(02120317)	135.08939	(02120317)
0.60200.0	80.22397	(02120317)	84.05817	(02120317)	88.15987	(02120317)	92.54881	(02120317)	97.26176	(02120317)
0.60100.0	51.98148	(02120317)	55.10934	(02021123)	63.37109	(02021123)	71.31947	(02021123)	78.64350	(02021123)
0.60000.0	62.34784	(02021123)	66.82170	(02021123)	70.21773	(02021123)	72.65549	(02021123)	73.61355	(02021123)
0.59900.0	58.00687	(02021123)	56.73691	(02021123)	53.92818	(02021123)	49.43219	(02021123)	45.67066	(02012501)
0.59800.0	36.15897	(02021123)	37.78898	(02012501)	39.55838	(020103005)	42.31424	(02012105)	44.94561	(02031506)
0.59700.0	35.18369	(02103005)	37.21039	(02012105)	39.08021	(02031506)	41.38006	(02110306)	52.35830	(02012824)
0.59600.0	34.25494	(02031506)	36.33287	(02110306)	41.60963	(02012824)	56.39956	(02012824)	68.14362	(02012824)
0.59500.0	33.72538	(02020321)	46.28408	(02012824)	57.73872	(02012824)	64.46677	(02012824)	63.82708	(02012824)
0.59400.0	48.84333	(02012824)	56.49905	(02012824)	58.07499	(02012824)	53.60209	(02012824)	42.49913	(02012824)
0.59300.0	53.22572	(02012824)	51.27963	(02012924)	43.54409	(020110502)	35.67080	(02010503)	38.47157	(02010503)
0.59200.0	43.22550	(02012824)	51.12924	(02012924)	39.07449	(02012924)	35.67080	(02010503)	37.27942	(02010503)

```

*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Net Data from Fresno
*** File:CMI_02.ADI
*** MODELOPTS:
CONC      DEFAULT ELEV
          *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL
          INCLUDING SOURCE(S): CMI
          *** NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART ***
          ** CONC OF PM    IN MICROGRAMS/M**3
Y-COORD | X-COORD (METERS) | X-COORD (METERS)
(METERS) | 274600.00 | 274700.00 | 274800.00 | 274900.00 | 275000.00
- - - - - | - - - - - | - - - - - | - - - - - | - - - - - | - - - - -
4061700.0 | 72.28551 ((02011102) | 52.84977 ((02011102) | 58.75818 ((02082805) | 56.88199 ((02101224) | 62.40348 ((02010706)
4061600.0 | 83.36907 ((02011102) | 78.49571 ((02011102) | 57.13519 ((02011102) | 63.11688 ((02082805) | 65.34496 ((02010706)
4061500.0 | 74.33301 ((02011102) | 90.38401 ((02011102) | 85.69968 ((02011102) | 63.34625 ((02082805) | 67.27134 ((02082805)
4061400.0 | 56.90461 ((02021013) | 59.42823 ((02011102) | 98.52302 ((02011102) | 94.16726 ((02011102) | 71.51321 ((02082805)
4061300.0 | 59.52265 ((02021013) | 64.02753 ((02021013) | 85.23318 ((02011102) | 108.10901 ((02011102) | 104.27005 ((02011102)
4061200.0 | 62.49839 ((02012902) | 67.23643 ((02121023) | 71.08392 ((02021013) | 91.94203 ((02011102) | 119.59065 ((02011102)
4061100.0 | 65.22495 ((02120722) | 67.246960 ((02012902) | 73.62035 ((02121823) | 77.74518 ((02020103) | 99.84127 ((02011102)
4061000.0 | 66.53819 ((02012506) | 70.28156 ((02020606) | 75.32108 ((02120722) | 79.57807 ((02012902) | 86.96587 ((02121823)
4060900.0 | 65.96813 ((02122501) | 69.57387 ((02012506) | 76.89329 ((02012506) | 82.27683 ((02020606) | 88.87154 ((02120722)
4060800.0 | 67.41905 ((02120406) | 72.22832 ((02011623) | 77.34400 ((02122501) | 81.39823 ((02122501) | 90.62689 ((02012506)
4060700.0 | 67.30436 ((02011522) | 71.18793 ((02011522) | 75.43280 ((02010206) | 82.97181 ((02120446) | 90.61131 ((02011623)
4060600.0 | 85.50792 ((02120317) | 90.58151 ((02120317) | 96.24694 ((02120317) | 102.65035 ((02120317) | 110.01328 ((02120317)
4060500.0 | 134.19394 ((02120317) | 146.55496 ((02120317) | 161.10130 ((02120317) | 178.47472 ((02120317) | 199.66884 ((02120317)
4060400.0 | 159.85103 ((02120317) | 175.83690 ((02120317) | 194.66806 ((02120317) | 217.08444 ((02120317) | 24.4.07335 ((02120317)
4060300.0 | 146.31519 ((02120317) | 159.21925 ((02120317) | 174.21664 ((02120317) | 191.90524 ((02120317) | 213.15149 ((02120317)
4060200.0 | 102.32927 ((02120317) | 107.80219 ((02120317) | 113.75241 ((02120317) | 120.28059 ((02120317) | 127.52891 ((02120317)
4060100.0 | 85.17841 ((02021123) | 90.91577 ((02021123) | 95.89536 ((02021123) | 99.94607 ((02021123) | 102.33734 ((02021123)
4060000.0 | 72.85551 ((02021123) | 69.84986 ((02021123) | 63.98101 ((02021123) | 62.05392 ((02021123) | 81.20979 ((02021123)
4059900.0 | 48.73081 ((02103005) | 52.20475 ((02012105) | 60.49144 ((02012824) | 84.70850 ((02012824) | 104.24557 ((02012824)
4059800.0 | 47.74303 ((02110306) | 66.33463 ((02012824) | 84.38646 ((02012824) | 94.96631 ((02012824) | 92.87232 ((02012824)
4059700.0 | 68.87247 ((02012824) | 80.35337 ((02012824) | 82.57293 ((02012824) | 72.71116 ((02012824) | 60.63350 ((02022606)
4059600.0 | 73.14906 ((02012824) | 68.68586 ((02012824) | 54.77166 ((02012824) | 54.11676 ((02022606) | 57.38404 ((02022504)
4059500.0 | 54.94091 ((02012824) | 45.65661 ((02101503) | 48.82402 ((02021201) | 51.25749 ((02022504) | 60.47483 ((02022423)
4059400.0 | 42.00374 ((02101503) | 44.33543 ((02021201) | 46.16283 ((02022504) | 48.20266 ((02022423) | 80.03353 ((02022423)
4059300.0 | 40.42319 ((02022503) | 41.85263 ((02022504) | 43.81556 ((02071004) | 47.52636 ((02022423) | 85.46687 ((02022423)
4059200.0 | 38.16268 ((02022504) | 40.11569 ((02071004) | 56.67382 ((02022423) | 76.65189 ((02022423) | 76.00162 ((02022423)

```

```
***** AERMOD - VERSION 07026 ****  *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
***** File:CMI_02.ADI  ***
```

10/29/07  
04:04:32  
PAGE 23

\*\*\*  
\*\*\* \* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL  
INCLUDING SOURCE(S): CMI

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

\*\* CONC OF DM TN MICROPROGRAMS /M\*\*3

Y-COORD (METERS)	X-COORD (METERS)	Y-COORD (METERS)	X-COORD (METERS)
275100.00	275200.00	275300.00	275400.00
66.244668 (02012722)	63.899953 (02122801)	86.76931 (02041303)	116.86247 (02041303)
0.061700.0	71.67514 (02012722)	72.83340 (02041303)	119.85550 (02041303)
0.061600.0	75.34068 (02012722)	74.45892 (02122801)	118.27781 (02041303)
0.061500.0	79.18099 (02010706)	83.59579 (02012722)	109.62817 (02041303)
0.061400.0	84.00233 (02010706)	88.78790 (02022801)	91.71825 (02041303)
0.061300.0	90.37854 (02082805)	96.46581 (02010706)	99.82633 (02012722)
0.061200.0	131.93654 (02011102)	101.14755 (02082805)	107.32152 (02022801)
0.061100.0	151.47313 (02011102)	151.81834 (02011102)	117.69682 (02010706)
0.061000.0	171.57275 (02121823)	174.92761 (02011102)	178.89557 (02011102)
0.060900.0	188.91320 (02120606)	137.26746 (02011102)	207.77557 (02011102)
0.060800.0	110.57472 (02012506)	125.68746 (02020606)	160.19586 (02011102)
0.060700.0	129.02808 (02120317)	141.82559 (02120317)	158.10854 (02120317)
0.060600.0	260.62793 (02120317)	307.53049 (02120317)	375.85245 (02120317)
0.060500.0	318.02390 (02120317)	370.27316 (02120317)	440.06396 (02120317)
0.060400.0	239.35942 (02120317)	272.88654 (02120317)	318.04974 (02120317)
0.060300.0	145.09610 (02120317)	156.11226 (02021123)	177.48712 (02021123)
0.060200.0	111.61094 (02012824)	146.81984 (02012824)	176.52541 (02012824)
0.060100.0	109.68031 (02012824)	131.65059 (02012824)	171.68913 (02012824)
0.059900.0	104.25250 (02012824)	87.04288 (020222504)	152.05580 (020222423)
0.059800.0	74.44810 (02022504)	119.77271 (02022423)	146.86824 (02022423)
0.059700.0	95.17978 (02022423)	127.82573 (02022423)	115.08729 (02022423)
0.059600.0	110.21705 (02022423)	109.11216 (02022423)	101.05116 (02021001)
0.059500.0	102.08774 (02022423)	78.17238 (02022423)	98.655620 (02021001)
0.059400.0	94.08404 (02022423)	80.35133 (02021001)	89.86172 (02021001)
0.059300.0	78.92252 (02022423)	80.21912 (02021001)	77.16364 (02021001)
0.059200.0	60.54233 (02022423)	66.08711 (02021001)	74.89042 (02021001)
0.059100.0	54.97701 (02022423)	54.97701 (02021001)	62.76598 (02020621)

```
***** AERMOD - VERSION 07026 ****  *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno
***** File:CMI_02.ADI  ***
```

10/29/07  
04:04:32  
PAGE 24

\*\*\*  
\*\*\* \* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL  
INCLUDING SOURCE(S): CMI

DEFAULT ELEV

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

\*\* CONC OF BM IN MICROGRAMS/M\*\*<sup>3</sup>

Y-COORD (METERS)		X-COORD (METERS)	
	275600.00		275700.00
	275800.00		275900.00
061700.0	66.96653 (02020320)	100.39747 (02022520)	110.55690 (02022520)
061600.0	86.24745 (02041303)	106.44002 (02022520)	118.78707 (02022520)
061500.0	110.57706 (02041303)	112.94305 (02022520)	127.94257 (02022520)
061400.0	132.85809 (02041303)	120.79084 (02022520)	138.24014 (02022520)
061300.0	152.00641 (02041303)	130.19025 (02022520)	150.03012 (02022520)
061200.0	169.14186 (02041303)	143.27641 (02041303)	163.86936 (02022520)
061100.0	186.81815 (02041303)	175.81538 (02041303)	180.67688 (02022520)
061000.0	207.58417 (02041303)	205.70511 (02041303)	202.03043 (02022520)
060900.0	231.50427 (02041303)	237.90355 (02041303)	230.82867 (02022520)
060800.0	245.83601 (02041303)	281.92801 (02041303)	273.51566 (02041303)
060700.0	287.37653 (02011102)	357.10202 (02041303)	356.02066 (02041303)
060600.0	358.37827 (02011102)	573.94019 (02041303)	573.69403 (02041303)
060500.0	699.28448 (02120317)	1447.79443 (02120317)	1285.11731 (02120317)
060400.0	740.02612 (02120317)	1469.01697 (02120317)	1291.40161 (02120317)
060300.0	699.253372 (02120317)	1447.40613 (02120317)	1419.61743 (02020621)
060200.0	295.92111 (02012824)	934.97424 (02020621)	935.99506 (02020621)
060100.0	263.64453 (02022423)	617.01654 (02020621)	617.86365 (02020621)
060000.0	195.43523 (02021001)	492.06657 (02020621)	493.08456 (02020621)
059900.0	224.86565 (02020621)	418.31317 (02020621)	418.57880 (02020621)
059800.0	249.41110 (02020621)	367.82419 (02020621)	366.19337 (02020621)
059700.0	256.51227 (02020621)	330.53824 (02020621)	324.37961 (02020621)
059600.0	254.08279 (02020621)	301.47598 (02020621)	287.04395 (02020621)
059500.0	247.01239 (02020621)	277.71414 (02020621)	251.30765 (02020621)
059400.0	237.97647 (02020621)	257.23187 (02020621)	238.49720 (02020621)
059300.0	228.31094 (02020621)	226.71616 (02113018)	207.07249 (02113018)
059200.0	219.61226 (02020621)	220.29216 (02020621)	199.51479 (02113018)
059100.0	219.59200 (02020621)	220.29216 (02020621)	197.28922 (02113018)
			276000.00

\*\*\* AERMOD - VERSION 07026 \*\*\*      \*\*\* King's River / CMI AERMOD Modeling 2002 Net Data from Fresno  
 \*\*\* File:CMI\_02.ADI      \*\*\*  
 \*\*\* MODELOPTS:  
 CONC

10/29/07  
 04:04:32  
 PAGE 25

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION      VALUES FOR SOURCE GROUP:  
 INCLUDING SOURCE(S): CMI  
 ,

\*\*\* NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART \*\*\*

\*\* CONC OF PM      IN MICROGRAMS/M\*\*3

	Y-COORD (METERS)	X-COORD (METERS) 276300.00	X-COORD (METERS) 276200.00	X-COORD (METERS) 276300.00	X-COORD (METERS) 276400.00	X-COORD (METERS) 276500.00
4061700.0	51.65538 (02070305)	62.20386 (02122423)	87.73100 (02122423)	85.50403 (02122423)	54.09086 (02122423)	
4061600.0	54.94652 (02070305)	80.22275 (02122423)	96.86299 (02122423)	81.79021 (02122423)	51.42576 (02112523)	
4061500.0	60.60334 (02122423)	96.89172 (02122423)	102.53589 (02122423)	72.17343 (02122423)	52.87219 (02101622)	
4061400.0	84.41375 (02122423)	110.93557 (02122423)	103.58669 (02122423)	60.38465 (02112523)	60.15512 (02101622)	
4061300.0	107.91273 (02122423)	122.25064 (02122423)	97.59539 (02122423)	65.67774 (02101622)	62.93373 (02011317)	
4061200.0	128.77988 (02122423)	130.73213 (02122423)	82.07079 (02122423)	71.19331 (02101622)	65.13405 (02011317)	
4061100.0	147.25871 (02122423)	133.77907 (02122423)	82.41152 (02101622)	76.81910 (02011317)	53.62021 (02011317)	
4061000.0	165.82362 (02122423)	124.04198 (02122423)	90.03474 (02011317)	68.34460 (02011317)	65.19514 (02082622)	
4060900.0	186.72946 (02122423)	107.26169 (02101622)	88.06892 (02011317)	84.71707 (02082622)	90.79596 (02082622)	
4060800.0	203.07368 (02122423)	116.41087 (02011317)	111.12017 (02082622)	107.14228 (02032606)	94.18975 (02081705)	
4060700.0	179.88297 (02122423)	149.13408 (02082622)	128.28221 (02032606)	106.22934 (02111107)	96.19339 (02111107)	
4060600.0	212.65843 (02032606)	153.32768 (02111107)	126.85328 (02040104)	110.01269 (02122319)	97.97099 (02122319)	
4060500.0	282.13382 (02021603)	209.63536 (02021603)	170.96867 (02021603)	144.57222 (02021603)	124.64861 (02031123)	
4060400.0	284.99146 (02021124)	211.57722 (02021023)	174.77023 (02021023)	150.52732 (02021023)	134.16681 (02021023)	
4060300.0	292.40814 (02021924)	213.10959 (02021124)	176.11163 (02021124)	152.14046 (02021124)	134.47371 (02021023)	
4060200.0	299.87927 (02042203)	219.67061 (02120420)	178.55586 (02021924)	152.02190 (02021124)	135.37318 (02021124)	
4060100.0	216.81067 (02123122)	221.28426 (02030502)	182.38010 (02022122)	156.40382 (02021924)	135.57954 (02030320)	
4060000.0	121.96043 (02122302)	163.57581 (02123122)	178.04874 (02123122)	155.88150 (02042223)	137.45543 (02120420)	
4059900.0	101.63370 (02120922)	99.73233 (02101924)	131.88748 (02123122)	150.08792 (02123122)	134.55859 (02053002)	
4059800.0	88.36369 (02012303)	88.18622 (02122302)	83.98846 (02031819)	110.09437 (02123122)	129.59337 (02123122)	
4059700.0	78.88660 (02012303)	77.84431 (02120922)	75.75653 (02082605)	72.11129 (02031819)	93.88764 (02123122)	
4059600.0	70.90371 (02020218)	69.67796 (02120922)	69.35751 (02122302)	66.74136 (02101924)	63.84191 (02122421)	
4059500.0	64.84084 (02020218)	64.39592 (02012303)	62.88465 (02091501)	61.63556 (02120218)	58.82710 (02072005)	
4059400.0	59.50162 (02053001)	59.49993 (02120203)	58.12994 (02120922)	56.81024 (02041302)	54.67408 (02092605)	
4059300.0	54.60931 (02053001)	54.27359 (02120203)	52.32066 (02012303)	52.65180 (02091501)	52.02565 (02122302)	
4059200.0	50.67015 (02020603)	51.22665 (02020218)	50.56721 (02012303)	49.57695 (02120922)	48.29790 (02041302)	

```

*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Net Data from Fresno
*** File:CMI_02.ADI
*** MODELOPTS:
CONC      DEFAULT ELEV
          *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL
          INCLUDING SOURCE(S): CMI
          *** NETWORK ID: MAIN ; NETWORK TYPE: GRIDCART ***
          ** CONC OF PM    IN MICROGRAMS/M**3
Y-COORD | X-COORD (METERS) | X-COORD (METERS)
(METERS) | 276600.00 | 276700.00 | 276800.00 | 276900.00 | 277000.00
- - - - - | - - - - - | - - - - - | - - - - - | - - - - - | - - - - -
4061700.0 | 42.57615 (02101622) | 46.87325 (02101622) | 44.43960 (02011317) | 39.74731 (02011317) | 26.52530 (02011317)
4061600.0 | 50.73191 (02101622) | 47.16571 (02011317) | 45.30700 (02011317) | 31.98154 (02011317) | 21.31266 (02111320)
4061500.0 | 53.04353 (02101622) | 51.15142 (02011317) | 38.45213 (02011317) | 23.60247 (02111320) | 25.79310 (02111320)
4061400.0 | 57.10667 (02011317) | 46.05698 (02011317) | 26.35687 (02011317) | 28.649194 (02111320) | 35.36690 (02082622)
4061300.0 | 54.91494 (02011317) | 33.34557 (02011317) | 31.69241 (02111320) | 43.60880 (02082622) | 51.93731 (02082622)
4061200.0 | 42.25013 (02011317) | 38.50084 (02082622) | 53.28127 (02082622) | 59.11321 (02082622) | 56.30418 (02032606)
4061100.0 | 50.19151 (02082622) | 64.42582 (02082622) | 66.11566 (02082622) | 63.64395 (02032606) | 57.88713 (02051705)
4061000.0 | 76.99907 (02082622) | 74.00051 (02032606) | 69.16551 (02032606) | 59.44952 (02081705) | 53.48709 (02010722)
4060900.0 | 85.07719 (02032606) | 74.06434 (02081705) | 64.17863 (02010722) | 64.03860 (0211107) | 61.54650 (0211107)
4060800.0 | 79.82918 (02111107) | 77.67957 (02111107) | 71.76156 (02111107) | 66.96107 (02040104) | 62.98577 (02040104)
4060700.0 | 86.87576 (02040104) | 79.64469 (02040104) | 72.74062 (02122118) | 68.56715 (02122319) | 64.51215 (02122319)
4060600.0 | 88.54993 (02122319) | 80.51770 (02122319) | 72.87023 (02122319) | 66.05449 (02012418) | 62.27922 (02012418)
4060500.0 | 110.27835 (02031123) | 98.64999 (02031123) | 89.04272 (02031123) | 80.99419 (02042419) | 74.28909 (02091405)
4060400.0 | 121.45058 (02021603) | 111.355873 (02021603) | 103.06339 (02021603) | 96.04018 (02021603) | 89.94480 (02021603)
4060300.0 | 121.74871 (02021023) | 111.66592 (02021023) | 103.36179 (02021023) | 96.23466 (02021023) | 89.82108 (02021023)
4060200.0 | 122.60045 (02021124) | 112.28208 (02021124) | 103.19839 (02021124) | 94.79757 (02052322) | 89.25846 (02052322)
4060100.0 | 116.10353 (02041323) | 108.77911 (02040705) | 101.34703 (02021124) | 96.16907 (02021124) | 90.85213 (02021124)
4060000.0 | 124.67873 (02021924) | 111.08030 (02030320) | 96.30112 (02030320) | 87.30756 (02041323) | 86.08813 (02041323)
4059900.0 | 123.25418 (02022122) | 112.89611 (02120420) | 104.41116 (02021924) | 94.32384 (02030320) | 82.95207 (02030320)
4059800.0 | 118.94151 (02053002) | 110.05270 (02042203) | 102.26674 (02022122) | 95.86637 (02120420) | 89.90903 (02021924)
4059700.0 | 113.72026 (02123122) | 107.06775 (02030502) | 100.44078 (02042203) | 93.89963 (02022122) | 86.81054 (02120420)
4059600.0 | 81.22578 (02123122) | 100.93870 (02123122) | 97.28571 (02030502) | 90.47206 (02053002) | 84.61008 (02042203)
4059500.0 | 57.23859 (02122421) | 71.66660 (02092901) | 90.36248 (02123122) | 88.25533 (02030502) | 83.82607 (02053002)
4059400.0 | 52.98290 (02031819) | 51.38347 (02122421) | 64.25537 (02092901) | 81.40752 (02123122) | 80.19738 (02123122)
4059300.0 | 49.90357 (02101924) | 47.64869 (02031819) | 46.17618 (02122421) | 58.02148 (02092901) | 73.70306 (02123122)
4059200.0 | 46.84206 (02082605) | 45.19415 (02072005) | 42.40002 (02031819) | 41.89484 (02042804) | 52.70266 (02092901)

```

```

*** AERMOD - VERSION 07026 ***
*** King's River / CMI AERMOD Modeling 2002 Net Data from Fresno
*** File:CMI_02.ADI
*** MODELOPTS:
CONC
      DEFAULT ELEV
      *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
      INCLUDING SOURCE(S):
          CMI
      *** DISCRETE CARTESIAN RECEPTOR POINTS ***
      ** CONC OF PM    IN MICROGRAMS/M**3
      X-COORD (M)   Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)   Y-COORD (M)   CONC   (YYMMDDHH)
      - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      275485.00    4060729.00    252.51311 (02011102)  275743.00    4061255.00    150.71848 (02012520)
      276272.00    4061239.00    105.99519 (02122423)  275586.00    4061193.00    170.75462 (0201303)
      276285.00    4061170.00    87.03300 (02122423)  276826.00    4059345.00    57.68185 (02042804)
      275723.00    4059493.00    275.15594 (02020621)  275517.00    4059743.00    132.62939 (02021001)

```

```
***** AERMOD - VERSION 07026 ****  *** King's River / CMI AERMOD Modeling 2002 Met Data from Fresno  
***** File:CNT02.ADI
```

10/29/07  
04:04:32  
PAGE 28

\*\*\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 8760 HRS ) RESULTS \*\*\*

\*\* CONC OF PM IN MICROGRAMS/M\*\*3

\* \*

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

\* \* \*

DEFAULT ELEV

六

GROUP	ID	NETWORK							
		AVERAGE	CONC	RECEPTOR	(XR, YR, ZHEV,	ZHILL,	ZFLAG)	OF TYPE	GRD-ID
ALL	1ST HIGHEST VALUE IS	104.5	3209 AT (	275900.00,	4060400.00,	0.00,	0.00,	GC	MAIN
	2ND HIGHEST VALUE IS	104.4	4406 AT (	275900.00,	4060300.00,	0.00,	0.00,	GC	MAIN
	3RD HIGHEST VALUE IS	103.4	9942 AT (	275800.00,	4060400.00,	0.00,	0.00,	GC	MAIN
	4TH HIGHEST VALUE IS	101.6	6885 AT (	275800.00,	4060300.00,	0.00,	0.00,	GC	MAIN
	5TH HIGHEST VALUE IS	98.8	7219 AT (	275800.00,	4060500.00,	0.00,	0.00,	GC	MAIN
	6TH HIGHEST VALUE IS	97.3	7489 AT (	275900.00,	4060500.00,	0.00,	0.00,	GC	MAIN
	7TH HIGHEST VALUE IS	94.3	9844 AT (	276000.00,	4060300.00,	0.00,	0.00,	GC	MAIN
	8TH HIGHEST VALUE IS	92.2	44633 AT (	276000.00,	4060400.00,	0.00,	0.00,	GC	MAIN
	9TH HIGHEST VALUE IS	89.0	1448 AT (	275700.00,	4060400.00,	0.00,	0.00,	GC	MAIN
	10TH HIGHEST VALUE IS	87.2	1495 AT (	275700.00,	4060500.00,	0.00,	0.00,	GC	MAIN

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



\*\*\* King's River / CMI AERMOD Modeling 2002 Met Data from Fresno  
\*\*\* File:CMI\_02.ADI

CONC \* \* MODELOP

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

### Summary Of Total Messages

A Total of 0 Fatal Error Message(s)  
A Total of 0 Warning Message(s)  
2615 Informational Message(s)

THE JOURNAL OF CLIMATE

**CAUTION:** Number of Missing Hours Exceeds 10 Percent of Total!  
Data May Not Be Acceptable for Regulatory Applications.  
See Section 5.3.2 of "Meteorological Monitoring Guidance  
for Regulatory Modeling Applications" (EPA-44/R-99-005).

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

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

\*\*\*\*\* AERMOD Finishes Successfully \*\*\*\*\*