APPENDIX H

GENERATING STATION CONSTRUCTION ACTIVITY AIR DISPERSION MODELING INFORMATION

- **Air Dispersion Modeling Results Summary**
- **Construction Emission Estimates**
- **Source Parameters**
- **Modeling Grid Summary**
- **Summary of Air Dispersion Calculations**
- **Windrose Information**
- **Modeling Log**
- **Select ISCST3 Print-Outs**

Construction Air Dispersion Modeling Results Summary
Riverside Energy Resource Center

Description	Time Period	Concentrations ($\mu g/m^3$)		Receptor UTM Coordinates
Run#: RIVERSIDECEC04				
- Construction Emissions	**24-Hour**	16.97202	UTM E	458313.91
- Combustion and Fugitive PM Sources			UTM N	3758175.75
- Area and Volume Sources				
- 24-Hour and Annual	**Annual**	2.33196	UTM E	458360.0
- Actual Emission Rates			UTM N	3758115.8
Run#: RIVERSIDECEC05				
- Construction Emissions	**1-Hour**	1019.81396	UTM E	458283.91
- Combustion NOx Sources			UTM N	3758175.75
- Volume Sources				
- 1-Hour and Annual	**Annual**	16.70348	UTM E	458360.0
- Actual Emission Rates			UTM N	3758145.75
Run#: RIVERSIDECEC06				
- Construction Emissions	**1-Hour**	513.28412	UTM E	458283.19
- Combustion CO Sources			UTM N	3758175.75
- Volume Sources				
- 1-Hour and 8-Hour	**8-Hour**	128.96968	UTM E	458343.91
- Actual Emission Rates			UTM N	3758175.75
Run#: RIVERSIDECEC07				
- Construction Emissions	**1-Hour**	1.01307	UTM E	458283.91
- Combustion SOx Sources			UTM N	3758175.75
- Volume Sources				
- 1-Hour, 3-Hour, and 24-Hour	**3-Hour**	0.67432	UTM E	458283.91
- Actual Emission Rates			UTM N	3758175.75
	24-Hour	0.1115	UTM E	458360.0
			UTM N	3758115.75

Volume & Area Source Modeling Descriptions
Riverside Energy Resource Center

Emission Source	Source ID#	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Elevation
Volume Source #1 Combustion Emissions from Construction Activities	SRC01	6 m	25.1 m	2.8 m	725'
Volume Source #2 Combustion Emissions from Construction Activities	SRC02	6 m	15.3 m	2.8 m	725'
Volume Source #3 Combustion Emissions from Construction Activities	SRC03	6 m	16.2	2.8 m	725'
Volume Source #4 Combustion Emissions from Construction Activities	SRC04	6 m	14.5 m	2.8 m	725'
Volume Source #5 Fugitive Dust from Construction Activities	SRC05	2 m	26 m	1.9 m	725'
Volume Source #6 Fugitive Dust from Construction Activities	SRC06	2 m	15.3 m	0.93 m	725'
Volume Source #7 Fugitive Dust from Construction Activities	SRC07	2 m	16.2 m	0.93 m	725'
Volume Source #8 Fugitive Dust from Construction Activities	SRC08	2 m	14.5 m	0.93 m	725'
Area Source #1 Fugitive Dust from Wind Entrainment - Entire Site Site Area: 52,325.8 m^2	SRC09	0.5 m	n/a	0.0 m	725'

Air Dispersion Modeling Construction Emission Estimates
Riverside Energy Resource Center

PM10 Lb/hr - Daily High

	Area 1	Volume 1	Volume 2	Volume 3	Volume 4	Volume 5	Volume 6	Volume 7	Volume 8	Total
		0.1216	0.1946	0.0973	0.0730	0.0000	0.0000	0.0000	0.0000	0.4864
						0.0467	0.0654	0.0374	0.0374	0.1869
						0.2485	0.4971	0.2485	0.2485	1.2427
						0.0905	0.0452	0.0452	0.0452	0.2262
	0.0036									0.0036
Total (lbs/hr):	0.0036	0.1216	0.1946	0.0973	0.0730	0.3858	0.6078	0.3312	0.3312	2.1459
Total (g/s):	0.0005	0.0153	0.0245	0.0123	0.0092	0.0486	0.0766	0.0417	0.0417	
Total (g/s-m^2)	8.73E-09	-	-	-	-	6.60E-06	1.53E-05	1.99E-05	1.99E-05	

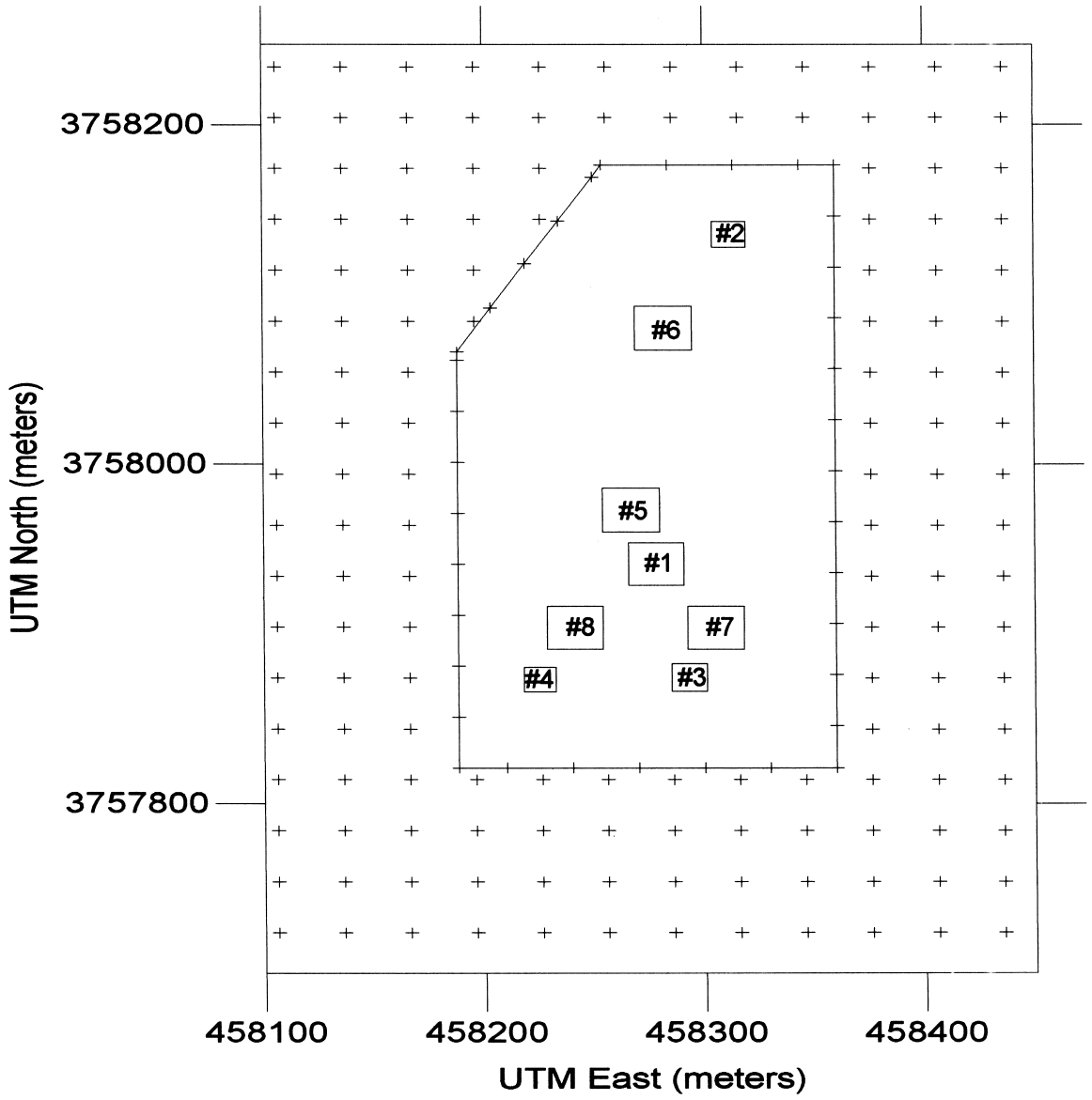
PM10 Lb/hr - Annual Average

	Area 5	Volume 1	Volume 2	Volume 3	Volume 4	Area 1	Area 2	Area 3	Area 4	Total
		0.0122	0.0194	0.0097	0.0073	0.0000	0.0000	0.0000	0.0000	0.0486
						0.0052	0.0072	0.0041	0.0041	0.0207
						0.0090	0.0180	0.0090	0.0090	0.0451
						0.0037	0.0019	0.0019	0.0019	0.0093
	0.0016									0.0016
Total (lbs/hr):	0.0016	0.0122	0.0194	0.0097	0.0073	0.0179	0.0271	0.0150	0.0150	
Total (g/s):	0.0002	0.0015	0.0024	0.0012	0.0009	0.0023	0.0034	0.0019	0.0019	
Total (g/s-m^2)	3.83E-09	-	-	-	-	3.07E-07	6.81E-07	9.02E-07	9.02E-07	-

Criteria Pollutants (lbs/hr)

	Emissions Total (lbs/day)	Emissions Total (lbs/day)	Volume 1	Volume 2	Volume 3	Volume 4	Total
%			25.0	40.0	20.0	15.0	100.0000
NOx	60.30	7.54	1.88	3.02	1.51	1.13	7.54
CO	30.49	3.81	0.95	1.52	0.76	0.57	3.81
VOC	5.60	0.70	0.18	0.28	0.14	0.11	0.70
SOx	0.06	0.008	0.002	0.003	0.002	0.001	0.01

CEC Modeling (Construction Emissions)
Volume Source Locations
Riverside Energy Resource Center



Volume Source #1: Construction Combustion Emissions

Volume Source #2: Construction Combustion Emissions

Volume Source #3: Construction Combustion Emissions

Volume Source #4: Construction Combustion Emissions

Volume Source #5: Construction Fugitive PM Emissions

Volume Source #6: Construction Fugitive PM Emissions

Volume Source #7: Construction Fugitive PM Emissions

Volume Source #8: Construction Fugitive PM Emissions

Modeling Grids
Riverside Energy Resource Center

	Km Out	Spacing	UTME	UTMN
Grid #1	0-2	30 meter	457296	3756943.6
Grid #2	2-5	100 meter	455796	3756943.6
Grid #3	5-10	200 meter	453296	3752943.6

Summary of Air Dispersion Calculations

The basic air dispersion equation used in the model assumes that the concentrations of emissions within a plume can be characterized by a Gaussian distribution as it correlate to the centerline of the plume. Concentrations at any location downwind of a point source such as a stack can be determined from the following equation:

$$C(x,y,z,H) = \left(\frac{Q}{2\pi\sigma_y\sigma_z u}\right) * \left(e^{-1/2(y/\sigma y)^2}\right) * \left[\left\{e^{-1/2(z-H/\sigma z)^2}\right\} + \left\{e^{-1/2(z+H/\sigma z)^2}\right\}\right]$$

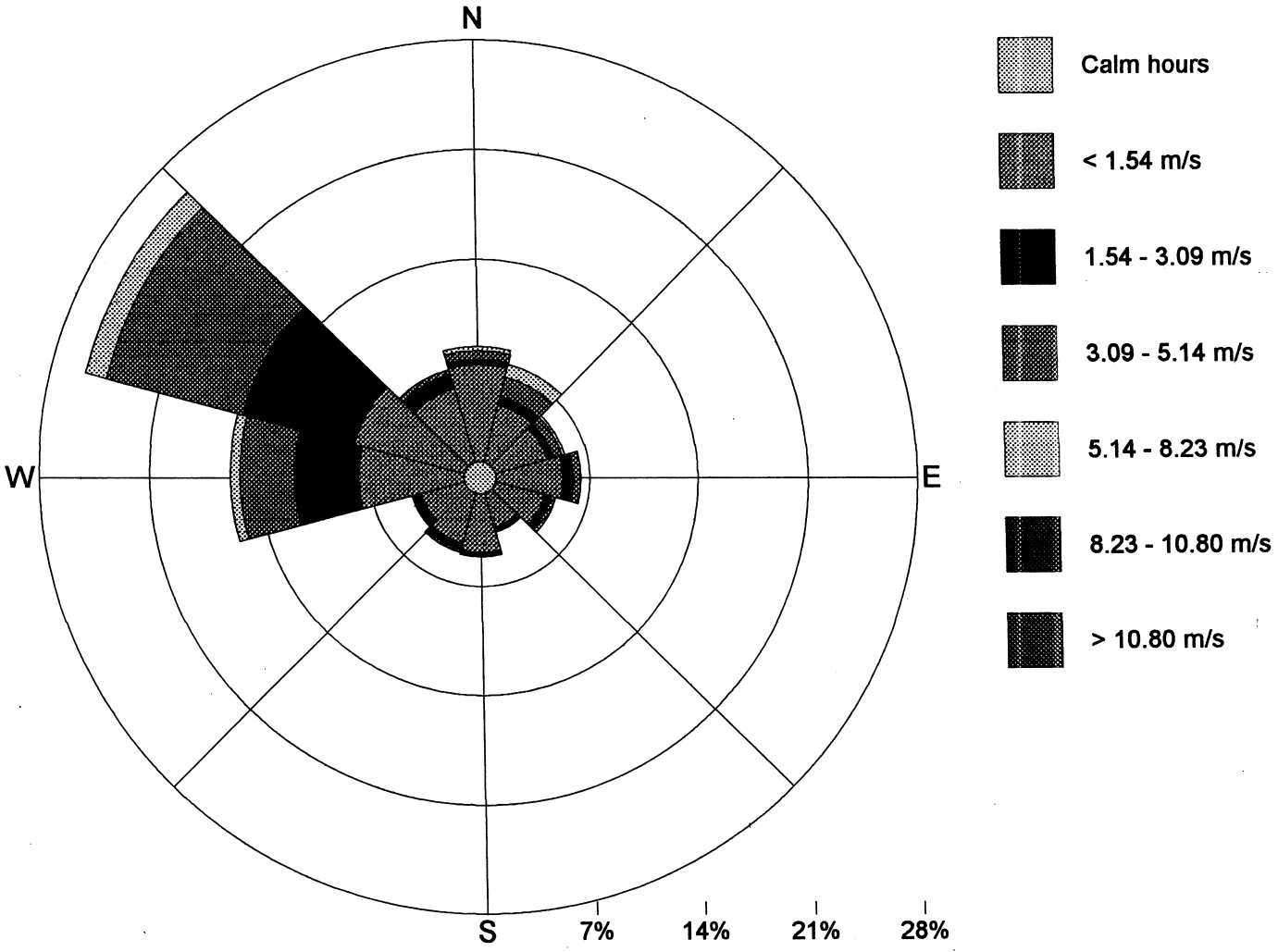
Where:

C	=	The concentration of the subject pollutant in the air.
Q	=	The pollutant emission rate.
$\sigma_y\sigma_z$	=	The horizontal and vertical dispersion coefficients, respectively, at downwind distance x.
u	=	The wind speed at the height of the plume centerline.
x,y,z	=	The variables the define the 3-deminsional Cartesian coordinate system used in the model for receptor grid points; downwind, crosswind, and vertical distances from the base of the stack.
H	=	The height of the plume above the stack base (the sum of the height of the stack and the vertical distance that the plume rises due to the momentum and/or buoyancy of the plume).

The Gaussian dispersion model, which are approved by the USEPA, are based on conservative assumptions (i.e., the model tends to over predict actual impacts by assuming steady-state conditions, no pollutant loss through conservation of mass, no atmospheric chemical reactions, etc.).

Windrose Information
Riverside Energy Resource Center

Surface Station: Riverside, CA
Surface Station #: 54139
Surface Station Year: 1981



Construction Air Dispersion Modeling Log
Riverside Energy Resource Center

Run No.	Run Type	Comments:
Construction Emissions AQIA:		
RIVERSIDECEC04	AQIA Run	Construction Emissions - PM Only Combustion PM and Fugitive PM Emission Sources Both Area and Volume Sources 24-Hour Only
RIVERSIDECEC05	AQIA Run	Construction Emissions - NOx Only Combustion Emission Sources Volume Sources 1-Hour and Annual Only
RIVERSIDECEC06	AQIA Run	Construction Emissions - CO Only Combustion Emission Sources Volume Sources 1-Hour and 8-Hour Only
RIVERSIDECEC07	AQIA Run	Construction Emissions - SOx Only Combustion Emission Sources Volume Sources 1-Hour, 3-Hour, and 24-Hour Only

PM10 Construction Emissions Run


```
                    ISCST3 - (DATED 02035)

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 Run Began on  3/30/2004 at 15:25:39

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RiversideCEC04v.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC Modeling Run #04 (PM Construction Emissions)
 CO MODELOPT  CONC  URBAN  NOCALM  HE>ZI
 CO AVERTIME  24  ANNUAL
 CO POLLUTID  OTHER
 CO TERRHGTS  ELEV
 CO RUNORNOT  RUN
 CO FINISHED

 SO STARTING
 SO ELEVUNIT  METERS
 SO LOCATION  SRC1  VOLUME  458278.2  3757941.3  220.98
 ** SRCDESCR  Volume Source #1
 SO LOCATION  SRC2  VOLUME  458311.8  3758135.0  220.98
 ** SRCDESCR  Volume Source #2
 SO LOCATION  SRC3  VOLUME  458293.2  3757874.3  220.98
 ** SRCDESCR  Volume Source #3
 SO LOCATION  SRC9  AREAPOLY  458199.2  3757835.3  220.98
 ** SRCDESCR  Area Source #1
 SO LOCATION  SRC4  VOLUME  458225.1  3757873.1  226
 ** SRCDESCR  Volume Source #4
 SO LOCATION  SRC5  VOLUME  458267.0  3757973.0  220.98
 ** SRCDESCR  Volume Source #5
 SO LOCATION  SRC6  VOLUME  458282.0  3758080.0  220.98
 ** SRCDESCR  Volume Source #6
 SO LOCATION  SRC7  VOLUME  458305.3  3757903.5  220.98
 ** SRCDESCR  Volume Source #7
 SO LOCATION  SRC8  VOLUME  458241.3  3757903.5  220.98
 ** SRCDESCR  Volume Source #8
 SO SRCPARAM  SRC1  1.532134E-02  6  25.1  2.8
 SO SRCPARAM  SRC2  2.451919E-02  6  15.3  2.8
 SO SRCPARAM  SRC3  1.225960E-02  6  16.2  2.8
 SO SRCPARAM  SRC9  8.730000E-09  0.1    5    0
 SO AREAVERT  SRC9    458199.2  3757835.3  458200.4  3758064.2  458265.1  3758167.1
 SO AREAVERT  SRC9    458343.7  3758167.1  458344.8  3757834.2
 SO SRCPARAM  SRC4  9.197846E-03  6  14.5  2.8
 SO SRCPARAM  SRC5  4.860999E-02  2  26  1.9
 SO SRCPARAM  SRC6  7.658152E-02  2  26  1.9
 SO SRCPARAM  SRC7  5.254112E-03  2  25.5  1.9
 SO SRCPARAM  SRC8  5.254112E-03  2  25.5  1.9
```

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC9 , SRC4 , SRC5 , SRC6 ,
SRC7 , SRC8 ,

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

RANK	CONC	(YYMMDDHH)	AT RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT RECEPTOR (XR,YR)	OF TYPE
1.	✓16.97202	(81042424)	AT (458313.91, 3758175.75)	DC	6.	12.64643	(81022424)	AT (458283.91, 3758175.75)	DC
2.	13.95778	(81122324)	AT (458313.91, 3758175.75)	DC	7.	12.52162	(81102724)	AT (458360.00, 3758145.75)	DC
3.	13.54735	(81030324)	AT (458313.91, 3758175.75)	DC	8.	12.40787	(81042424)	AT (458343.91, 3758175.75)	DC
4.	13.51725	(81102824)	AT (458313.91, 3758175.75)	DC	9.	11.94407	(81041024)	AT (458360.00, 3758055.75)	DC
5.	13.46529	(81022424)	AT (458313.91, 3758175.75)	DC	10.	11.86755	(81110324)	AT (458218.97, 3758117.50)	DC

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

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE SUMMARY OF MAXIMUM ANNUAL (1 YRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	✓2.33196 AT	(458360.00, 3758115.75, 227.09, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	2.25833 AT	(458360.00, 3758085.75, 226.51, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	2.12288 AT	(458360.00, 3758055.75, 226.51, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.96380 AT	(458313.91, 3758175.75, 227.67, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.91711 AT	(458283.91, 3758175.75, 227.49, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.90215 AT	(458218.97, 3758117.50, 228.04, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.87866 AT	(458360.00, 3758145.75, 227.81, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.85422 AT	(458234.38, 3758143.25, 228.28, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.84501 AT	(458203.53, 3758091.75, 228.72, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.81369 AT	(458360.00, 3758025.75, 226.93, 0.00)	DC	NA

Construction Emissions

NOx Run


```
                    ISCST3 - (DATED 02035)

             ISCST3X  PC (32 BIT) VERSION  4.0.0
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 Run Began on  3/30/2004 at 16:01:15

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RiversideCEC05.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC Modeling Run #05 (NOx Construction Emissions)
 CO MODELOPT  CONC  URBAN  NOCALM  HE>ZI
 CO AVERTIME  1  ANNUAL
 CO POLLUTID  OTHER
 CO TERRHGTS  ELEV
 CO RUNORNOT  RUN
 CO FINISHED

 SO STARTING
 SO ELEVUNIT  METERS
 SO LOCATION  SRC1  VOLUME  458278.2  3757941.3  220.98
 ** SRCDESCR  Volume Source #1
 SO LOCATION  SRC2  VOLUME  458311.8  3758142.4  220.98
 ** SRCDESCR  Volume Source #2
 SO LOCATION  SRC3  VOLUME  458293.2  3757874.3  220.98
 ** SRCDESCR  Volume Source #3
 SO LOCATION  SRC4  VOLUME  458225.1  3757873.1  220.98
 ** SRCDESCR  Volume Source #4
 SO SRCPARAM  SRC1  2.368760E-01  6  25.1  2.8
 SO SRCPARAM  SRC2  3.805136E-01  6  15.3  2.8
 SO SRCPARAM  SRC3  1.902568E-01  6  16.2  2.8
 SO SRCPARAM  SRC4  1.423776E-01  6  14.5  2.8
 SO EMISFACT  SRC1  SHRDOW  0.0  0.0  0.0  0.0  0.0  0.0  1.0  1.0  1.0  1.0
```

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	1019.81396	(81110508)	AT	(458283.91, 3758175.75)	DC	6.	993.17792	(81110308)	AT	(458283.91, 3758175.75)	DC
2.	1012.06360	(81050707)	AT	(458283.91, 3758175.75)	DC	7.	974.04681	(81010808)	AT	(458283.91, 3758175.75)	DC
3.	1007.65491	(81020607)	AT	(458283.91, 3758175.75)	DC	8.	961.12347	(81100507)	AT	(458283.91, 3758175.75)	DC
4.	1006.51685	(81090907)	AT	(458283.91, 3758175.75)	DC	9.	955.07416	(81012207)	AT	(458283.91, 3758175.75)	DC
5.	1006.34204	(81032707)	AT	(458283.91, 3758175.75)	DC	10.	944.63617	(81122407)	AT	(458283.91, 3758175.75)	DC

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

Distance To #1 Receptor : < 200 meters

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE SUMMARY OF MAXIMUM ANNUAL (1 YRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	16.70348 AT	(458360.00, 3758145.75, 227.81, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	14.36479 AT	(458360.00, 3758115.75, 227.09, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	14.12903 AT	(458283.91, 3758175.75, 227.49, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	13.08956 AT	(458343.91, 3758175.75, 227.12, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	11.33790 AT	(458376.00, 3758143.50, 225.86, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	10.20497 AT	(458376.00, 3758113.50, 225.70, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	9.78952 AT	(458188.09, 3757881.00, 225.15, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	9.77938 AT	(458360.00, 3758175.75, 226.55, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	9.63751 AT	(458316.00, 3758203.50, 223.99, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	8.83336 AT	(458249.84, 3758169.00, 226.69, 0.00)	DC	NA

Construction Emissions

CO Run


```
                    ISCST3 - (DATED 02035)

             ISCST3X  PC (32 BIT) VERSION  4.0.0
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 Run Began on  3/30/2004 at 16:20:44

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RiversideCEC06.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC Modeling Run #06 (CO Construction Emissions)
 CO MODELOPT  CONC  URBAN  NOCALM  HE>ZI
 CO AVERTIME  1  8
 CO POLLUTID  OTHER
 CO TERRHGTS  ELEV
 CO RUNORNOT  RUN
 CO FINISHED

 SO STARTING
 SO ELEVUNIT  METERS
 SO LOCATION  SRC1  VOLUME  458278.2  3757941.3  220.98
 ** SRCDESCR  Volume Source #1
 SO LOCATION  SRC2  VOLUME  458311.8  3758142.4  220.98
 ** SRCDESCR  Volume Source #2
 SO LOCATION  SRC3  VOLUME  458293.2  3757874.3  220.98
 ** SRCDESCR  Volume Source #3
 SO LOCATION  SRC4  VOLUME  458225.1  3757873.1  220.98
 ** SRCDESCR  Volume Source #4
 SO SRCPARAM  SRC1  1.196980E-01  6  25.1  2.8
 SO SRCPARAM  SRC2  1.915168E-01  6  15.3  2.8
 SO SRCPARAM  SRC3  9.575839E-02  6  16.2  2.8
 SO SRCPARAM  SRC4  7.181880E-02  6  14.5  2.8
 SO EMISFACT  SRC1  SHRDOW  0.0  0.0  0.0  0.0  0.0  0.0  1.0  1.0  1.0  1.0
```

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	513.28412	(81110508)	AT	(458283.91, 3758175.75)	DC	6.	499.87769	(81110308)	AT	(458283.91, 3758175.75)	DC
2.	509.38397	(81050707)	AT	(458283.91, 3758175.75)	DC	7.	490.24878	(81010808)	AT	(458283.91, 3758175.75)	DC
3.	507.16415	(81020607)	AT	(458283.91, 3758175.75)	DC	8.	483.74921	(81100507)	AT	(458283.91, 3758175.75)	DC
4.	506.59256	(81090907)	AT	(458283.91, 3758175.75)	DC	9.	480.70517	(81012207)	AT	(458283.91, 3758175.75)	DC
5.	506.50461	(81032707)	AT	(458283.91, 3758175.75)	DC	10.	475.44608	(81122407)	AT	(458283.91, 3758175.75)	DC

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

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	128.96968	(81102716)	AT	(458343.91, 3758175.75)	DC	6.	102.47556	(81090908)	AT	(458283.91, 3758175.75)	DC
2.	123.39154	(81041016)	AT	(458360.00, 3758115.75)	DC	7.	101.10373	(81111316)	AT	(458360.00, 3758145.75)	DC
3.	118.84556	(81042416)	AT	(458343.91, 3758175.75)	DC	8.	100.95726	(81010916)	AT	(458283.91, 3758175.75)	DC
4.	103.97836	(81102716)	AT	(458360.00, 3758145.75)	DC	9.	100.44048	(81021116)	AT	(458360.00, 3758115.75)	DC
5.	102.74536	(81122308)	AT	(458343.91, 3758175.75)	DC	10.	100.30627	(81102716)	AT	(458360.00, 3758175.75)	DC

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

ISCST3 - (DATED 02035)

ISCST3X PC (32 BIT) VERSION 4.0.0
(C) COPYRIGHT 1991-2002, Trinity Consultants

Construction Emissions

SOx Run

```
Run Began on  3/30/2004 at 16:28:19

** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RiversideCEC07.dat
** Trinity Consultants


CO STARTING
CO TITLEONE  Riverside ERC
CO TITLETWO  CEC Modeling Run #07 (SOx Construction Emissions)
CO MODELOPT  CONC  URBAN  NOCALM  HE>ZI
CO AVERTIME  1  3  24
CO POLLUTID  OTHER
CO TERRHGTS  ELEV
CO RUNORNOT  RUN
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
SO LOCATION  SRC1  VOLUME  458278.2  3757941.3  220.98
** SRCDESCR  Volume Source #1
SO LOCATION  SRC2  VOLUME  458311.8  3758142.4  220.98
** SRCDESCR  Volume Source #2
SO LOCATION  SRC3  VOLUME  458293.2  3757874.3  220.98
** SRCDESCR  Volume Source #3
SO LOCATION  SRC4  VOLUME  458225.1  3757873.1  220.98
** SRCDESCR  Volume Source #4
SO SRCPARAM  SRC1  2.519958E-04  6  25.1  2.8
SO SRCPARAM  SRC2  3.779937E-04  6  15.3  2.8
SO SRCPARAM  SRC3  2.519958E-04  6  16.2  2.8
SO SRCPARAM  SRC4  1.259979E-04  6  14.5  2.8
SO EMISFACT  SRC1  SHRDOW  0.0  0.0  0.0  0.0  0.0  0.0  1.0  1.0  1.0  1.0
```

**MODELOPTs:
CONC URBAN ELEV NOCALM

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	✓1.01307	(81110508)	AT	(458283.91, 3758175.75)	DC	6.	0.98660	(81110308)	AT	(458283.91, 3758175.75)	DC
2.	1.00540	(81050707)	AT	(458283.91, 3758175.75)	DC	7.	0.96760	(81010808)	AT	(458283.91, 3758175.75)	DC
3.	1.00098	(81020607)	AT	(458283.91, 3758175.75)	DC	8.	0.95502	(81100507)	AT	(458283.91, 3758175.75)	DC
4.	0.99990	(81090907)	AT	(458283.91, 3758175.75)	DC	9.	0.94905	(81012207)	AT	(458283.91, 3758175.75)	DC
5.	0.99973	(81032707)	AT	(458283.91, 3758175.75)	DC	10.	0.93838	(81122407)	AT	(458283.91, 3758175.75)	DC

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

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	✓0.67432	(81010809)	AT	(458283.91, 3758175.75)	DC	6.	0.54645	(81122909)	AT	(458283.91, 3758175.75)	DC
2.	0.59823	(81101609)	AT	(458283.91, 3758175.75)	DC	7.	0.53937	(81090909)	AT	(458283.91, 3758175.75)	DC
3.	0.57323	(81110909)	AT	(458283.91, 3758175.75)	DC	8.	0.53343	(81110309)	AT	(458283.91, 3758175.75)	DC
4.	0.55268	(81022309)	AT	(458188.09, 3757881.00)	DC	9.	0.52658	(81112309)	AT	(458188.09, 3757881.00)	DC
5.	0.54823	(81122309)	AT	(458343.91, 3758175.75)	DC	10.	0.52542	(81121809)	AT	(458188.09, 3757881.00)	DC

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

**MODELOPTs:
CONC URBAN ELEV NOCALM HE>ZI

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 ,

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

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	✓0.11150	(81041024)	AT	(458360.00, 3758115.75)	DC	6.	0.09125	(81122424)	AT	(458283.91, 3758175.75)	DC
2.	0.10810	(81102724)	AT	(458343.91, 3758175.75)	DC	7.	0.09037	(81040224)	AT	(458360.00, 3758115.75)	DC
3.	0.09600	(81042424)	AT	(458343.91, 3758175.75)	DC	8.	0.09033	(81042024)	AT	(458360.00, 3758145.75)	DC
4.	0.09570	(81110324)	AT	(458283.91, 3758175.75)	DC	9.	0.08784	(81010824)	AT	(458283.91, 3758175.75)	DC
5.	0.09360	(81041724)	AT	(458360.00, 3758145.75)	DC	10.	0.08732	(81021024)	AT	(458283.91, 3758175.75)	DC