APPENDIX J

GENERATING STATION CONSTRUCTION AND STATIONARY SOURCE HEALTH RISK ASSESSMENTS

- **Generating Station Emissions Health Risk Assessment Results Summary**
- **Construction Emissions Health Risk Assessment Results Summary**
- **HARP Output Files**
- **Summary of Health Risk Assessment Calculations**
- **MEI Receptor Plot Diagrams**
- **HRA Air Dispersion Modeling Results Summary**
- **Source Parameters**
- **Building Parameters**
- **Modeling Grid Parameters**
- **Windrose Information**
- **HRA Air Dispersion Modeling Log**
- **Select ISCST3 Print-Outs**

Generating Station Health Risk Analysis Summary
Maximally Exposed Individual (MEI)

Facility Information:

Riverside ERC

Health Risk Analysis Results:

Description	MICR	Chronic HI	Acute HI
Turbine Dominated MEI			
1-Hour	-	-	0.00596
Annual	3.74×10^{8}	0.00261	-
Cooling Tower Dominated MEI			
1-Hour	-	-	0.000232
Annual	1.83×10^{7}	0.000282	-

Construction Emissions Health Risk Analysis Summary
Maximally Exposed Individual (MEI)

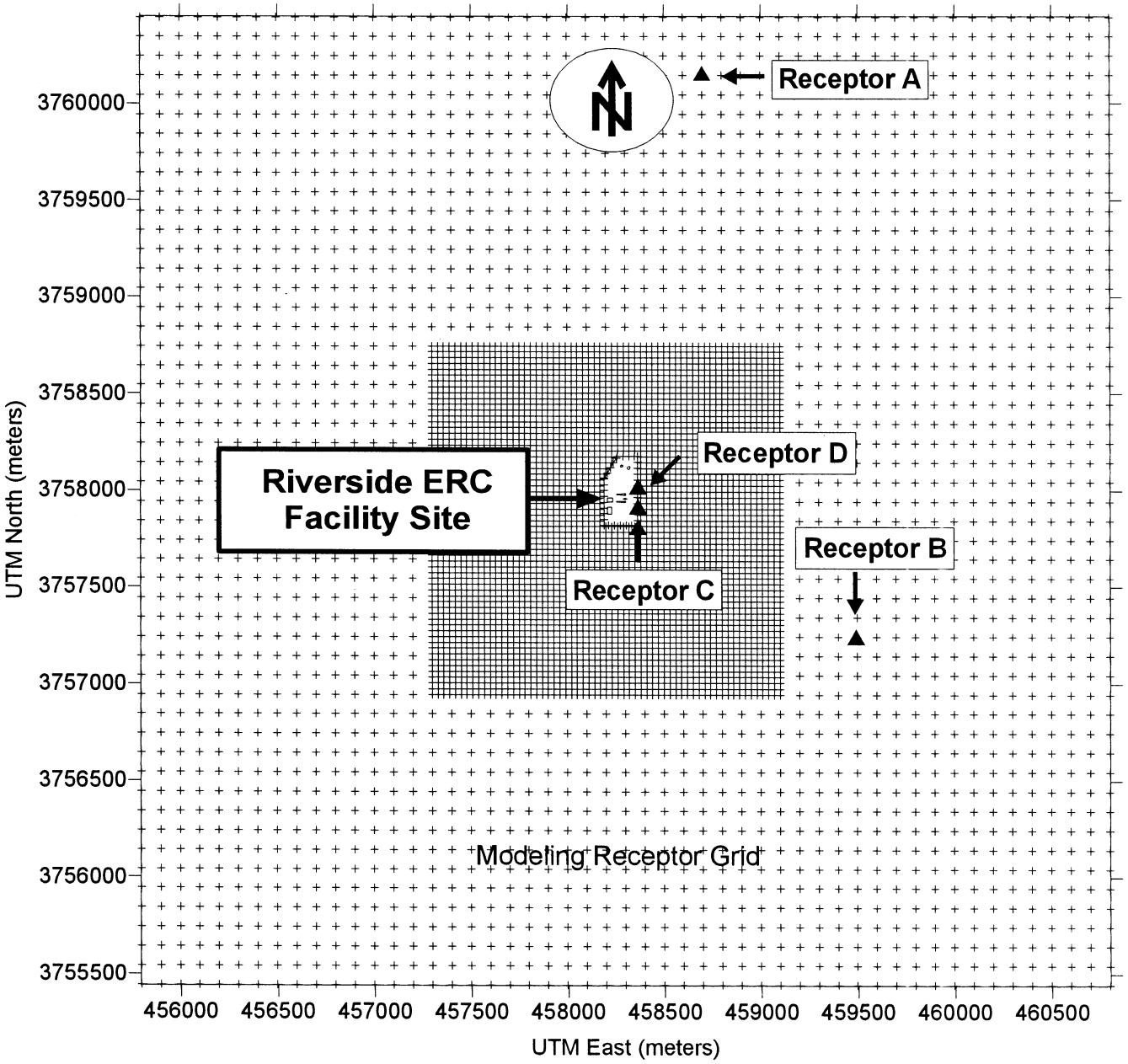
Facility Information:

Riverside ERC

Health Risk Analysis Results:

Description	MICR	Chronic HI	Acute HI
Construction Emissions MEI			
1-Hour	-	-	-
Annual	6.22×10^{7}	0.00215	-

CEC HRA Modeling Run (Generating Station)
MEI Receptors
Riverside Energy Resource Center



Receptor A - Turbine Dominated Acute MEI

Receptor B - Turbine Dominated MICR and Chronic MEI

Receptor C - Cooling Tower Dominated Acute MEI

Receptor D - Cooling Tower Dominated MICR and Chronic MEI

CEC HRA Modeling Run (Construction Emissions)
MEI Receptors
Riverside Energy Resource Center

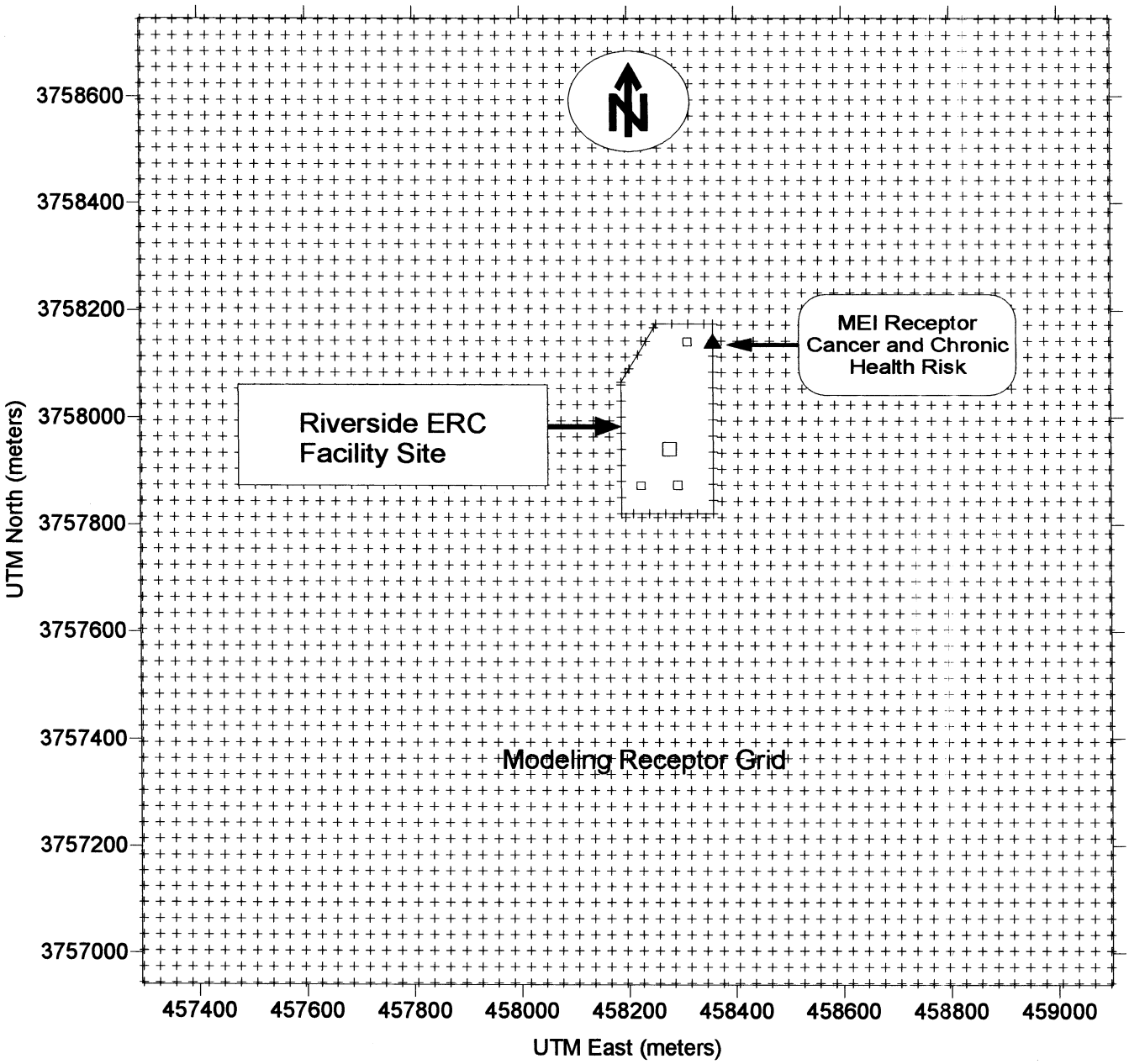


Table 2
Adjusted Down-Wind Toxic Emission Estimates - Turbine Dominated MEI
Maximally Exposed Individual (MEI)

Facility Information:

Riverside ERC
Turbine Dominated MEI

Modeling Parameters (Turbines): (@ 1 g/s):

Normalized X/Q ($\mu g/m^3$)/(annual)	Normalized X/Q ($\mu g/m^3$)/(hourly)	MET	LEA
0.24320	5.82660	1	1.00

Toxic Emissions Information (Turbines):

Compound	Emissions (all turbines) (lb/hr)	(lb/yr)	(ton/yr)	(g/sec)	X/Q ($\mu g/m^3$)/(annual)	X/Q ($\mu g/m^3$)/(hourly)
Acetaldehyde	5.91E-03	7.68E+00	3.84E-03	7.44E-04	1.81E-04	4.34E-03
Acrolein	9.35E-04	1.22E+00	6.08E-04	1.18E-04	2.87E-05	6.87E-04
Ammonia	6.65E+00	8.65E+03	4.32E+00	8.38E-01	2.04E-01	4.88E+00
Benzene	1.73E-03	2.25E+00	1.12E-03	2.18E-04	5.30E-05	1.27E-03
Butadiene (1,3)	6.31E-05	8.21E-02	4.10E-05	7.95E-06	1.93E-06	4.63E-05
Ethylbenzene	4.71E-03	6.13E+00	3.06E-03	5.94E-04	1.44E-04	3.46E-03
Formaldehyde	1.04E-01	1.35E+02	6.77E-02	1.31E-02	3.19E-03	7.65E-02
Hexane	3.73E-02	4.85E+01	2.43E-02	4.70E-03	1.14E-03	2.74E-02
Napthelene	1.87E-04	2.44E-01	1.22E-04	2.36E-05	5.74E-06	1.38E-04
PAH'S	3.27E-04	4.25E-01	2.13E-04	4.12E-05	1.00E-05	2.40E-04
Propylene	2.88E-01	3.75E+02	1.87E-01	3.63E-02	8.83E-03	2.12E-01
Propylene Oxide	6.89E-03	8.96E+00	4.48E-03	8.68E-04	2.11E-04	5.06E-03
Toluene	1.97E-02	2.57E+01	1.28E-02	2.49E-03	6.05E-04	1.45E-02
Xylene	9.37E-03	1.22E+01	6.09E-03	1.18E-03	2.87E-04	6.88E-03

Modeling Parameters (Cooling Towers @ Turbine MEI): (@ 1 g/s):

Normalized X/Q ($\mu g/m^3$)/(annual)	Normalized X/Q ($\mu g/m^3$)/(hourly)	MET	LEA
2.14582	8.17253	1	1.00

Toxic Emissions Information (Cooling Towers):

Compound	Emissions (total) (lb/hr)	(lb/yr)	(ton/yr)	(g/sec)	X/Q ($\mu g/m^3$)/(annual)	X/Q ($\mu g/m^3$)/(hourly)
Arsenic	5.04E-07	6.55E-04	3.27E-07	6.34E-08	1.36E-07	5.18E-07
Cadmium	8.39E-08	1.09E-04	5.45E-08	1.06E-08	2.27E-08	8.64E-08
Chloride	5.62E-06	7.31E-03	3.65E-06	7.08E-07	1.52E-06	5.79E-06
Chromium	4.20E-07	5.45E-04	2.73E-07	5.29E-08	1.13E-07	4.32E-07
Chromium (hexavalent)	1.40E-07	1.82E-04	9.09E-08	1.76E-08	3.78E-08	1.44E-07
Copper	2.27E-06	2.95E-03	1.47E-06	2.85E-07	6.12E-07	2.33E-06
Dichloroethene	3.64E-07	4.73E-04	2.36E-07	4.58E-08	9.83E-08	3.74E-07
Lead	3.36E-07	4.36E-04	2.18E-07	4.23E-08	9.07E-08	3.46E-07
Manganese	1.51E-06	1.96E-03	9.82E-07	1.90E-07	4.08E-07	1.56E-06
Nickel	4.20E-07	5.45E-04	2.73E-07	5.29E-08	1.13E-07	4.32E-07
Trichloroethene	2.80E-07	3.64E-04	1.82E-07	3.52E-08	7.56E-08	2.88E-07
Zinc	8.98E-06	1.17E-02	5.84E-06	1.13E-06	2.43E-06	9.24E-06

Note: Concentration were derived from the turbine doinated MEI receptor locations.

Table 3
Adjusted Down-Wind Toxic Emission Estimates - Cooling Tower Dominated MEI
Maximally Exposed Individual (MEI)

Facility Information:

Riverside ERC
Cooling Tower Dominated MEI

Modeling Parameters (Cooling Tower): (@ 1 g/s):

Normalized X/Q ($\mu g/m^3$)/(annual)	Normalized X/Q ($\mu g/m^3$)/(hourly)	MET	LEA
48.62681	693.13513	1	1.00

Toxic Emissions Information (Cooling Tower):

Compound	Emissions (total) (lb/hr)	(lb/yr)	(ton/yr)	(g/sec)	X/Q ($\mu g/m^3$)/(annual)	X/Q ($\mu g/m^3$)/(hourly)
Arsenic	5.04E-07	6.55E-04	3.27E-07	6.34E-08	3.08E-06	4.40E-05
Cadmium	8.39E-08	1.09E-04	5.45E-08	1.06E-08	5.14E-07	7.33E-06
Chloride	5.62E-06	7.31E-03	3.65E-06	7.08E-07	3.44E-05	4.91E-04
Chromium	4.20E-07	5.45E-04	2.73E-07	5.29E-08	2.57E-06	3.66E-05
Chromium (hexavalent)	1.40E-07	1.82E-04	9.09E-08	1.76E-08	8.57E-07	1.22E-05
Copper	2.27E-06	2.95E-03	1.47E-06	2.85E-07	1.39E-05	1.98E-04
Dichloroethene	3.64E-07	4.73E-04	2.36E-07	4.58E-08	2.23E-06	3.18E-05
Lead	3.36E-07	4.36E-04	2.18E-07	4.23E-08	2.06E-06	2.93E-05
Manganese	1.51E-06	1.96E-03	9.82E-07	1.90E-07	9.25E-06	1.32E-04
Nickel	4.20E-07	5.45E-04	2.73E-07	5.29E-08	2.57E-06	3.66E-05
Trichloroethene	2.80E-07	3.64E-04	1.82E-07	3.52E-08	1.71E-06	2.44E-05
Zinc	8.98E-06	1.17E-02	5.84E-06	1.13E-06	5.50E-05	7.84E-04

Modeling Parameters (Turbines @ Cooling Tower MEI): (@ 1 g/s):

Normalized X/Q ($\mu g/m^3$)/(annual)	Normalized X/Q ($\mu g/m^3$)/(hourly)	MET	LEA
0.00200	0.04143	1	1.00

Toxic Emissions Information (Turbines):

Compound	Emissions (all turbines) (lb/hr)	(lb/yr)	(ton/yr)	(g/sec)	X/Q ($\mu g/m^3$)/(annual)	X/Q ($\mu g/m^3$)/(hourly)
Acetaldehyde	5.91E-03	7.68E+00	3.84E-03	7.44E-04	1.49E-06	3.08E-05
Acrolein	9.35E-04	1.22E+00	6.08E-04	1.18E-04	2.36E-07	4.88E-06
Ammonia	6.65E+00	8.65E+03	4.32E+00	8.38E-01	1.68E-03	3.47E-02
Benzene	1.73E-03	2.25E+00	1.12E-03	2.18E-04	4.36E-07	9.03E-06
Butadiene (1,3)	6.31E-05	8.21E-02	4.10E-05	7.95E-06	1.59E-08	3.29E-07
Ethylbenzene	4.71E-03	6.13E+00	3.06E-03	5.94E-04	1.19E-06	2.46E-05
Formaldehyde	1.04E-01	1.35E+02	6.77E-02	1.31E-02	2.63E-05	5.44E-04
Hexane	3.73E-02	4.85E+01	2.43E-02	4.70E-03	9.40E-06	1.95E-04
Napthelene	1.87E-04	2.44E-01	1.22E-04	2.36E-05	4.72E-08	9.78E-07
PAH'S	3.27E-04	4.25E-01	2.13E-04	4.12E-05	8.24E-08	1.71E-06
Propylene	2.88E-01	3.75E+02	1.87E-01	3.63E-02	7.26E-05	1.50E-03
Propylene Oxide	6.89E-03	8.96E+00	4.48E-03	8.68E-04	1.74E-06	3.60E-05
Toluene	1.97E-02	2.57E+01	1.28E-02	2.49E-03	4.97E-06	1.03E-04
Xylene	9.37E-03	1.22E+01	6.09E-03	1.18E-03	2.36E-06	4.89E-05

Note: Concentration were derived from the turbine doinated MEI receptor locations.

Toxic Emission Estimates and Health Risk Assessment Information
Maximally Exposed Individual (MEI)

Facility Information:

Riverside ERC

Equipment Information (per turbine):

Unit	Rating MMBTU	Load (%)	Hrs/Yr	Fuel (cfh)	Fuel (MMcfh)
Turbine	490	100	1300	480392	0.48039

Equipment Information (per cooling tower):

Unit	Rating (gpm)	Drift Rate (%)	TDS (ppm)	Hrs/Yr
Cooling Tower	5590	0.001	-	1300

Number of Turbines: 2

Turbine Toxic Emissions Information:

Compound	Factor (lb/MMcf)	Control Efficiency (%)	Emissions (per turbine) (lb/hr)	(lb/yr)	(tons/yr)	Emissions (total) (lb/hr)	(lb/yr)	(tons/yr)	Emission Factor Source
Acetaldehyde	4.10E-02	85%	2.95E-03	3.84E+00	1.92E-03	5.91E-03	7.68E+00	3.84E-03	AP-42
Acrolein	6.49E-03	85%	4.68E-04	6.08E-01	3.04E-04	9.35E-04	1.22E+00	6.08E-04	AP-42
Ammonia	7.12	-	3.33E+00	4.32E+03	2.16E+00	6.65E+00	8.65E+03	4.32E+00	Manufacturer
Benzene	1.20E-02	85%	8.65E-04	1.12E+00	5.62E-04	1.73E-03	2.25E+00	1.12E-03	AP-42
Butadiene (1,3)	4.38E-04	85%	3.16E-05	4.10E-02	2.05E-05	6.31E-05	8.21E-02	4.10E-05	AP-42
Ethylbenzene	3.27E-02	85%	2.36E-03	3.06E+00	1.53E-03	4.71E-03	6.13E+00	3.06E-03	AP-42
Formaldehyde	7.23E-01	85%	5.21E-02	6.77E+01	3.39E-02	1.04E-01	1.35E+02	6.77E-02	AP-42
Hexane	2.59E-01	85%	1.87E-02	2.43E+01	1.21E-02	3.73E-02	4.85E+01	2.43E-02	CATEF
Napthalene	1.30E-03	85%	9.37E-05	1.22E-01	6.09E-05	1.87E-04	2.44E-01	1.22E-04	AP-42
PAH'S (No Napthalene)	2.27E-03	85%	1.64E-04	2.13E-01	1.06E-04	3.27E-04	4.25E-01	2.13E-04	AP-42
Propylene	2.00E+00	85%	1.44E-01	1.87E+02	9.37E-02	2.88E-01	3.75E+02	1.87E-01	CATEF
Propylene Oxide	4.78E-02	85%	3.44E-03	4.48E+00	2.24E-03	6.89E-03	8.96E+00	4.48E-03	CATEF
Toluene	1.37E-01	85%	9.87E-03	1.28E+01	6.42E-03	1.97E-02	2.57E+01	1.28E-02	AP-42
Xylene	6.50E-02	85%	4.68E-03	6.09E+00	3.04E-03	9.37E-03	1.22E+01	6.09E-03	AP-42

Number of Cooling Tower: 1 **(3 Cells Combined)**

Cooling Tower Toxic Emissions Information:

Compound	Concentration (ppmW)	Drift Rate (%)	Emissions (per tower) (lb/hr)	(lb/yr)	(tons/yr)	Emissions (total) (lb/hr)	(lb/yr)	(tons/yr)	Emission Factor Source
Arsenic	0.018	0.001	5.04E-07	6.55E-04	3.27E-07	5.04E-07	6.55E-04	3.27E-07	Typical Analysis
Cadmium	0.003	0.001	8.39E-08	1.09E-04	5.45E-08	8.39E-08	1.09E-04	5.45E-08	Typical Analysis
Chloride	0.201	0.001	5.62E-06	7.31E-03	3.65E-06	5.62E-06	7.31E-03	3.65E-06	Typical Analysis
Chromium	0.015	0.001	4.20E-07	5.45E-04	2.73E-07	4.20E-07	5.45E-04	2.73E-07	Typical Analysis
Chromium (hexavalent)	0.005	0.001	1.40E-07	1.82E-04	9.09E-08	1.40E-07	1.82E-04	9.09E-08	Typical Analysis
Copper	0.081	0.001	2.27E-06	2.95E-03	1.47E-06	2.27E-06	2.95E-03	1.47E-06	Typical Analysis
Dichloroethene	0.013	0.001	3.64E-07	4.73E-04	2.36E-07	3.64E-07	4.73E-04	2.36E-07	Typical Analysis
Lead	0.012	0.001	3.36E-07	4.36E-04	2.18E-07	3.36E-07	4.36E-04	2.18E-07	Typical Analysis
Manganese	0.054	0.001	1.51E-06	1.96E-03	9.82E-07	1.51E-06	1.96E-03	9.82E-07	Typical Analysis
Nickel	0.015	0.001	4.20E-07	5.45E-04	2.73E-07	4.20E-07	5.45E-04	2.73E-07	Typical Analysis
Trichloroethene	0.010	0.001	2.80E-07	3.64E-04	1.82E-07	2.80E-07	3.64E-04	1.82E-07	Typical Analysis
Zinc	0.321	0.001	8.98E-06	1.17E-02	5.84E-06	8.98E-06	1.17E-02	5.84E-06	Typical Analysis

Notes:

- Emission Factor Source - US EPA AP-42, July 2000, Section 3.2 (Based on 1020 HHV) and CalARB CATEF.
- Spreadsheet Revised 2/01/04
- PAH includes speciated compounds except naphthalene.

Summary of Health Risk Assessment Calculations

Parameter	
MICR	MICR = Qsd x X/Q x U x MP x LEA Where: MICR - Maximum Individual Cancer Risk Qsd - Pollutant emission rate (grams/second) U - Unit Risk Factor (from SCAQMD Guidelines) MP - Multi Pathway Adjustment Factor (from SCAQMD Guidelines) LEA - Lifetime Exposure Adjustment Factor (from SCAQMD Guidelines)
HIC	HIC = (Σ (Modeled $Impact_{MAX}$ x MP) / $Chronic_{REL}$) Where: HIC - Chronic Hazard Index Modeled $Impact_{MAX}$ - Maximum modeled concentrations ($\mu g/m^3$) MP - Multi Pathway Adjustment Factor (from SCAQMD Guidelines) $Chronic_{REL}$ - Chronic Reference Exposure Level ($\mu g/m^3$) - (from SCAQMD Guidelines)
HIA	HIA = (Σ (Modeled $Impact_{MAX}$) / $Chronic_{REL}$) Where: HIA - Acute Hazard Index Modeled $Impact_{MAX}$ - Maximum modeled concentrations ($\mu g/m^3$) $Acute_{REL}$ - Acute Reference Exposure Level ($\mu g/m^3$) - (from SCAQMD Guidelines)

Construction Toxic Emission Estimates - Combustion Emissions
Riverside Energy Resource Center

PM10 Lb/hr - Daily High

	Area 1	Volume 1	Volume 2	Volume 3	Volume 4
		0.1216	0.1946	0.0973	0.0730
	0.0036				
Total (lbs/hr):	0.0036	0.1216	0.1946	0.0973	0.0730
Total (g/s):	0.0005	0.0153	0.0245	0.0123	0.0092
Total (g/s-m^2)	8.73E-09	-	-	-	-

PM10 Lb/hr - Annual Average

	Area 5	Volume 1	Volume 2	Volume 3	Volume 4
		0.0122	0.0194	0.0097	0.0073
	0.0016				
Total (lbs/hr):	0.0016	0.0122	0.0194	0.0097	0.0073
Total (g/s):	0.0002	0.0015	0.0024	0.0012	0.0009
Total (g/s-m^2)	3.83E-09	-	-	-	-

Revised HRA Air Dispersion Modeling Results Summary
Riverside Energy Resource Center

Description	Time Period	Maximum Concentrations (mg/m^3)		Receptor UTM Coordinates
Run#: RERCCEHRA01b	1-Hour	5.8266	UTM E	458796
			UTM N	3760343.5
- Generating Station Emissions				
- Gas Turbines Only	Annual	0.2432	UTM E	4459496.0
- (mg/m^3 @ 1.00 g/s)			UTM N	3757443.5
Run#: RERCCEHRA02b	1-Hour	693.13513	UTM E	458360.0
			UTM N	3757995.75
- Generating Station Emissions				
- Cooling Tower Only	Annual	48.62681	UTM E	458360.0
- (mg/m^3 @ 1.00 g/s)			UTM N	3757935.75
Run#: RERCCEHRA03b & RERCHRA03b2	1-Hour (03b)	0.04143	UTM E	458360.0
			UTM N	3757995.75
- Generating Station Emissions				
- Turbines Only w/ Cooling Tower MEI	Annual (03b2)	0.00200	UTM E	458360.0
			UTM N	3757935.75
Run#: RERCCEHRA04b & RERCHRA04b2	1-Hour (04b)	8.17253	UTM E	458696.00
			UTM N	3760243.5
- Generating Station Emissions				
- Cooling Tower Running w/ Turbine MEI	Annual (04b2)	2.14582	UTM E	459496.0
			UTM N	3757443.5
Run#: RERCCEHRA05	1-Hour	n/a	UTM E	-
			UTM N	-
- Construction Emissions				
- Combustion Emissions, Volume Sources	Annual	0.10734	UTM E	458360.0

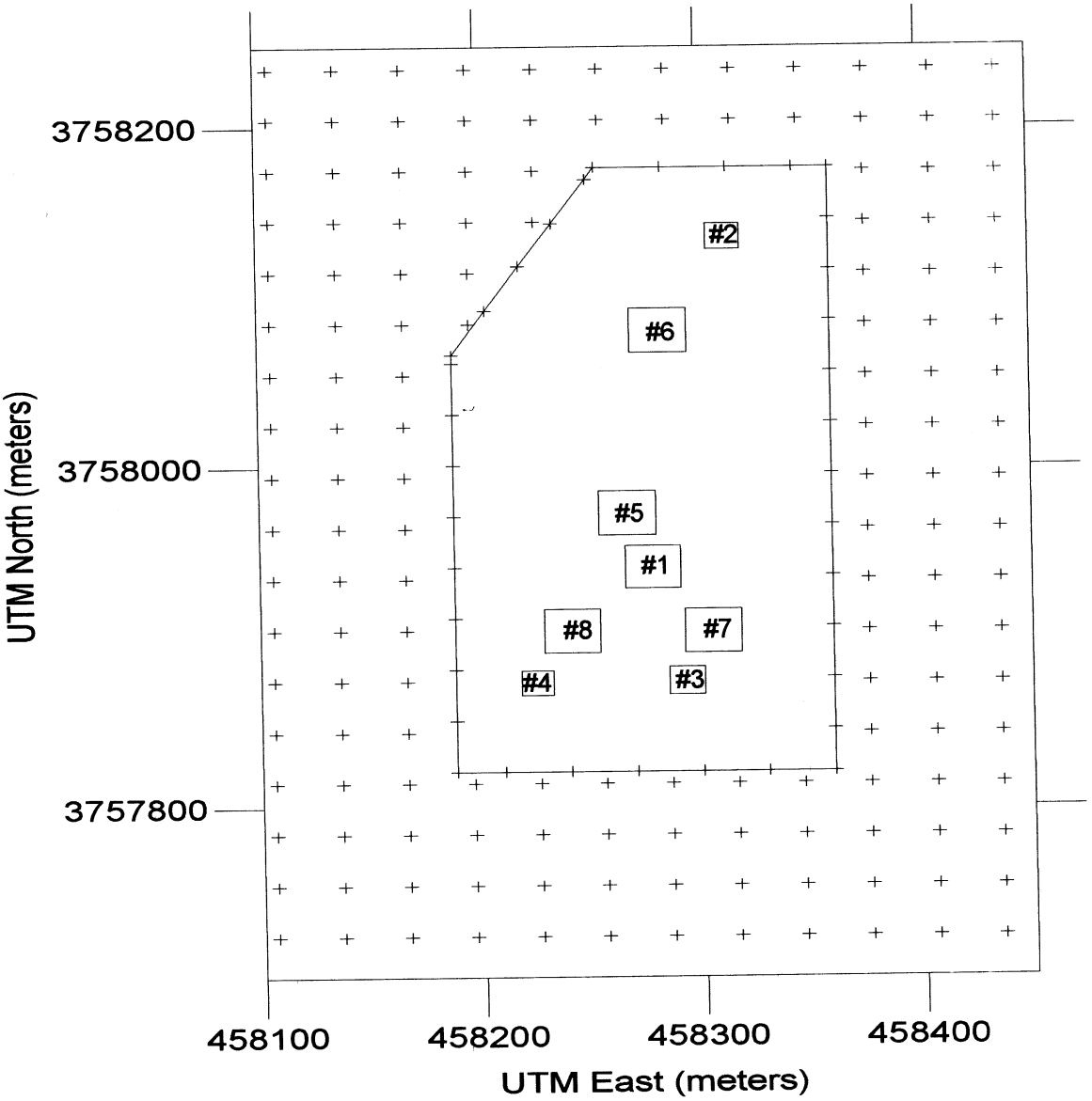
Revised Point Source Parameters
Riverside ERC

Description	Turbine 1	Turbine 2	Cooling Tower
UTM E (m)	458296	458296	458296 (Cell #1)
UTM N (m)	3757943.6	3757980.1	3757958.6
Elevation (ft)	725	725	725
Height (ft)	80	80	18.3
Diameter (ft)	13	13	13
Temperature (F)	830	830	90
Flow Rate (acfm)	575520	575520	613000 (204,333 / cell)

Building Coordinates
Riverside Energy Resource Center

	UTME	UTMN	Length	Width	Height	Dia.	Elevation
Admin/Control Room	458204.6	3757879.6	114'	66'	30'	n/a	725'
Warehouse	458204.6	3757879.6	60'	84'	35'	n/a	725'
Tank	458277.7	3758126.4	n/a	n/a	30'	40'	725'
Fire Water Tank	458314.3	3758117.3	n/a	n/a	40'	48'	725'
Cooling Tower Building	458285.8	3757956.3	71.7	13.9	18.3	n/a	725'
Turbine Building 1a	458251.6	3757941.8	90'	15'	25'	n/a	725'
Turbine Building 1b	458279	3757941	60'	20'	35'	n/a	725'
Turbine Building 2a	458251.6	3757978.5	90'	15'	25'	n/a	725'
Turbine Building 2b	458279	3757978	60'	20'	35'	n/a	725'

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

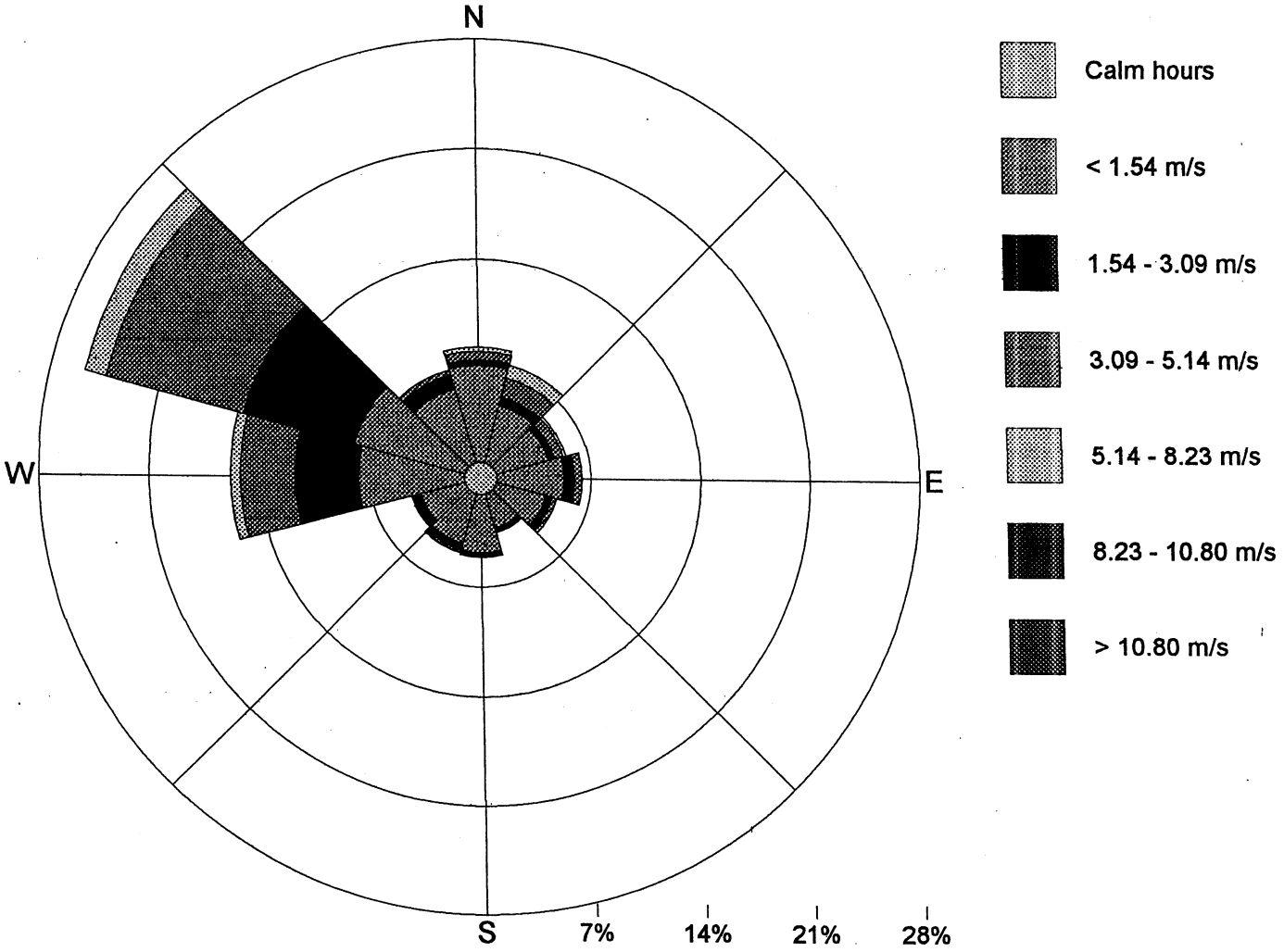
	Km Out	Spacing	UTME	UTMN
Grid #1	0-2	30 meter	457296	3756943.6
Grid #2	2-5	100 meter	455796	3756943.6
Grid #3	5-10	200 meter	453296	3752943.6

Revised HRA Air Dispersion Modeling Log
Riverside ERC

Run No.	Run Type	Comments:
Generating Station Emissions HRA:		
RERCCECHRA01b	HRA Run	Normal Operations Turbines Only
RERCCECHRA02b	HRA Run	Normal Operations Cooling Towers Only
RERCCECHRA03b	HRA Run	Normal Operations Turbines Only With Cooling Tower MEI Receptor 1-Hour
RERCCECHRA03b2	HRA Run	Normal Operations Turbines Only With Cooling Tower MEI Receptor Annual
RERCCECHRA04b	HRA Run	Normal Operations Cooling Towers Only With Turbines MEI Receptor 1-Hour
RERCCECHRA04b	HRA Run	Normal Operations Cooling Towers Only With Turbines MEI Receptor Annual
Construction Emissions HRA:		
RERCCECHRA05	HRA Run	Combustion Emissions Volume Sources Only

Windrose Information
Riverside Energy Resource Center

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



This file: C:\HARP\projects\demo\PointEstimateRisk.txt

Created by HARP Risk Module Version: 21.3.20
Creation date: 6/1/2004 2:54:02 PM

Point Estimate
GLC source: concentrations read from file C:\HARP\PROJECTS\RiversideHRA01b.cml
Exposure Duration: 70 year (adult resident)
Analysis Method: Derived (OEHHA) Method

Riverside ERC
HARP Results
Turbine Dominated
MEI Receptor
Cancer Analysis

CHEMICAL CROSS-REFERENCE TABLE

CHEM	CAS	ABBREVIATION	POLLUTANT NAME
0001	75070	Acetaldehyde	Acetaldehyde
0002	107028	Acrolein	Acrolein
0003	7664417	Ammonia	Ammonia
0004	71432	Benzene	Benzene
0005	106990	1,3-Butadiene	1,3-Butadiene
0006	100414	Ethyl Benzene	Ethyl benzene
0007	50000	Formaldehyde	Formaldehyde
0008	110543	Hexane	Hexane
0009	1150	PAHs-w/	PAHs, total, with individ. components also reported
0010	91203	Naphthalene	Naphthalene
0011	115071	Propylene	Propylene
0012	75569	Propylene Oxide	Propylene oxide
0013	108883	Toluene	Toluene
0014	1210	Xylenes	Xylenes (mixed)
0015	7440382	Arsenic	Arsenic
0016	7440439	Cadmium	Cadmium
0017	7782505	Chlorine	Chlorine
0018	7440473	Chromium	Chromium
0019	18540299	Cr(VI)	Chromium, hexavalent (& compounds)
0020	7440508	Copper	Copper
0021	75343	1,1-DiClEthane	1,1-Dichloroethane
0022	7439921	Lead	Lead
0023	7439965	Manganese	Manganese
0024	7440020	Nickel	Nickel
0025	79005	1,1,2TriClEthan	1,1,2-Trichloroethane
0026	7440666	Zinc	Zinc

CHEMICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CHEM	CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
0001	75070	Acetaldehyde	1.810E-04	1.810E-04	0.000E+00	0.000E+00	0.000E+00
0002	107028	Acrolein	2.870E-05	2.870E-05	0.000E+00	0.000E+00	0.000E+00
0003	7664417	Ammonia	2.040E-01	2.040E-01	0.000E+00	0.000E+00	0.000E+00
0004	71432	Benzene	5.300E-05	5.300E-05	0.000E+00	0.000E+00	0.000E+00
0005	106990	1,3-Butadiene	1.930E-06	1.930E-06	0.000E+00	0.000E+00	0.000E+00
0006	100414	Ethyl Benzene	1.440E-04	1.440E-04	0.000E+00	0.000E+00	0.000E+00
0007	50000	Formaldehyde	3.190E-03	3.190E-03	0.000E+00	0.000E+00	0.000E+00
0008	110543	Hexane	1.140E-03	1.140E-03	0.000E+00	0.000E+00	0.000E+00
0009	1150	PAHs-w/	1.000E-05	1.000E-05	0.000E+00	0.000E+00	0.000E+00
0010	91203	Naphthalene	5.740E-06	5.740E-06	0.000E+00	0.000E+00	0.000E+00
0011	115071	Propylene	8.830E-03	8.830E-03	0.000E+00	0.000E+00	0.000E+00
0012	75569	Propylene Oxide	2.110E-04	2.110E-04	0.000E+00	0.000E+00	0.000E+00
0013	108883	Toluene	6.050E-04	6.050E-04	0.000E+00	0.000E+00	0.000E+00
0014	1210	Xylenes	2.870E-04	2.870E-04	0.000E+00	0.000E+00	0.000E+00
0015	7440382	Arsenic	1.360E-07	1.360E-07	0.000E+00	0.000E+00	0.000E+00
0016	7440439	Cadmium	2.270E-08	2.270E-08	0.000E+00	0.000E+00	0.000E+00
0017	7782505	Chlorine	1.520E-06	1.520E-06	0.000E+00	0.000E+00	0.000E+00
0018	7440473	Chromium	1.130E-07	1.130E-07	0.000E+00	0.000E+00	0.000E+00
0019	18540299	Cr(VI)	3.780E-08	3.780E-08	0.000E+00	0.000E+00	0.000E+00
0020	7440508	Copper	6.120E-07	6.120E-07	0.000E+00	0.000E+00	0.000E+00
0021	75343	1,1-DiClEthane	9.830E-08	9.070E-08	0.000E+00	0.000E+00	0.000E+00

0022	7439921	Lead	9.070E-08	9.070E-08	0.000E+00	0.000E+00	0.000E+00
0023	7439965	Manganese	4.080E-07	4.080E-07	0.000E+00	0.000E+00	0.000E+00
0024	7440020	Nickel	1.130E-07	1.130E-07	0.000E+00	0.000E+00	0.000E+00
0025	79005	1,1,2TriClEthan	7.560E-08	7.560E-08	0.000E+00	0.000E+00	0.000E+00
0026	7440666	Zinc	2.430E-06	2.430E-06	0.000E+00	0.000E+00	0.000E+00

DOMINANT PATHWAYS FOR CANCER

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	YES	-	-	-	-	-	-	-	-	-	-	-
0002	-	-	-	-	-	-	-	-	-	-	-	-
0003	-	-	-	-	-	-	-	-	-	-	-	-
0004	YES	-	-	-	-	-	-	-	-	-	-	-
0005	YES	-	-	-	-	-	-	-	-	-	-	-
0006	-	-	-	-	-	-	-	-	-	-	-	-
0007	YES	-	-	-	-	-	-	-	-	-	-	-
0008	-	-	-	-	-	-	-	-	-	-	-	-
0009	-	-	-	-	-	-	-	-	-	-	-	-
0010	-	-	-	-	-	-	-	-	-	-	-	-
0011	-	-	-	-	-	-	-	-	-	-	-	-
0012	YES	-	-	-	-	-	-	-	-	-	-	-
0013	-	-	-	-	-	-	-	-	-	-	-	-
0014	-	-	-	-	-	-	-	-	-	-	-	-
0015	YES	-	-	-	-	-	-	-	-	-	-	-
0016	YES	-	-	-	-	-	-	-	-	-	-	-
0017	-	-	-	-	-	-	-	-	-	-	-	-
0018	-	-	-	-	-	-	-	-	-	-	-	-
0019	YES	-	-	-	-	-	-	-	-	-	-	-
0020	-	-	-	-	-	-	-	-	-	-	-	-
0021	YES	-	-	-	-	-	-	-	-	-	-	-
0022	YES	-	-	-	-	-	-	-	-	-	-	-
0023	-	-	-	-	-	-	-	-	-	-	-	-
0024	YES	-	-	-	-	-	-	-	-	-	-	-
0025	YES	-	-	-	-	-	-	-	-	-	-	-
0026	-	-	-	-	-	-	-	-	-	-	-	-

DERIVED DOSE BY PATHWAY (mg/(kg-d))

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	TOTAL
0001	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-08
0002	7.46E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-08
0003	5.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05
0004	2.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05
0005	7.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05
0006	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05
0007	1.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-05
0008	2.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05
0009	2.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05
0010	1.49E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05
0011	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-05
0012	7.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-05
0013	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-05
0014	7.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0015	5.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0016	8.55E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0017	3.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0018	2.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0019	1.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0020	1.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0021	3.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0022	3.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0023	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0024	4.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05

0025	2.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05
0026	6.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-05

DERIVED CANCER RISK

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
0001	6.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-10
0002	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0003	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0004	2.00E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-09
0005	4.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-10
0006	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0007	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-08
0008	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0010	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0012	1.03E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-09
0013	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0014	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0015	6.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-10
0016	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-10
0017	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0018	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0019	7.26E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-09
0020	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0021	2.11E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-13
0022	1.44E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-12
0023	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0024	3.88E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-11
0025	1.62E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-12
0026	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SUM	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-08

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s) 0.05

This file: C:\HARP\projects\demo\PointEstimateRisk.txt

Created by HARP Risk Module Version: 21.3.20
Creation date: 6/1/2004 3:00:54 PM

Point Estimate
GLC source: concentrations read from file C:\HARP\PROJECTS\RiversideHRA01b.cml
Exposure Duration: resident
Analysis Method: Derived (OEHHA) Method

Riverside ERC
HARP Results
Turbine Dominated
MEI Receptor

Chronic Analysis

CHEMICAL CROSS-REFERENCE TABLE

CHEM	CAS	ABBREVIATION	POLLUTANT NAME
0001	75070	Acetaldehyde	Acetaldehyde
0002	107028	Acrolein	Acrolein
0003	7664417	Ammonia	Ammonia
0004	71432	Benzene	Benzene
0005	106990	1,3-Butadiene	1,3-Butadiene
0006	100414	Ethyl Benzene	Ethyl benzene
0007	50000	Formaldehyde	Formaldehyde
0008	110543	Hexane	Hexane
0009	1150	PAHs-w/	PAHs, total, with individ. components also reported
0010	91203	Naphthalene	Naphthalene
0011	115071	Propylene	Propylene
0012	75569	Propylene Oxide	Propylene oxide
0013	108883	Toluene	Toluene
0014	1210	Xylenes	Xylenes (mixed)
0015	7440382	Arsenic	Arsenic
0016	7440439	Cadmium	Cadmium
0017	7782505	Chlorine	Chlorine
0018	7440473	Chromium	Chromium
0019	18540299	Cr(VI)	Chromium, hexavalent (& compounds)
0020	7440508	Copper	Copper
0021	75343	1,1-DiClEthane	1,1-Dichloroethane
0022	7439921	Lead	Lead
0023	7439965	Manganese	Manganese
0024	7440020	Nickel	Nickel
0025	79005	1,1,2TriClEthan	1,1,2-Trichloroethane
0026	7440666	Zinc	Zinc

CHEMICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CHEM	CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
0001	75070	Acetaldehyde	1.810E-04	1.810E-04	0.000E+00	0.000E+00	0.000E+00
0002	107028	Acrolein	2.870E-05	2.870E-05	0.000E+00	0.000E+00	0.000E+00
0003	7664417	Ammonia	2.040E-01	2.040E-01	0.000E+00	0.000E+00	0.000E+00
0004	71432	Benzene	5.300E-05	5.300E-05	0.000E+00	0.000E+00	0.000E+00
0005	106990	1,3-Butadiene	1.930E-06	1.930E-06	0.000E+00	0.000E+00	0.000E+00
0006	100414	Ethyl Benzene	1.440E-04	1.440E-04	0.000E+00	0.000E+00	0.000E+00
0007	50000	Formaldehyde	3.190E-03	3.190E-03	0.000E+00	0.000E+00	0.000E+00
0008	110543	Hexane	1.140E-03	1.140E-03	0.000E+00	0.000E+00	0.000E+00
0009	1150	PAHs-w/	1.000E-05	1.000E-05	0.000E+00	0.000E+00	0.000E+00
0010	91203	Naphthalene	5.740E-06	5.740E-06	0.000E+00	0.000E+00	0.000E+00
0011	115071	Propylene	8.830E-03	8.830E-03	0.000E+00	0.000E+00	0.000E+00
0012	75569	Propylene Oxide	2.110E-04	2.110E-04	0.000E+00	0.000E+00	0.000E+00
0013	108883	Toluene	6.050E-04	6.050E-04	0.000E+00	0.000E+00	0.000E+00
0014	1210	Xylenes	2.870E-04	2.870E-04	0.000E+00	0.000E+00	0.000E+00
0015	7440382	Arsenic	1.360E-07	1.360E-07	0.000E+00	0.000E+00	0.000E+00
0016	7440439	Cadmium	2.270E-08	2.270E-08	0.000E+00	0.000E+00	0.000E+00
0017	7782505	Chlorine	1.520E-06	1.520E-06	0.000E+00	0.000E+00	0.000E+00
0018	7440473	Chromium	1.130E-07	1.130E-07	0.000E+00	0.000E+00	0.000E+00
0019	18540299	Cr(VI)	3.780E-08	3.780E-08	0.000E+00	0.000E+00	0.000E+00
0020	7440508	Copper	6.120E-07	6.120E-07	0.000E+00	0.000E+00	0.000E+00
0021	75343	1,1-DiClEthane	9.830E-08	9.070E-08	0.000E+00	0.000E+00	0.000E+00

0022	7439921	Lead	9.070E-08	9.070E-08	0.000E+00	0.000E+00	0.000E+00
0023	7439965	Manganese	4.080E-07	4.080E-07	0.000E+00	0.000E+00	0.000E+00
0024	7440020	Nickel	1.130E-07	1.130E-07	0.000E+00	0.000E+00	0.000E+00
0025	79005	1,1,2TriClEthan	7.560E-08	7.560E-08	0.000E+00	0.000E+00	0.000E+00
0026	7440666	Zinc	2.430E-06	2.430E-06	0.000E+00	0.000E+00	0.000E+00

DOMINANT PATHWAYS FOR CHRONIC

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	YES	-	-	-	-	-	-	-	-	-	-	-
0002	YES	-	-	-	-	-	-	-	-	-	-	-
0003	YES	-	-	-	-	-	-	-	-	-	-	-
0004	YES	-	-	-	-	-	-	-	-	-	-	-
0005	YES	-	-	-	-	-	-	-	-	-	-	-
0006	YES	-	-	-	-	-	-	-	-	-	-	-
0007	YES	-	-	-	-	-	-	-	-	-	-	-
0008	YES	-	-	-	-	-	-	-	-	-	-	-
0009	YES	-	-	-	-	-	-	-	-	-	-	-
0010	YES	-	-	-	-	-	-	-	-	-	-	-
0011	YES	-	-	-	-	-	-	-	-	-	-	-
0012	YES	-	-	-	-	-	-	-	-	-	-	-
0013	YES	-	-	-	-	-	-	-	-	-	-	-
0014	YES	-	-	-	-	-	-	-	-	-	-	-
0015	YES	-	-	-	-	-	-	-	-	-	-	-
0016	YES	-	-	-	-	-	-	-	-	-	-	-
0017	YES	-	-	-	-	-	-	-	-	-	-	-
0018	YES	-	-	-	-	-	-	-	-	-	-	-
0019	YES	-	-	-	-	-	-	-	-	-	-	-
0020	YES	-	-	-	-	-	-	-	-	-	-	-
0021	YES	-	-	-	-	-	-	-	-	-	-	-
0022	YES	-	-	-	-	-	-	-	-	-	-	-
0023	YES	-	-	-	-	-	-	-	-	-	-	-
0024	YES	-	-	-	-	-	-	-	-	-	-	-
0025	YES	-	-	-	-	-	-	-	-	-	-	-
0026	YES	-	-	-	-	-	-	-	-	-	-	-

INHALATION CONCENTRATION (ug/m^3) AND DERIVED DOSE BY PATHWAY (mg/(kg-d))

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	1.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0002	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0003	2.04E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0004	5.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0005	1.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0006	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0007	3.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0008	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0009	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0010	5.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0011	8.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0012	2.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0013	6.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0014	2.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0015	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0016	2.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0017	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0018	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0019	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0020	6.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0021	9.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0022	9.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0023	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0024	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0025	7.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0026	2.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DERIVED CHRONIC HI

CHEM	CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0001	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	2.01E-05
0002	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04	0.00E+00	0.00E+00	4.78E-04
0003	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	1.02E-03
0004	0.00E+00	8.83E-07	0.00E+00	8.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-07	8.83E-07
0005	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-08	0.00E+00	0.00E+00	0.00E+00	9.65E-08
0006	0.00E+00	0.00E+00	0.00E+00	7.20E-08	7.20E-08	0.00E+00	7.20E-08	0.00E+00	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-08
0007	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	1.06E-03
0008	0.00E+00	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-07
0009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0010	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-07	0.00E+00	0.00E+00	6.38E-07
0011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-06	0.00E+00	0.00E+00	2.94E-06
0012	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-06	0.00E+00	0.00E+00	7.03E-06
0013	0.00E+00	2.02E-06	0.00E+00	2.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-06	0.00E+00	0.00E+00	2.02E-06
0014	0.00E+00	4.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-07	0.00E+00	0.00E+00	4.10E-07
0015	4.53E-06	4.53E-06	0.00E+00	4.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-06
0016	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-06	0.00E+00	1.14E-06	0.00E+00	0.00E+00	1.14E-06
0017	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-06	0.00E+00	0.00E+00	7.60E-06
0018	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0019	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-07	0.00E+00	0.00E+00	1.89E-07
0020	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-07	0.00E+00	0.00E+00	2.55E-07
0021	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0022	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0023	0.00E+00	2.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-06
0024	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-06	0.00E+00	2.26E-06	2.26E-06
0025	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0026	6.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-08	0.00E+00	6.94E-08	~~6.94E-08~~
SUM	4.60E-06	1.00E-05	0.00E+00	7.51E-06	7.20E-08	1.54E-03	7.20E-08	0.00E+00	1.21E-06	9.65E-08	2.61E-03	0.00E+00	3.21E-06	2.61E-03

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s) 0.05

: file: C:\HARP\projects\demo\PointEstimateRisk.txt

.ted by HARP Risk Module Version: 21.3.20
.tion date: 6/8/2004 3:12:57 PM

ıt Estimate
source: values edited by user
›sure Duration: 70 year (adult resident)
.ysis Method: Average Point Estimate

ICAL CROSS-REFERENCE TABLE

CAS	ABBREVIATION	POLLUTANT NAME
75070	Acetaldehyde	Acetaldehyde
107028	Acrolein	Acrolein
7664417	Ammonia	Ammonia
71432	Benzene	Benzene
106990	1,3-Butadiene	1,3-Butadiene
100414	Ethyl Benzene	Ethyl benzene
50000	Formaldehyde	Formaldehyde
110543	Hexane	Hexane
1150	PAHs-w/	PAHs, total, with individ. components also reported
91203	Naphthalene	Naphthalene
115071	Propylene	Propylene
75569	Propylene Oxide	Propylene oxide
108883	Toluene	Toluene
1210	Xylenes	Xylenes (mixed)
7440382	Arsenic	Arsenic
7440439	Cadmium	Cadmium
7782505	Chlorine	Chlorine
7440473	Chromium	Chromium
18540299	Cr(VI)	Chromium, hexavalent (& compounds)
7440508	Copper	Copper
75343	1,1-DiClEthane	1,1-Dichloroethane
7439921	Lead	Lead
7439965	Manganese	Manganese
7440020	Nickel	Nickel
79005	1,1,2TriClEthan	1,1,2-Trichloroethane
7440666	Zinc	Zinc

ICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
75070	Acetaldehyde	4.340E-03	4.340E-03	0.000E+00	0.000E+00	0.000E+00
107028	Acrolein	6.870E-04	6.870E-04	0.000E+00	0.000E+00	0.000E+00
7664417	Ammonia	4.880E+00	4.880E+00	0.000E+00	0.000E+00	0.000E+00
71432	Benzene	1.270E-03	1.270E-03	0.000E+00	0.000E+00	0.000E+00
106990	1,3-Butadiene	4.630E-05	4.630E-05	0.000E+00	0.000E+00	0.000E+00
100414	Ethyl Benzene	3.460E-03	3.460E-03	0.000E+00	0.000E+00	0.000E+00
50000	Formaldehyde	7.650E-02	7.650E-02	0.000E+00	0.000E+00	0.000E+00
110543	Hexane	2.740E-02	2.740E-02	0.000E+00	0.000E+00	0.000E+00
1150	PAHs-w/	2.400E-04	2.400E-04	0.000E+00	0.000E+00	0.000E+00
91203	Naphthalene	1.380E-04	1.380E-04	0.000E+00	0.000E+00	0.000E+00
115071	Propylene	2.120E-01	2.120E-01	0.000E+00	0.000E+00	0.000E+00
75569	Propylene Oxide	5.060E-03	5.060E-03	0.000E+00	0.000E+00	0.000E+00
108883	Toluene	1.450E-02	1.450E-02	0.000E+00	0.000E+00	0.000E+00
1210	Xylenes	6.880E-03	6.880E-03	0.000E+00	0.000E+00	0.000E+00
7440382	Arsenic	1.120E-05	1.120E-05	0.000E+00	0.000E+00	0.000E+00
7440439	Cadmium	1.870E-06	1.870E-06	0.000E+00	0.000E+00	0.000E+00
7782505	Chlorine	1.250E-04	1.250E-04	0.000E+00	0.000E+00	0.000E+00
7440473	Chromium	9.340E-06	9.340E-06	0.000E+00	0.000E+00	0.000E+00
18540299	Cr(VI)	3.110E-06	3.110E-06	0.000E+00	0.000E+00	0.000E+00
7440508	Copper	5.040E-05	5.040E-05	0.000E+00	0.000E+00	0.000E+00
75343	1,1-DiClEthane	8.100E-06	8.100E-06	0.000E+00	0.000E+00	0.000E+00

Riverside ERC

HARP Results

Turbine Dominated

MEI Receptor

Acute Analysis

7439921	Lead	7.470E-06	7.470E-06	0.000E+00	0.000E+00	0.000E+00
7439965	Manganese	3.360E-05	3.360E-05	0.000E+00	0.000E+00	0.000E+00
7440020	Nickel	9.340E-06	9.340E-06	0.000E+00	0.000E+00	0.000E+00
79005	1,1,2TriClEthan	6.230E-06	6.230E-06	0.000E+00	0.000E+00	0.000E+00
7440666	Zinc	2.000E-04	2.000E-04	0.000E+00	0.000E+00	0.000E+00

'E HI

CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-03	0.00E+00	0.00E+00	3.62E-03
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	1.53E-03
0.00E+00	0.00E+00	0.00E+00	9.77E-07	0.00E+00	0.00E+00	0.00E+00	9.77E-07	0.00E+00	9.77E-07	0.00E+00	0.00E+00	9.77E-07	9.77E-07
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-04	0.00E+00	8.14E-04	0.00E+00	0.00E+00	8.14E-04	0.00E+00	0.00E+00	8.14E-04
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	1.63E-06	0.00E+00	1.63E-06	0.00E+00	0.00E+00	0.00E+00	1.63E-06	1.63E-06	0.00E+00	0.00E+00	1.63E-06
0.00E+00	3.92E-07	0.00E+00	3.92E-07	0.00E+00	3.92E-07	0.00E+00	0.00E+00	0.00E+00	3.92E-07	3.92E-07	0.00E+00	0.00E+00	3.92E-07
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-07	0.00E+00	0.00E+00	3.13E-07
0.00E+00	0.00E+00	0.00E+00	5.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05	0.00E+00	0.00E+00	0.00E+00	5.89E-05
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-07	0.00E+00	0.00E+00	5.95E-07
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-07	0.00E+00	0.00E+00	5.04E-07
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-06	0.00E+00	0.00E+00	1.56E-06	0.00E+00	0.00E+00	1.56E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0.00E+00	3.92E-07	0.00E+00	6.19E-05	0.00E+00	5.96E-03	0.00E+00	8.16E-04	0.00E+00	6.19E-05	5.96E-03	0.00E+00	9.77E-07	5.96E-03

; PARAMETERS

)SITION

)eposition rate (m/s) 0.05

This file: C:\HARP\projects\demo\PointEstimateRisk.txt

Created by HARP Risk Module Version: 21.3.20
Creation date: 6/2/2004 11:18:51 AM

Point Estimate
GLC source: values edited by user
Exposure Duration: 70 year (adult resident)
Analysis Method: Derived (OEHHA) Method

Riverside ERC
HARP Results

Cooling Tower Dominated
MEI Receptor

Cancer Analysis

CHEMICAL CROSS-REFERENCE TABLE

CHEM	CAS	ABBREVIATION	POLLUTANT NAME
0001	75070	Acetaldehyde	Acetaldehyde
0002	107028	Acrolein	Acrolein
0003	7664417	Ammonia	Ammonia
0004	71432	Benzene	Benzene
0005	106990	1,3-Butadiene	1,3-Butadiene
0006	100414	Ethyl Benzene	Ethyl benzene
0007	50000	Formaldehyde	Formaldehyde
0008	110543	Hexane	Hexane
0009	1150	PAHs-w/	PAHs, total, with individ. components also reported
0010	91203	Naphthalene	Naphthalene
0011	115071	Propylene	Propylene
0012	75569	Propylene Oxide	Propylene oxide
0013	108883	Toluene	Toluene
0014	1210	Xylenes	Xylenes (mixed)
0015	7440382	Arsenic	Arsenic
0016	7440439	Cadmium	Cadmium
0017	7782505	Chlorine	Chlorine
0018	7440473	Chromium	Chromium
0019	18540299	Cr(VI)	Chromium, hexavalent (& compounds)
0020	7440508	Copper	Copper
0021	75343	1,1-DiClEthane	1,1-Dichloroethane
0022	7439921	Lead	Lead
0023	7439965	Manganese	Manganese
0024	7440020	Nickel	Nickel
0025	79005	1,1,2TriClEthan	1,1,2-Trichloroethane
0026	7440666	Zinc	Zinc

CHEMICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CHEM	CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
0001	75070	Acetaldehyde	1.490E-06	1.490E-06	0.000E+00	0.000E+00	0.000E+00
0002	107028	Acrolein	2.360E-07	2.360E-07	0.000E+00	0.000E+00	0.000E+00
0003	7664417	Ammonia	1.680E-03	1.680E-03	0.000E+00	0.000E+00	0.000E+00
0004	71432	Benzene	4.360E-07	4.360E-07	0.000E+00	0.000E+00	0.000E+00
0005	106990	1,3-Butadiene	1.590E-08	1.590E-08	0.000E+00	0.000E+00	0.000E+00
0006	100414	Ethyl Benzene	1.190E-06	1.190E-06	0.000E+00	0.000E+00	0.000E+00
0007	50000	Formaldehyde	2.630E-05	2.630E-05	0.000E+00	0.000E+00	0.000E+00
0008	110543	Hexane	9.400E-06	9.400E-06	0.000E+00	0.000E+00	0.000E+00
0009	1150	PAHs-w/	8.240E-08	8.240E-08	0.000E+00	0.000E+00	0.000E+00
0010	91203	Naphthalene	4.720E-08	4.720E-08	0.000E+00	0.000E+00	0.000E+00
0011	115071	Propylene	7.260E-05	7.260E-05	0.000E+00	0.000E+00	0.000E+00
0012	75569	Propylene Oxide	1.740E-06	1.740E-06	0.000E+00	0.000E+00	0.000E+00
0013	108883	Toluene	4.970E-06	4.970E-06	0.000E+00	0.000E+00	0.000E+00
0014	1210	Xylenes	2.360E-06	2.360E-06	0.000E+00	0.000E+00	0.000E+00
0015	7440382	Arsenic	3.080E-06	3.080E-06	0.000E+00	0.000E+00	0.000E+00
0016	7440439	Cadmium	5.140E-07	5.140E-07	0.000E+00	0.000E+00	0.000E+00
0017	7782505	Chlorine	3.440E-05	3.440E-05	0.000E+00	0.000E+00	0.000E+00
0018	7440473	Chromium	2.570E-06	2.570E-06	0.000E+00	0.000E+00	0.000E+00
0019	18540299	Cr(VI)	8.570E-07	8.570E-07	0.000E+00	0.000E+00	0.000E+00
0020	7440508	Copper	1.390E-05	1.390E-05	0.000E+00	0.000E+00	0.000E+00
0021	75343	1,1-DiClEthane	2.230E-06	2.230E-06	0.000E+00	0.000E+00	0.000E+00

0022	7439921	Lead	2.060E-06	2.060E-06	0.000E+00	0.000E+00	0.000E+00
0023	7439965	Manganese	9.250E-06	9.250E-06	0.000E+00	0.000E+00	0.000E+00
0024	7440020	Nickel	2.570E-06	2.570E-06	0.000E+00	0.000E+00	0.000E+00
0025	79005	1,1,2TriClEthan	1.710E-06	1.710E-06	0.000E+00	0.000E+00	0.000E+00
0026	7440666	Zinc	5.500E-05	5.500E-05	0.000E+00	0.000E+00	0.000E+00

DOMINANT PATHWAYS FOR CANCER

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	YES	-	-	-	-	-	-	-	-	-	-	-
0002	-	-	-	-	-	-	-	-	-	-	-	-
0003	-	-	-	-	-	-	-	-	-	-	-	-
0004	YES	-	-	-	-	-	-	-	-	-	-	-
0005	YES	-	-	-	-	-	-	-	-	-	-	-
0006	-	-	-	-	-	-	-	-	-	-	-	-
0007	YES	-	-	-	-	-	-	-	-	-	-	-
0008	-	-	-	-	-	-	-	-	-	-	-	-
0009	-	-	-	-	-	-	-	-	-	-	-	-
0010	-	-	-	-	-	-	-	-	-	-	-	-
0011	-	-	-	-	-	-	-	-	-	-	-	-
0012	YES	-	-	-	-	-	-	-	-	-	-	-
0013	-	-	-	-	-	-	-	-	-	-	-	-
0014	-	-	-	-	-	-	-	-	-	-	-	-
0015	YES	-	-	-	-	-	-	-	-	-	-	-
0016	YES	-	-	-	-	-	-	-	-	-	-	-
0017	-	-	-	-	-	-	-	-	-	-	-	-
0018	-	-	-	-	-	-	-	-	-	-	-	-
0019	YES	-	-	-	-	-	-	-	-	-	-	-
0020	-	-	-	-	-	-	-	-	-	-	-	-
0021	YES	-	-	-	-	-	-	-	-	-	-	-
0022	YES	-	-	-	-	-	-	-	-	-	-	-
0023	-	-	-	-	-	-	-	-	-	-	-	-
0024	YES	-	-	-	-	-	-	-	-	-	-	-
0025	YES	-	-	-	-	-	-	-	-	-	-	-
0026	-	-	-	-	-	-	-	-	-	-	-	-

DERIVED DOSE BY PATHWAY (mg/(kg-d))

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	TOTAL
0001	5.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-10
0002	6.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-10
0003	4.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-07
0004	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-07
0005	5.99E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-07
0006	3.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-07
0007	9.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-07
0008	2.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-07
0009	2.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-07
0010	1.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-07
0011	1.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-07
0012	6.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-07
0013	1.29E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-07
0014	6.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-07
0015	1.16E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-07
0016	1.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-07
0017	8.94E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-07
0018	6.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-07
0019	3.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-07
0020	3.61E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-07
0021	8.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-07
0022	7.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-07
0023	2.40E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-07
0024	9.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-07

0025	6.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-07
0026	1.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-07

DERIVED CANCER RISK

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
0001	5.62E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-12
0002	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0003	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0004	1.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-11
0005	3.60E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-12
0006	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0007	2.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-10
0008	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0010	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-12
0012	8.52E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0013	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0014	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-08
0015	1.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-09
0016	2.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0017	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0018	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-07
0019	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0020	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-12
0021	4.79E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-11
0022	3.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0023	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.81E-10
0024	8.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E-11
0025	3.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	~~0.00E+00~~
0026	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-07
SUM	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s) 0.05

This file: C:\HARP\projects\demo\PointEstimateRisk.txt

Created by HARP Risk Module Version: 21.3.20
Creation date: 6/2/2004 11:19:07 AM

Point Estimate
GLC source: values edited by user
Exposure Duration: resident
Analysis Method: Derived (OEHHA) Method

Riverside ERC

HARP Results

Cooling Tower Dominated

MEI Receptor

Chronic Analysis

CHEMICAL CROSS-REFERENCE TABLE

CHEM	CAS	ABBREVIATION	POLLUTANT NAME
0001	75070	Acetaldehyde	Acetaldehyde
0002	107028	Acrolein	Acrolein
0003	7664417	Ammonia	Ammonia
0004	71432	Benzene	Benzene
0005	106990	1,3-Butadiene	1,3-Butadiene
0006	100414	Ethyl Benzene	Ethyl benzene
0007	50000	Formaldehyde	Formaldehyde
0008	110543	Hexane	Hexane
0009	1150	PAHs-w/	PAHs, total, with individ. components also reported
0010	91203	Naphthalene	Naphthalene
0011	115071	Propylene	Propylene
0012	75569	Propylene Oxide	Propylene oxide
0013	108883	Toluene	Toluene
0014	1210	Xylenes	Xylenes (mixed)
0015	7440382	Arsenic	Arsenic
0016	7440439	Cadmium	Cadmium
0017	7782505	Chlorine	Chlorine
0018	7440473	Chromium	Chromium
0019	18540299	Cr(VI)	Chromium, hexavalent (& compounds)
0020	7440508	Copper	Copper
0021	75343	1,1-DiClEthane	1,1-Dichloroethane
0022	7439921	Lead	Lead
0023	7439965	Manganese	Manganese
0024	7440020	Nickel	Nickel
0025	79005	1,1,2TriClEthan	1,1,2-Trichloroethane
0026	7440666	Zinc	Zinc

CHEMICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CHEM	CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
0001	75070	Acetaldehyde	1.490E-06	1.490E-06	0.000E+00	0.000E+00	0.000E+00
0002	107028	Acrolein	2.360E-07	2.360E-07	0.000E+00	0.000E+00	0.000E+00
0003	7664417	Ammonia	1.680E-03	1.680E-03	0.000E+00	0.000E+00	0.000E+00
0004	71432	Benzene	4.360E-07	4.360E-07	0.000E+00	0.000E+00	0.000E+00
0005	106990	1,3-Butadiene	1.590E-08	1.590E-08	0.000E+00	0.000E+00	0.000E+00
0006	100414	Ethyl Benzene	1.190E-06	1.190E-06	0.000E+00	0.000E+00	0.000E+00
0007	50000	Formaldehyde	2.630E-05	2.630E-05	0.000E+00	0.000E+00	0.000E+00
0008	110543	Hexane	9.400E-06	9.400E-06	0.000E+00	0.000E+00	0.000E+00
0009	1150	PAHs-w/	8.240E-08	8.240E-08	0.000E+00	0.000E+00	0.000E+00
0010	91203	Naphthalene	4.720E-08	4.720E-08	0.000E+00	0.000E+00	0.000E+00
0011	115071	Propylene	7.260E-05	7.260E-05	0.000E+00	0.000E+00	0.000E+00
0012	75569	Propylene Oxide	1.740E-06	1.740E-06	0.000E+00	0.000E+00	0.000E+00
0013	108883	Toluene	4.970E-06	4.970E-06	0.000E+00	0.000E+00	0.000E+00
0014	1210	Xylenes	2.360E-06	2.360E-06	0.000E+00	0.000E+00	0.000E+00
0015	7440382	Arsenic	3.080E-06	3.080E-06	0.000E+00	0.000E+00	0.000E+00
0016	7440439	Cadmium	5.140E-07	5.140E-07	0.000E+00	0.000E+00	0.000E+00
0017	7782505	Chlorine	3.440E-05	3.440E-05	0.000E+00	0.000E+00	0.000E+00
0018	7440473	Chromium	2.570E-06	2.570E-06	0.000E+00	0.000E+00	0.000E+00
0019	18540299	Cr(VI)	8.570E-07	8.570E-07	0.000E+00	0.000E+00	0.000E+00
0020	7440508	Copper	1.390E-05	1.390E-05	0.000E+00	0.000E+00	0.000E+00
0021	75343	1,1-DiClEthane	2.230E-06	2.230E-06	0.000E+00	0.000E+00	0.000E+00

0022	7439921	Lead	2.060E-06	2.060E-06	0.000E+00	0.000E+00	0.000E+00
0023	7439965	Manganese	9.250E-06	9.250E-06	0.000E+00	0.000E+00	0.000E+00
0024	7440020	Nickel	2.570E-06	2.570E-06	0.000E+00	0.000E+00	0.000E+00
0025	79005	1,1,2TriClEthan	1.710E-06	1.710E-06	0.000E+00	0.000E+00	0.000E+00
0026	7440666	Zinc	5.500E-05	5.500E-05	0.000E+00	0.000E+00	0.000E+00

DOMINANT PATHWAYS FOR CHRONIC

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	YES	-	-	-	-	-	-	-	-	-	-	-
0002	YES	-	-	-	-	-	-	-	-	-	-	-
0003	YES	-	-	-	-	-	-	-	-	-	-	-
0004	YES	-	-	-	-	-	-	-	-	-	-	-
0005	YES	-	-	-	-	-	-	-	-	-	-	-
0006	YES	-	-	-	-	-	-	-	-	-	-	-
0007	YES	-	-	-	-	-	-	-	-	-	-	-
0008	YES	-	-	-	-	-	-	-	-	-	-	-
0009	YES	-	-	-	-	-	-	-	-	-	-	-
0010	YES	-	-	-	-	-	-	-	-	-	-	-
0011	YES	-	-	-	-	-	-	-	-	-	-	-
0012	YES	-	-	-	-	-	-	-	-	-	-	-
0013	YES	-	-	-	-	-	-	-	-	-	-	-
0014	YES	-	-	-	-	-	-	-	-	-	-	-
0015	YES	-	-	-	-	-	-	-	-	-	-	-
0016	YES	-	-	-	-	-	-	-	-	-	-	-
0017	YES	-	-	-	-	-	-	-	-	-	-	-
0018	YES	-	-	-	-	-	-	-	-	-	-	-
0019	YES	-	-	-	-	-	-	-	-	-	-	-
0020	YES	-	-	-	-	-	-	-	-	-	-	-
0021	YES	-	-	-	-	-	-	-	-	-	-	-
0022	YES	-	-	-	-	-	-	-	-	-	-	-
0023	YES	-	-	-	-	-	-	-	-	-	-	-
0024	YES	-	-	-	-	-	-	-	-	-	-	-
0025	YES	-	-	-	-	-	-	-	-	-	-	-
0026	YES	-	-	-	-	-	-	-	-	-	-	-

INHALATION CONCENTRATION (ug/m^3) AND DERIVED DOSE BY PATHWAY (mg/(kg-d))

CHEM	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG
0001	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0002	2.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0003	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0004	4.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0005	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0006	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0007	2.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0008	9.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0009	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0010	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0011	7.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0012	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0013	4.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0014	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0015	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0016	5.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0017	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0018	2.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0019	8.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0020	1.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0021	2.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0022	2.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0023	9.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0024	2.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0025	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0026	5.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

DERIVED CHRONIC HI

CHEM	CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0001	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-07	0.00E+00	0.00E+00	1.66E-07
0002	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	3.93E-06
0003	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-06	0.00E+00	0.00E+00	8.40E-06
0004	0.00E+00	7.27E-09	0.00E+00	7.27E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-09	7.27E-09
0005	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-10	0.00E+00	0.00E+00	0.00E+00	7.95E-10
0006	0.00E+00	0.00E+00	0.00E+00	5.95E-10	5.95E-10	0.00E+00	5.95E-10	0.00E+00	5.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-10
0007	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-06	0.00E+00	0.00E+00	8.77E-06
0008	0.00E+00	1.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-09
0009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0010	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.24E-09	0.00E+00	0.00E+00	5.24E-09
0011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-08	0.00E+00	0.00E+00	2.42E-08
0012	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-08	0.00E+00	0.00E+00	5.80E-08
0013	0.00E+00	1.66E-08	0.00E+00	1.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	0.00E+00	0.00E+00	1.66E-08
0014	0.00E+00	3.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-09	0.00E+00	0.00E+00	3.37E-09
0015	1.03E-04	1.03E-04	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
0016	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-05	0.00E+00	2.57E-05	0.00E+00	0.00E+00	2.57E-05
0017	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	1.72E-04
0018	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0019	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-06	0.00E+00	0.00E+00	4.28E-06
0020	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-06	0.00E+00	0.00E+00	5.79E-06
0021	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0022	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0023	0.00E+00	4.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-05
0024	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-05	0.00E+00	5.14E-05	5.14E-05
0025	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0026	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-06	0.00E+00	1.57E-06	1.57E-06
SUM	1.04E-04	1.49E-04	0.00E+00	1.03E-04	5.95E-10	1.27E-05	5.95E-10	0.00E+00	2.57E-05	7.95E-10	2.82E-04	0.00E+00	5.30E-06	2.82E-04

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s) 0.05

This file: C:\HARP\projects\demo\PointEstimateRisk.txt

Created by HARP Risk Module Version: 21.3.20
Creation date: 6/2/2004 11:28:28 AM

Point Estimate
GLC source: values edited by user
Exposure Duration: resident
Analysis Method: Derived (OEHHA) Method

Riverside ERC
HARP Results

Cooling Tower Dominated
MEI Receptor

Acute Analysis

CHEMICAL CROSS-REFERENCE TABLE

CHEM	CAS	ABBREVIATION	POLLUTANT NAME
0001	75070	Acetaldehyde	Acetaldehyde
0002	107028	Acrolein	Acrolein
0003	7664417	Ammonia	Ammonia
0004	71432	Benzene	Benzene
0005	106990	1,3-Butadiene	1,3-Butadiene
0006	100414	Ethyl Benzene	Ethyl benzene
0007	50000	Formaldehyde	Formaldehyde
0008	110543	Hexane	Hexane
0009	1150	PAHs-w/	PAHs, total, with individ. components also reported
0010	91203	Naphthalene	Naphthalene
0011	115071	Propylene	Propylene
0012	75569	Propylene Oxide	Propylene oxide
0013	108883	Toluene	Toluene
0014	1210	Xylenes	Xylenes (mixed)
0015	7440382	Arsenic	Arsenic
0016	7440439	Cadmium	Cadmium
0017	7782505	Chlorine	Chlorine
0018	7440473	Chromium	Chromium
0019	18540299	Cr(VI)	Chromium, hexavalent (& compounds)
0020	7440508	Copper	Copper
0021	75343	1,1-DiClEthane	1,1-Dichloroethane
0022	7439921	Lead	Lead
0023	7439965	Manganese	Manganese
0024	7440020	Nickel	Nickel
0025	79005	1,1,2TriClEthan	1,1,2-Trichloroethane
0026	7440666	Zinc	Zinc

CHEMICAL GROUND LEVEL CONCENTRATIONS (micrograms/m^3)

CHEM	CAS	ABBREVIATION	AVERAGE	HOURLY MAX	WATER	PASTURE	FISH
0001	75070	Acetaldehyde	3.080E-05	3.080E-05	0.000E+00	0.000E+00	0.000E+00
0002	107028	Acrolein	4.880E-06	4.880E-06	0.000E+00	0.000E+00	0.000E+00
0003	7664417	Ammonia	3.470E-02	3.470E-02	0.000E+00	0.000E+00	0.000E+00
0004	71432	Benzene	9.030E-06	9.030E-06	0.000E+00	0.000E+00	0.000E+00
0005	106990	1,3-Butadiene	3.290E-07	3.290E-07	0.000E+00	0.000E+00	0.000E+00
0006	100414	Ethyl Benzene	2.460E-05	2.460E-05	0.000E+00	0.000E+00	0.000E+00
0007	50000	Formaldehyde	5.440E-04	5.440E-04	0.000E+00	0.000E+00	0.000E+00
0008	110543	Hexane	1.950E-04	1.950E-04	0.000E+00	0.000E+00	0.000E+00
0009	1150	PAHs-w/	1.710E-06	1.710E-06	0.000E+00	0.000E+00	0.000E+00
0010	91203	Naphthalene	9.780E-07	9.780E-07	0.000E+00	0.000E+00	0.000E+00
0011	115071	Propylene	1.500E-03	1.500E-03	0.000E+00	0.000E+00	0.000E+00
0012	75569	Propylene Oxide	3.600E-05	3.600E-05	0.000E+00	0.000E+00	0.000E+00
0013	108883	Toluene	1.030E-04	1.030E-04	0.000E+00	0.000E+00	0.000E+00
0014	1210	Xylenes	4.890E-05	4.890E-05	0.000E+00	0.000E+00	0.000E+00
0015	7440382	Arsenic	4.400E-05	4.400E-05	0.000E+00	0.000E+00	0.000E+00
0016	7440439	Cadmium	7.330E-06	7.330E-06	0.000E+00	0.000E+00	0.000E+00
0017	7782505	Chlorine	4.910E-04	4.910E-04	0.000E+00	0.000E+00	0.000E+00
0018	7440473	Chromium	3.660E-05	3.660E-05	0.000E+00	0.000E+00	0.000E+00
0019	18540299	Cr(VI)	1.220E-05	1.220E-05	0.000E+00	0.000E+00	0.000E+00
0020	7440508	Copper	1.980E-04	1.980E-04	0.000E+00	0.000E+00	0.000E+00
0021	75343	1,1-DiClEthane	3.180E-05	3.180E-05	0.000E+00	0.000E+00	0.000E+00

0022	7439921	Lead	2.930E-05	2.930E-05	0.000E+00	0.000E+00	0.000E+00
0023	7439965	Manganese	1.320E-04	1.320E-04	0.000E+00	0.000E+00	0.000E+00
0024	7440020	Nickel	3.660E-05	3.660E-05	0.000E+00	0.000E+00	0.000E+00
0025	79005	1,1,2TriClEthan	2.440E-05	2.440E-05	0.000E+00	0.000E+00	0.000E+00
0026	7440666	Zinc	7.840E-04	7.840E-04	0.000E+00	0.000E+00	0.000E+00

ACUTE HI

CHEM	CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0001	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0002	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-05	0.00E+00	0.00E+00	2.57E-05
0003	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-05	0.00E+00	0.00E+00	1.08E-05
0004	0.00E+00	0.00E+00	0.00E+00	6.95E-09	0.00E+00	0.00E+00	0.00E+00	6.95E-09	0.00E+00	6.95E-09	0.00E+00	0.00E+00	6.95E-09	6.95E-09
0005	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0006	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0007	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-06	0.00E+00	5.79E-06	0.00E+00	0.00E+00	5.79E-06	0.00E+00	0.00E+00	5.79E-06
0008	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0010	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0012	0.00E+00	0.00E+00	0.00E+00	1.16E-08	0.00E+00	1.16E-08	0.00E+00	0.00E+00	0.00E+00	1.16E-08	1.16E-08	0.00E+00	0.00E+00	1.16E-08
0013	0.00E+00	2.78E-09	0.00E+00	2.78E-09	0.00E+00	2.78E-09	0.00E+00	0.00E+00	0.00E+00	2.78E-09	2.78E-09	0.00E+00	0.00E+00	2.78E-09
0014	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-09	0.00E+00	0.00E+00	2.22E-09
0015	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	2.32E-04
0016	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0017	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-06	0.00E+00	0.00E+00	2.34E-06
0018	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0019	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0020	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-06	0.00E+00	0.00E+00	1.98E-06
0021	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0022	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0023	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0024	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-06	0.00E+00	0.00E+00	6.10E-06	0.00E+00	0.00E+00	6.10E-06
0025	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
0026	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-30
SUM	0.00E+00	2.78E-09	0.00E+00	2.32E-04	0.00E+00	4.47E-05	0.00E+00	1.19E-05	0.00E+00	2.32E-04	5.27E-05	0.00E+00	6.95E-09	2.32E-04

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s) 0.05

Riverside ERC
HRA Modeling
Turbines only

```
1                    ISCST3 - (DATED 02035)

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

 Run Began on  6/01/2004 at 11:11:59

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA01b.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC HRA Modeling Run #01
 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  POINT  458296.0  3757943.6  220.98
 ** SRCDESCR  Turbine #1
 SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
 ** SRCDESCR  Turbine #2
 SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #1
 SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #2
 SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #3
 SO SRCPARAM  SRC1  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC2  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC3  0.000000E+00  7.07136  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC4  0.000000E+00  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC5  0.000000E+00  5.57784  305.3722  7.82034  3.9624
```

Turbine MEI's

```
*** ISCST3 - VERSION 02035 ***     ***  Riverside ERC                                                    ***        06/01/04
                                   ***  CEC HRA Modeling Run #01                                          ***        11:12:02
                                                                                                                     PAGE 393
**MODELOPTs:                                                                                                          HE>ZI
CONC                    URBAN ELEV                                  NOCALM

                        *** THE MAXIMUM   10   1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                            INCLUDING SOURCE(S):    SRC1    , SRC2    , SRC3    , SRC4    , SRC5    ,

                                  ** 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.       5.82660 (81122402) AT ( 458696.00, 3760243.50)  DC        6.       5.81573 (81112906) AT ( 458696.00, 3760243.50)  DC
  2.       5.82348 (81020107) AT ( 458696.00, 3760243.50)  DC        7.       5.81437 (81020224) AT ( 458696.00, 3760243.50)  DC
  3.       5.82040 (81122802) AT ( 458696.00, 3760243.50)  DC        8.       5.81437 (81030307) AT ( 458696.00, 3760243.50)  DC
  4.       5.81737 (81013022) AT ( 458696.00, 3760243.50)  DC        9.       5.81276 (81120804) AT ( 458696.00, 3760243.50)  DC
  5.       5.81573 (81011003) AT ( 458696.00, 3760243.50)  DC       10.       5.81276 (81120805) AT ( 458696.00, 3760243.50)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
                      BD = BOUNDARY
1 *** ISCST3 - VERSION 02035 ***     ***  Riverside ERC                                                    ***        06/01/04
                                     ***  CEC HRA Modeling Run #01                                          ***        11:12:02
                                                                                                                     PAGE 394
**MODELOPTs:                                                                                                          HE>ZI
CONC                    URBAN ELEV                                  NOCALM

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

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

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

ALL        1ST HIGHEST VALUE IS       0.24320 AT (  459496.00,  3757443.50,    268.49,      0.00)  DC      NA
           2ND HIGHEST VALUE IS       0.22735 AT (  459396.00,  3757443.50,    265.37,      0.00)  DC      NA
           3RD HIGHEST VALUE IS       0.22634 AT (  459596.00,  3757443.50,    265.54,      0.00)  DC      NA
           4TH HIGHEST VALUE IS       0.22627 AT (  459896.00,  3757343.50,    269.51,      0.00)  DC      NA
           5TH HIGHEST VALUE IS       0.22445 AT (  459496.00,  3757543.50,    265.54,      0.00)  DC      NA
           6TH HIGHEST VALUE IS       0.22411 AT (  459396.00,  3757543.50,    261.03,      0.00)  DC      NA
           7TH HIGHEST VALUE IS       0.22267 AT (  459296.00,  3757543.50,    257.52,      0.00)  DC      NA
           8TH HIGHEST VALUE IS       0.22039 AT (  459596.00,  3757343.50,    268.66,      0.00)  DC      NA
           9TH HIGHEST VALUE IS       0.21566 AT (  459096.00,  3757633.50,    246.18,      0.00)  DC      NA
          10TH HIGHEST VALUE IS       0.21356 AT (  459796.00,  3757343.50,    261.85,      0.00)  DC      NA
```

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                    ISCST3 - (DATED 02035)

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

Run Began on  6/01/2004 at 11:35:54

** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA02b.dat
** Trinity Consultants


CO STARTING
CO TITLEONE  Riverside ERC
CO TITLETWO  CEC HRA Modeling Run #01
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  POINT  458296.0  3757943.6  220.98
** SRCDESCR  Turbine #1
SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
** SRCDESCR  Turbine #2
SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #1
SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #2
SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #3
SO SRCPARAM  SRC1  0.000000E+00  24.384  716.4833  22.02661  3.9624
SO SRCPARAM  SRC2  0.000000E+00  24.384  716.4833  22.02661  3.9624
SO SRCPARAM  SRC3  3.333000E-01  5.57784  305.3722  7.82034  3.9624
SO SRCPARAM  SRC4  3.333000E-01  5.57784  305.3722  7.82034  3.9624
SO SRCPARAM  SRC5  3.333000E-01  5.57784  305.3722  7.82034  3.9624
```

Riverside ERC
HRA modeling
Cooling Towers Only

**MODELOPTs:
CONC URBAN ELEV NOCALM

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): SRC1 , SRC2 , SRC3 , SRC4 , SRC5 ,

** 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.	693.13513	(81080319)	AT	(458360.00, 3757995.75)	DC	6.	554.30859	(81082716)	AT	(458360.00, 3757965.75)	DC
2.	636.78217	(81100718)	AT	(458360.00, 3757905.75)	DC	7.	548.40808	(81101113)	AT	(458360.00, 3757965.75)	DC
3.	631.14539	(81091118)	AT	(458360.00, 3757905.75)	DC	8.	545.40887	(81032114)	AT	(458360.00, 3757965.75)	DC
4.	560.10724	(81102916)	AT	(458360.00, 3757965.75)	DC	9.	545.37378	(81101116)	AT	(458360.00, 3757965.75)	DC
5.	556.69897	(81080916)	AT	(458360.00, 3757965.75)	DC	10.	544.71997	(81032116)	AT	(458360.00, 3757965.75)	DC

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

Cooling Tower MEI

**MODELOPTs:
CONC URBAN ELEV NOCALM

*** 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	48.62681	AT (	458360.00,	3757935.75,	229.70,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	35.41774	AT (	458376.00,	3757933.50,	230.48,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	21.75288	AT (	458406.00,	3757903.50,	231.48,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	21.07159	AT (	458406.00,	3757933.50,	231.48,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	20.90350	AT (	458376.00,	3757903.50,	230.48,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	18.38664	AT (	458360.00,	3757905.75,	230.00,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	18.14086	AT (	458436.00,	3757903.50,	232.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	14.06956	AT (	458436.00,	3757933.50,	232.00,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	13.64673	AT (	458466.00,	3757903.50,	232.00,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	12.56363	AT (	458436.00,	3757873.50,	232.00,			

Riverside ERC

HRA Modeling

Cooling Tower 1-Hour MEI

Turbines Only

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1                    ISCST3 - (DATED 02035)

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

 Run Began on  6/02/2004 at 10:11:31

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA03b.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC HRA Modeling Run #03
 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  POINT  458296.0  3757943.6  220.98
 ** SRCDESCR  Turbine #1
 SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
 ** SRCDESCR  Turbine #2
 SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #1
 SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #2
 SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #3
 SO SRCPARAM  SRC1  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC2  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC3  0.000000E+00  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC4  0.000000E+00  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC5  0.000000E+00  5.57784  305.3722  7.82034  3.9624
```

**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 , SRC5 ,

** 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.	0.04143	(81030306)	AT	(458360.00, 3757995.75)	DC	6.	0.04077	(81021024)	AT	(458360.00, 3757995.75)	DC
2.	0.04115	(81040506)	AT	(458360.00, 3757995.75)	DC	7.	0.04076	(81121624)	AT	(458360.00, 3757995.75)	DC
3.	0.04103	(81120801)	AT	(458360.00, 3757995.75)	DC	8.	0.04069	(81112506)	AT	(458360.00, 3757995.75)	DC
4.	0.04097	(81031324)	AT	(458360.00, 3757995.75)	DC	9.	0.04058	(81042022)	AT	(458360.00, 3757995.75)	DC
5.	0.04089	(81011002)	AT	(458360.00, 3757995.75)	DC	10.	0.04057	(81011921)	AT	(458360.00, 3757995.75)	DC

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

Riverside ERC

HRA Modeling

Cooling Tower Annual MEI

Turbines Only

```
1                    ISCST3 - (DATED 02035)

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

 Run Began on  6/02/2004 at 10:15:44

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA03b2.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC HRA Modeling Run #03
 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  POINT  458296.0  3757943.6  220.98
 ** SRCDESCR  Turbine #1
 SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
 ** SRCDESCR  Turbine #2
 SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #1
 SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #2
 SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #3
 SO SRCPARAM  SRC1  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC2  5.000000E-01  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC3  0.000000E+00  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC4  0.000000E+00  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC5  0.000000E+00  5.57784  305.3722  7.82034  3.9624
```

**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	0.00200 AT	(458360.00, 3757935.75, 230.12, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	3RD HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	4TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	5TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	6TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	7TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		

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

Riverside ERC

HRA Modeling

Turbine 1-Hour MEI

Cooling Tower Only


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                    ISCST3 - (DATED 02035)

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

Run Began on  6/02/2004 at 10:22:46

** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA04b.dat
** Trinity Consultants


CO STARTING
CO TITLEONE  Riverside ERC
CO TITLETWO  CEC HRA Modeling Run #03
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  POINT  458296.0  3757943.6  220.98
** SRCDESCR  Turbine #1
SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
** SRCDESCR  Turbine #2
SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #1
SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #2
SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
** SRCDESCR  Cooling Tower #3
SO SRCPARAM  SRC1  0.000000E+00  24.384  716.4833  22.02661  3.9624
SO SRCPARAM  SRC2  0.000000E+00  24.384  716.4833  22.02661  3.9624
SO SRCPARAM  SRC3  3.333000E-01  5.57784  305.3722  7.82034  3.9624
SO SRCPARAM  SRC4  3.333000E-01  5.57784  305.3722  7.82034  3.9624
SO SRCPARAM  SRC5  3.333000E-01  5.57784  305.3722  7.82034  3.9624
```

**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 , SRC5 ,

** 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.	8.17253	(81013108)	AT	(458696.00, 3760243.50)	DC	6.	8.05018	(81040220)	AT	(458696.00, 3760243.50)	DC
2.	8.16444	(81122308)	AT	(458696.00, 3760243.50)	DC	7.	8.00194	(81122102)	AT	(458696.00, 3760243.50)	DC
3.	8.12524	(81113008)	AT	(458696.00, 3760243.50)	DC	8.	7.97588	(81092506)	AT	(458696.00, 3760243.50)	DC
4.	8.09588	(81012921)	AT	(458696.00, 3760243.50)	DC	9.	7.97588	(81102501)	AT	(458696.00, 3760243.50)	DC
5.	8.07457	(81112820)	AT	(458696.00, 3760243.50)	DC	10.	7.96356	(81102808)	AT	(458696.00, 3760243.50)	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

 Run Began on  6/01/2004 at 14:20:35

 ** BREEZE ISC GIS Pro v4.0.7 - C:\BREEZE\RERCCECHRA04b2.dat
 ** Trinity Consultants


 CO STARTING
 CO TITLEONE  Riverside ERC
 CO TITLETWO  CEC HRA Modeling Run #03
 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  POINT  458296.0  3757943.6  220.98
 ** SRCDESCR  Turbine #1
 SO LOCATION  SRC2  POINT  458296.0  3757980.1  220.98
 ** SRCDESCR  Turbine #2
 SO LOCATION  SRC3  POINT  458291.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #1
 SO LOCATION  SRC4  POINT  458296.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #2
 SO LOCATION  SRC5  POINT  458301.0  3757958.0  220.98
 ** SRCDESCR  Cooling Tower #3
 SO SRCPARAM  SRC1  0.000000E+00  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC2  0.000000E+00  24.384  716.4833  22.02661  3.9624
 SO SRCPARAM  SRC3  3.333000E-01  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC4  3.333000E-01  5.57784  305.3722  7.82034  3.9624
 SO SRCPARAM  SRC5  3.333000E-01  5.57784  305.3722  7.82034  3.9624
```

Riverside ERC

HRA Modeling

Turbine Annual MEI

Cooling Tower Only

**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	2.14582 AT	(459496.00, 3757443.50, 268.49, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.46252 AT	(458360.00, 3757821.00, 230.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.38840 AT	(458188.09, 3757821.00, 226.46, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.71022 AT	(458360.00, 3758175.75, 226.55, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.56677 AT	(458253.91, 3758175.75, 227.66, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.42374 AT	(458188.09, 3758066.00, 227.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT	(0.00, 0.00, 0.00, 0.00)		

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