

NLS2015058
Enclosure 1

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**Annual Radioactive Effluent Release Report
January 1, 2014 through December 31, 2014**

**NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION**

RADIOACTIVE EFFLUENT RELEASE REPORT

January 1, 2014 through December 31, 2014

USNRC Docket 50-298

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INTRODUCTION

This report summarizes meteorological data and doses from radioactive effluents for the Cooper Nuclear Station for the period January through December, 2014. The data presented is consistent with guidance provided in Regulatory Guide 1.21 of the U.S. Nuclear Regulatory Commission (Revision 1, 1974) for reporting meteorological data and radioactive effluent data.

The report is organized into three parts. Appendix A presents the effluent and waste disposal source term data. Appendix B presents a summary of onsite meteorological data for the report period, including atmospheric diffusion estimates and a description of the atmospheric diffusion model. Appendix C presents the doses from liquid and gaseous radioactive effluents. Descriptions of the dose calculation models are also included.

APPENDIX A

SOURCE TERMS

EFFLUENT AND WASTE DISPOSAL REPORTS

SUPPLEMENTAL INFORMATION

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

January 1, 2014 through December 31, 2014

Cooper Nuclear Station effluent and waste disposal data are presented in the format prescribed by Regulatory Guide 1.21. Meteorological data required by Table 4A&B of Regulatory Guide 1.21 is included in the Meteorological Section of the Annual Radioactive Material Release Report - Radioactive Effluents.

Facility Cooper Nuclear Station License DPR-46.

A. Regulatory Limits

1. Gaseous Waste Effluents

- a. The dose rates due to radioactive materials released in gaseous effluents offsite shall be limited to the following:
 1. Noble Gases: Less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin.
 2. I-131, I-133, tritium, and all radionuclides in particulate form with half-lives greater than or equal to 8 days: Less than or equal to 1500 mrem/yr to any organ.
- b. The air dose due to noble gases released in gaseous effluents offsite shall be limited to the following:
 1. During any calendar quarter: Less than or equal to 5 mrad from gamma radiation and less than or equal to 10 mrad from beta radiation.
 2. During any calendar year: Less than or equal to 10 mrad from gamma radiation and less than or equal to 20 mrad from beta radiation.
- c. The dose to a member of the public due to I-131, I-133, and radioactive materials in particulate form with half-lives greater than 8 days in gaseous effluents offsite shall be limited to the following:
 1. During any calendar quarter: Less than or equal to 7.5 mrem to any organ.
 2. During any calendar year: Less than or equal to 15 mrem to any organ.

2. Liquid Waste Effluents

- a. January 1, 2014 through December 31, 2014

The concentration of radioactive material in water offsite due to radioactive liquid effluents shall not exceed the concentration specified in 10 CFR 20 Part 20.1302 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall not exceed 2×10^{-4} uCi/ml total activity. (CNS Technical Specification Amendment 174 Implementation)

- b. The dose to a member of the public due to radioactive material in liquid effluents offsite shall be limited to the following:
 - 1. During any calendar quarter: Less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ.
 - 2. During any calendar year: Less than or equal to 3 mrem to the total body and less than or equal to 10 mrem to any organ.

B. Maximum Permissible Concentrations

- 1. Water: Covered in Section A.2.
- 2. Air: Covered in Section A.1.

C. Average Energy

The average energy (E) of the radionuclide mixtures of fission and activation gases released is not applicable. This information is not utilized for dose or release calculations.

D. Measurements and Approximations of Total Radioactivity

The methods used to measure or approximate the total radioactivity in effluents and to determine radionuclide composition are as follows:

1. Gaseous Effluents

a. Fission and Activation Gases:

Radioactivity and radionuclide composition is determined by laboratory HPGe detector analysis in correlation with continuous gross radioactivity monitoring by a beta scintillation detector in the release pathway.

b. Iodines:

Charcoal cartridges provide continuous sample collection. These cartridges are analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer.

c. Particulates:

Particulate filters provide continuous sample collection. These filters are analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer. An aliquot of a filter composite from each release point was analyzed for Sr-89, Sr-90, and gross alpha by an offsite laboratory.

d. Tritium:

A portable sampling apparatus is utilized to collect a quarterly sample of each radioactive vent effluent. These samples are analyzed using a liquid scintillation counter.

e. Carbon-14:

Carbon-14 source term was estimated using 2014 plant operational data and applying the methodology outlined in EPRI Technical Report 1021106 (EPRI, 2010).

2. Liquid Effluents

a. Principal gamma emitters and dissolved and entrained gases:

Each batch of liquid effluent is analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer. In addition, each batch is monitored for gross gamma radioactivity by a NaI detector in-line with the release pathway.

b. Tritium:

An aliquot of a monthly composite is analyzed using a liquid scintillation counter.

c. Sr-89 and Sr-90:

An aliquot from a quarterly composite is analyzed by an offsite laboratory.

d. Gross alpha:

An aliquot from a monthly composite is analyzed by an offsite laboratory.

e. Fe-55:

An aliquot from a quarterly composite is analyzed by an offsite laboratory.

E. Batch Releases

a. Liquid

1.	Number of batch releases	0	
2.	Total time period for batch releases	NA	minutes
3.	Maximum time period for batch release	NA	minutes
4.	Average time period for batch release	NA	minutes
5.	Minimum time period for batch release	NA	minutes
6.	Average stream flow during periods of release of effluent into a flowing stream	NA	liters/minute

b. Gaseous

1.	Number of batch releases	0	
2.	Total time period for batch releases	NA	minutes
3.	Maximum time period for batch release	NA	minutes
4.	Average time period for batch release	NA	minutes
5.	Minimum time period for batch release	NA	minutes

F. Abnormal Release

a. Liquid

1.	Number of releases:	0	
2.	Total activity released	NA	Ci

b. Gaseous

1.	Number of releases:	0	
2.	Total activity released	NA	Ci

**TABLE 1A
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES**

	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR	EST. TOTAL ERROR %
A. Fission and activation gases						
1. Total release	Ci	3.77E+00	6.07E-01	4.12E+00	2.81E+00	2.0E+01
2. Average release rate for period	μCi/sec	4.84E-01	7.72E-02	5.18E-01	3.54E-01	
B. Iodines						
1. Total iodine 131	Ci	1.46E-05	1.52E-05	2.22E-05	1.14E-05	3.0E+01
2. Average release rate for period	μCi/sec	1.87E-06	1.93E-06	2.79E-06	1.44E-06	
C. Particulates						
1. Particulates with half-lives >8 days	Ci	1.67E-05	8.39E-05	6.54E-05	5.43E-04	5.0E+01
2. Average release rate for period	μCi/sec	2.15E-06	1.07E-05	8.23E-06	6.83E-05	
3. Gross alpha radioactivity	Ci	2.24E-06	2.57E-06	4.52E-06	1.51E-06	
D. Tritium						
1. Total release	Ci	2.64E+00	2.74E+00	2.24E+00	9.25E-01	3.0E+01
2. Average release rate for period	μCi/sec	3.40E-01	3.48E-01	2.82E-01	1.16E-01	
E. Carbon-14						
1. Total release	Ci	2.68E+00	2.71E+00	2.74E+00	2.74E+00	NA
2. Release Rate	μCi/sec	3.45E-01	3.45E-01	3.45E-01	3.45E-01	

TABLE 1B
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-ELEVATED RELEASE
CONTINUOUS MODE *BATCH

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
1. Fission gases					
argon-41	Ci	1.08E-01	2.53E-02	7.70E-02	9.02E-02
krypton-83m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-85m	Ci	1.42E-01	8.82E-03	1.01E-01	1.30E-01
krypton-85	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-87	Ci	6.60E-01	4.27E-02	5.01E-01	5.78E-01
krypton-88	Ci	4.83E-01	2.54E-02	3.27E-01	4.66E-01
krypton-89	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-133	Ci	4.14E-02	4.39E-03	5.50E-02	2.18E-02
xenon-135m	Ci	4.09E-01	9.21E-02	5.76E-01	2.38E-01
xenon-135	Ci	6.02E-01	8.60E-02	7.29E-01	4.21E-01
xenon-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-138	Ci	1.32E+00	3.22E-01	1.75E+00	8.69E-01
Total for period	Ci	3.77E+00	6.07E-01	4.12E+00	2.81E+00
2. Iodines					
iodine-131	Ci	5.78E-06	7.44E-06	9.45E-06	7.92E-06
iodine-132	Ci	0.00E+00	0.00E+00	3.37E-05	5.54E-06
iodine-133	Ci	1.29E-05	1.02E-05	4.34E-05	4.09E-05
iodine-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iodine-135	Ci	0.00E+00	0.00E+00	4.84E-05	7.22E-05
Total for period	Ci	1.87E-05	1.76E-05	1.35E-04	1.27E-04

* No batch discharges were made

**TABLE 1B
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-ELEVATED RELEASE (CONTINUED)
CONTINUOUS MODE *BATCH**

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
3. Particulates					
sodium-24	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
chromium-51	Ci	0.00E+00	1.75E-06	4.96E-06	1.42E-07
manganese-54	Ci	0.00E+00	1.48E-07	3.59E-07	5.65E-08
manganese-56	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iron-59	Ci	0.00E+00	0.00E+00	2.29E-07	0.00E+00
cobalt-58	Ci	0.00E+00	1.30E-07	3.65E-07	0.00E+00
cobalt-60	Ci	7.66E-08	1.93E-06	2.75E-06	6.28E-07
zinc-65	Ci	0.00E+00	0.00E+00	1.34E-07	0.00E+00
zinc-69	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
rubidium-88	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
rubidium-89	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-89	Ci	2.05E-07	5.57E-05	1.44E-06	4.24E-06
strontium-90	Ci	0.00E+00	0.00E+00	0.00E+00	1.31E-08
strontium-91	Ci	1.15E-06	2.31E-06	1.30E-05	4.08E-05
yttrium-91m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-92	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
niobium-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ruthenium-103	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
silver-110m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
antimony-124	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
antimony-125	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
tellurium-132	Ci	0.00E+00	0.00E+00	1.56E-08	0.00E+00
cesium-137	Ci	0.00E+00	1.30E-07	3.68E-08	1.68E-07
cesium-138	Ci	5.74E-04	1.20E-04	2.99E-02	7.14E-02
barium-139	Ci	4.14E-04	4.96E-04	2.12E-03	5.15E-04
barium-140	Ci	0.00E+00	3.97E-07	3.33E-07	1.79E-06
lanthanum-140	Ci	7.02E-08	2.85E-07	3.25E-07	9.83E-07
cerium-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
praesodymium-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	9.90E-04	6.79E-04	3.20E-02	7.20E-02
Total for period with >8d half life	Ci	2.82E-07	6.02E-05	1.06E-05	7.04E-06

* No batch discharges were made

**TABLE 1C
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-BUILDING VENT RELEASE
CONTINUOUS MODE *BATCH**

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
1. Fission gases					
krypton-83m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-85m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-85	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-87	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-88	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
krypton-89	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-135m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-138	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2. Iodines					
iodine-131	Ci	8.79E-06	7.73E-06	1.27E-05	3.52E-06
iodine-132	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iodine-133	Ci	2.07E-05	2.58E-05	5.33E-05	3.26E-06
iodine-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iodine-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	2.95E-05	3.35E-05	6.60E-05	6.78E-06

* No batch discharges were made.

TABLE 1C
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-BUILDING VENT RELEASE (CONTINUED)
CONTINUOUS MODE *BATCH

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
3. Particulates					
sodium-24	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
chromium-51	Ci	0.00E+00	0.00E+00	0.00E+00	1.89E-04
manganese-54	Ci	3.70E-07	2.62E-07	2.28E-06	3.01E-05
manganese-56	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cobalt-57	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cobalt-58	Ci	0.00E+00	0.00E+00	1.35E-07	1.60E-05
iron-59	Ci	0.00E+00	0.00E+00	0.00E+00	9.26E-06
cobalt-60	Ci	1.51E-05	2.27E-05	5.05E-05	2.72E-04
zinc-65	Ci	0.00E+00	0.00E+00	0.00E+00	1.51E-05
rubidium-89	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-89	Ci	8.19E-07	3.48E-07	3.60E-07	0.00E+00
strontium-90	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-91	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-92	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
yttrium-91m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
nobium-95	Ci	0.00E+00	0.00E+00	0.00E+00	2.58E-06
technetium-99m	Ci	0.00E+00	0.00E+00	0.00E+00	5.86E-07
ruthenium-103	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
silver-110m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
antimony-124	Ci	0.00E+00	0.00E+00	0.00E+00	7.89E-07
cesium-137	Ci	1.21E-07	3.91E-07	1.56E-06	1.31E-06
cesium-138	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
barium-139	Ci	3.70E-04	0.00E+00	6.18E-04	0.00E+00
barium-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
lanthanum-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cerium-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cerium-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
praseodymium-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
 Total for period	Ci	 3.86E-04	 2.37E-05	 6.73E-04	 5.37E-04
 Total for period >8 day half life	Ci	 1.64E-05	 2.37E-05	 5.48E-05	 5.36E-04

* No batch discharges were made

**TABLE 2A
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES**

	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR	EST. TOTAL ERROR %
A. Fission and activation products						
1. Total release (not including tritium, gases or alpha)	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.0E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
B. Tritium						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.0E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
C. Dissolved and entrained gases						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.0E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
D. Gross alpha radioactivity						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.0E+01
E. Volume of waste released (prior to dilution)						
	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.0E+01
F. Volume of dilution water used during period						
	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.0E+01

**TABLE 2B
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID EFFLUENTS (CONTINUED)
CONTINUOUS MODE *BATCH MODE**

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
sodium-24	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
chromium-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
manganese-54	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iron-55	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cobalt-58	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iron-59	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cobalt-60	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
zinc-65	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-89	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
strontium-90	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
technetium-99m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
antimony-124	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iodine-131	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
iodine-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cesium-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cesium-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cerium-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
 Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
 xenon-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
xenon-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

* No continuous mode discharges were made

TABLE 3

**SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
PERIOD: January 1, 2014 through December 31, 2014**

A. Solid Waste Shipped Offsite for Burial or Disposal (Not Irradiated Fuel)

1. Type of Waste

	Unit	12 Month Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³	4.58E+01	N/A
	Ci	7.02E+01	15%
b. Dry compressible waste, contaminated equip, etc.	m ³	2.59E+02	N/A
	Ci	2.18E+01	25%
c. Irradiated components, control rods, etc.	m ³	0.00E+00	N/A
	Ci	0.00E+00	N/A
d. Other	m ³	4.80E+00	N/A
	Ci	5.00E-01	N/A

2. Estimate of Major Nuclide Composition (By Type of Waste), Percent %

a. Resin

americium-241	3.56E-04	Iodine-131	1.13E-04
barium-140	3.63E-04	manganese-54	2.26E+00
carbon-14	2.96E-01	nickel-63	8.28E-01
cesium-134	3.47E-01	plutonium-238	2.13E-04
cesium-137	1.56E-00	plutonium-239	3.19E-04
cobalt-58	1.46E-01	plutonium-241	4.48E-02
cobalt-60	5.70E+01	strontium-89	1.77E-02
curium-242	1.65E-04	strontium-90	6.59E-03
curium-244	2.63E-04	technetium-99	1.40E-02
iodine-129	2.60E-03	tritium	4.65E-02
lanthanum-140	3.08E-04	zinc-65	1.42E+00
chromium-51	8.94E-02	silver-110m	9.47E-04
iron-55	3.59E+01		

TABLE 3

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (continued)

PERIOD: January 1, 2014 through December 31, 2014

b. DAW

americium-241	4.64E-04	manganese-54	6.63E+00
antimony-124	1.27E-01	nickel-63	8.24E-01
carbon-14	5.58E-02	niobium-95	1.62E-01
cesium-137	3.54E-02	plutonium-238	4.14E-04
chromium-51	2.47E+00	plutonium-239	4.16E-04
cobalt-57	3.18E-03	plutonium-241	8.45E-02
cobalt-58	1.52E+00	silver-110m	8.38E-03
cobalt-60	5.61E+01	strontium-89	1.60E-02
curium-242	2.68E-04	strontium-90	9.20E-03
curium-244	3.86E-04	technetium-99	9.32E-03
iodine-129	3.79E-04	tritium	7.50E-03
iron-55	2.86E+01	zinc-65	2.72E+00
iron-59	5.79E-01	zirconium-95	5.25E-02

c. Irradiated Hardware - None

d. Other

americium-241	2.60E-02	nickel-63	9.93E+01
carbon-14	2.86E-04	plutonium-238	3.04E-07
cesium-137	2.30E-02	plutonium-239	2.69E-06
cobalt-60	3.20E-01	plutonium-241	7.64E-05
curium-244	2.91E-06	strontium-89	7.84E-05
iron-55	3.18E-01	strontium-90	9.57E-06
iodine-129	2.86E-05	technetium-99	1.24E-04
manganese-54	2.91E-03	tritium	4.43E-02

TABLE 3

**SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (continued)
PERIOD: January 1, 2014 through December 31, 2014**

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
10	Exclusive Use	UT
7	Exclusive Use	TN

4. Solidification Agent

None

B. Irradiated Fuel Shipments (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	NA	NA

**GASEOUS RADIOACTIVE WASTES
CUMULATIVE DOSE DATA**

A.	Maximum gamma air dose		<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>Annual</u>
	Site boundary*		N	NNW	N	NNW	N
	1. Total	mrad	3.72E-05	2.06E-05	5.67E-05	3.03E-05	1.67E-04
	Percent of Technical Specification						
	2. Limit		0.00%	0.00%	0.00%	0.00%	0.00%
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrad	1.12E-04	2.89E-05	2.43E-04	1.35E-04	5.15E-04
	Percent of Technical Specification						
	2. Limit		0.00%	0.00%	0.00%	0.00%	0.01%
B.	Maximum beta air dose						
	Site boundary*		N	NNW	N	NNW	N
	1. Total	mrad	2.31E-05	1.15E-05	3.43E-05	1.89E-05	1.03E-04
	Percent of Technical Specification						
	2. Limit		0.00%	0.00%	0.00%	0.00%	0.00%
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrad	6.98E-05	1.62E-05	1.47E-04	8.39E-05	3.15E-04
	Percent of Technical Specification						
	2. Limit		0.00%	0.00%	0.00%	0.00%	0.00%
C.	Maximum organ dose due to I-131, I-133, and particulates (>8 day half lives)						
	Site boundary*		N	N	N	NNW	N
	1. Total	mrem	6.49E-03	8.06E-03	1.18E-02	1.39E-02	4.01E-02
	Percent of Technical Specification						
	2. Limit		0.09%	0.11%	0.16%	0.19%	0.27%
	3. Organ		Thyroid	Thyroid	Thyroid	Thyroid	Thyroid
	4. Exposed Individual		Infant	Infant	Infant	Infant	Infant
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrem	1.56E-03	2.24E-03	4.18E-03	4.83E-03	1.22E-02
	Percent of Technical Specification						
	2. Limit		0.02%	0.03%	0.06%	0.06%	0.08%
	3. Organ		Thyroid	Thyroid	Thyroid	Thyroid	Thyroid
	4. Exposed Individual		Infant	Infant	Infant	Infant	Infant
D.	Maximum organ dose rate due to I-131, I-133, tritium, and particulates (>8 day half-lives) was 0.040 mrem/year which was 0.27% of the Technical Specification Limit.						
E.	All radioactive noble gas effluent monitors were set to automatically alarm when the monitor alarm set point, determined as specified in the Offsite Dose Assessment Manual (ODAM), was exceeded. This is required to ensure that the 500 mrem/yr to the total body and the 3000 mrem/yr to the skin limits are not exceeded.						

*Resident and Site Boundary Key: N is 0.67 miles North, NNW is 0.69 miles North-Northwest, and NW residence is 0.90 miles Northwest.

GASEOUS RADIOACTIVE WASTES (Continued)
CUMULATIVE DOSE DATA

F. Maximum organ dose due to Carbon-14*			<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>Annual</u>
1.	Total	mrem	3.49E-01	3.86E-01	4.61E-01	4.97E-01	1.83E+00
2.	Percent of Technical Specification Limit		3.49%	3.86%	4.61%	4.97%	9.14%
3.	Organ	mrem	Bone	Bone	Bone	Bone	Bone
4.	Exposed Individual		Child	Child	Child	Child	Child

*Maximum organ dose due to Carbon-14 is based on summation of organ dose pathways from the nearest garden, nearest meat animal, and nearest milk animal. Inhalation pathway was negligible.

LIQUID RADIOACTIVE WASTES
CUMULATIVE DOSE DATA

A. Maximum whole body dose			<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>Annual</u>
1.	Total	mrem	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	Percent of Technical Specification Limit		0.00%	0.00%	0.00%	0.00%	0.00%
B. Maximum Organ Dose							
1.	Total	mrem	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	Percent of Technical Specification Limit		0.00%	0.00%	0.00%	0.00%	0.00%

SUPPLEMENTAL INFORMATION

A. Unplanned Releases:

None

B. NPPD Initiated Changes to the Process Control Program:

None.

C. Changes to the Offsite Dose Assessment Manual:

None

D. Reports Required by the Offsite Dose Assessment Manual:

The following information is being reported per the requirements of ODAM Specification D3.3.2, Condition I, Required Action I.2.2. This information describes conditions in which particulate and iodine sampling via auxiliary sampling equipment as required by ODAM Specification D3.3.2, Condition I, Required Action I.1, was out of service.

Turbine Building Vents Monitoring: On 10/7/2014, at 12:16, during RE-28 and due to 4160V Bus outages (planned maintenance) Turbine Building Kaman monitor and NMC Alternate Sampler were declared inoperable. This resulted in Turbine Building Vents releases being unmonitored. With the alternate sampler unavailable, particulate & iodine sampling were not performed and ODAM requirements, D3.3.2, Condition I.1 were not met. Particulate & Iodine sampling for the Turbine Building vent was unavailable from 10/7/2014, 12:16 through 10/11/2014, 12:41 for a total of 96 hours and 25 minutes.

Note: During the timeframe vents monitoring was secured, the plant was in Mode 5; Shutdown Cooling was in continuous service for a minimum 9 days.

It was determined from 01:00 to 09:13 on 11/18/14 the Elevated Release Point sample line heat trace failed and due to low outdoor temperatures the sample line froze, thus restricting or reducing sample flow to zero. The Normal and High range ERP Kaman's as well as the GE Alternate Sampler were declared inoperable thus preventing effluent monitoring from occurring. On 11/18/14 the FIN Team re-energized the heat tracing and shortly thereafter, normal indications were restored to the Normal and High range Kaman's. The Normal and High range ERP Kaman's were declared operable 11/18/14 at 10:53.

APPENDIX B
METEOROLOGY

CONTENTS

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ATMOSPHERIC DIFFUSION MODEL	B324

METEOROLOGICAL DATA SUMMARIES

Meteorological data collected onsite for the period January 1, 2014, through December 31, 2014, were reduced, validated, summarized for analysis, and included in appropriate dose calculations. Hourly data summaries are provided for all pertinent parameters and for the joint frequency distributions (JFD's) of wind speed and wind direction by atmospheric stability class.

DATA RECOVERY

Data recovery statistics are provided in Table 1 for all pertinent meteorological parameters. Average data recovery for all parameters in 2014 was approximately 99.9%.

		<u>Lowest Data Recovery</u>	<u>Average Data Recovery</u>
January 1 - March 31, 2014	(Q1)	100.0%	100.0%
April 1 - June 30, 2014	(Q2)	99.7%	99.9%
First Semiannual Period - January 1 - June 30, 2014	(SEM1)	99.9%	99.9%
July 1 - September 30, 2014	(Q3)	98.7%	99.7%
October 1 - December 31, 2014	(Q4)	99.8%	99.9%
Second Semiannual Period - July 1 - December 31, 2014	(SEM2)	99.3%	99.8%
Annual Period - January 1 - December 31, 2014	(ANN)	99.7%	99.9%

WIND AT 100-METER LEVEL AND 10-METER LEVEL

	<u>Predominant Wind Direction at 100m Level</u>		<u>Predominant Wind Direction at 10m Level</u>	
Q1	North-Northwest	13.2%	North-Northwest	13.5%
Q2	South	15.3%	South	15.5%
SEM1	South	13.4%	South	14.1%
Q3	South-southeast	17.9%	South-Southeast	15.0%
Q4	North-northwest	15.1%	Northwest	13.7%
SEM2	South-southeast	13.7%	South-Southwest	13.7%
ANN	South	13.0%	South	13.0%

	<u>Mean Wind Speed at 100m Level</u>	<u>Mean Wind Speed at 10m Level</u>
Q1	14.6 MPH	10.3 MPH
Q2	14.1 MPH	9.6 MPH
SEM1	14.3 MPH	10.0 MPH
Q3	10.9 MPH	6.2 MPH
Q4	13.9 MPH	8.4 MPH
SEM2	12.4 MPH	7.3 MPH
ANN	13.3 MPH	8.6 MPH

	<u>Maximum Hourly Average Wind Speed/(Date at 100m Level)</u>	<u>Maximum Hourly Average Wind Speed/(Date at 10m Level)</u>
Q1	44.5 MPH/(14/03/26)	38.3 MPH/(14/03/26)
Q2	38.7 MPH/(14/04/26)	36.5 MPH/(14/04/26)
SEM1	44.5 MPH/(14/03/26)	38.3 MPH/(14/03/26)
Q3	31.8 MPH/(14/08/31)	21.1 MPH/(14/09/03)
Q4	32.5 MPH/(14/11/02)	26.1 MPH/(14/11/07)
SEM2	32.5 MPH/(14/11/02)	26.1 MPH/(14/11/07)
ANN	44.5 MPH/(14/03/26)	38.3 MPH/(14/03/26)

TEMPERATURE AT 10-METER LEVEL

	<u>Mean Hourly Average Temperature</u>	<u>Average Daily Maximum</u>	<u>Average Daily Minimum</u>
Q1	28.1 Degrees F	38.3 Degrees F	18.0 Degrees F
Q2	64.2 Degrees F	73.8 Degrees F	54.3 Degrees F
SEM1	46.2 Degrees F	56.1 Degrees F	36.2 Degrees F
Q3	71.3 Degrees F	80.1 Degrees F	63.0 Degrees F
Q4	41.5 Degrees F	50.2 Degrees F	33.7 Degrees F
SEM2	56.4 Degrees F	65.1 Degrees F	48.3 Degrees F
ANN	51.4 Degrees F	60.7 Degrees F	42.3 Degrees F

	<u>Maximum Temperature (Date)</u>	<u>Minimum Temperature (Date)</u>
Q1	75.1 Degrees F (14/03/31)	-9.8 Degrees F (14/01/06)
Q2	95.9 Degrees F (14/05/07)	25.3 Degrees F (14/04/01)
SEM1	95.9 Degrees F (14/05/07)	-9.8 Degrees F (14/01/06)
Q3	97.1 Degrees F (14/07/25)	37.0 Degrees F (14/09/13)
Q4	86.0 Degrees F (14/10/26)	0.8 Degrees F (14/12/31)
SEM2	97.1 Degrees F (14/07/25)	0.8 Degrees F (14/12/31)
ANN	97.1 Degrees F (14/07/25)	-9.8 Degrees F (14/01/06)

PRECIPITATION

	<u>Total Precipitation</u>	<u>Maximum Daily Precipitation Total/(Date)</u>	<u>Maximum Hourly Precipitation Total/(Date)</u>
Q1	1.43 Inches	0.71 Inches (14/02/20)	0.40 Inches (14/02/20)
Q2	12.87 Inches	1.98 Inches (14/05/25)	1.14 Inches (14/06/27)
SEM1	14.30 Inches	1.98 Inches (14/05/25)	1.14 Inches (14/06/27)
Q3	17.24 Inches	2.95 Inches (14/09/09)	1.80 Inches (14/09/09)
Q4	4.24 Inches	0.90 Inches (14/10/13)	0.32 Inches (14/10/02)
SEM2	21.48 Inches	2.95 Inches (14/09/09)	1.80 Inches (14/09/09)
ANN	35.78 Inches	2.95 Inches (14/09/09)	1.80 Inches (14/09/09)

ATMOSPHERIC STABILITY

Atmospheric stability is determined through classification of differential temperature data based on JFD of the 100-meter wind and the delta T (100m - 10m) stability data.

	<u>Unstable Conditions Classes A-C</u>	<u>Neutral Conditions Class D</u>	<u>Stable Conditions Classes E-G</u>
Q1	3%	62%	34%
Q2	10%	52%	38%
SEM1	7%	57%	36%
Q3	3%	48%	49%
Q4	1%	62%	37%
SEM2	2%	55%	43%
ANN	5%	56%	39%

TABLE 1. Meteorological Data Recovery

Data Recovery (% of total Observations)

	January- March 2014	April- June 2014	January- June 2014	July- Sept. 2014	October- Dec. 2014	July- Dec. 2014	January- Dec. 2014
100m wind speed	100.0	100.0	100.0	100.0	99.8	99.9	99.9
100m wind direction	100.0	100.0	100.0	100.0	99.8	99.9	99.9
100m ambient temperature	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60m wind speed	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60m wind direction	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60m ambient temperature	100.0	100.0	100.0	98.7	100.0	99.3	99.7
10m wind speed	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10m wind direction	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10m ambient temperature	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10m dew point	100.0	99.7	99.9	99.6	100.0	99.8	99.8
100m-10m delta T	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100m-60m delta T	100.0	100.0	100.0	98.7	100.0	99.3	99.7
60m-10m delta T	100.0	100.0	100.0	98.7	100.0	99.3	99.7
100m JFD	100.0	100.0	100.0	100.0	99.8	99.9	100.0
10m JFD	100.0	100.0	100.0	98.7	100.0	99.3	99.7

JFD - Joint Frequency Distribution of wind speed, wind direction and atmospheric stability.

MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA

The tables presented in this section provide a summary of hourly averages of measured meteorological parameters. The tables provide summaries by month for the annual period January through December, 2014. Summaries for the first quarter, second quarter, third quarter, fourth quarter, and semiannual periods are also provided. The parameters provided are listed below.

- * 10 meter ambient temperature.
- * Wind direction frequencies at 10 meters and 100 meters.
- * Precipitation.

Any missing or non-measured data are indicated by a field of 9's.

10-Meter Ambient Temperature
and
10-Meter Dew Point Temperature

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NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-MAR 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

JANUARY

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER	(DEG F)	NUMBER	(DEG F)	NUMBER	(%)	NUMBER	(GM/M3)	NUMBER	(DEG F)
	OBS		OBS		OBS		OBS		OBS	
1	31	21.4	31	11.4	31	66.5	31	2.5	31	18.7
2	31	20.9	31	11.4	31	67.8	31	2.5	31	18.4
3	31	20.5	31	11.4	31	68.8	31	2.5	31	18.1
4	31	20.3	31	11.3	31	69.2	31	2.5	31	17.9
5	31	20.3	31	11.2	31	68.7	31	2.5	31	17.8
6	31	19.9	31	11.2	31	69.8	31	2.5	31	17.5
7	31	19.7	31	11.5	31	71.2	31	2.5	31	17.4
8	31	19.6	31	11.6	31	71.6	31	2.5	31	17.4
9	31	19.6	31	11.9	31	72.5	31	2.5	31	17.5
10	31	20.1	31	11.7	31	70.4	31	2.5	31	17.8
11	31	21.5	31	11.7	31	66.4	31	2.4	31	18.8
12	31	23.4	31	11.7	31	61.8	31	2.4	31	20.1
13	31	25.4	31	11.9	31	57.9	31	2.4	31	21.5
14	31	27.0	31	12.0	31	55.1	31	2.4	31	22.6
15	31	28.4	31	11.9	31	52.2	31	2.4	31	23.5
16	31	29.2	31	12.0	31	51.2	31	2.4	31	24.0
17	31	29.7	31	12.9	31	52.2	31	2.5	31	24.6
18	31	29.2	31	13.3	31	53.7	31	2.5	31	24.4
19	31	27.1	31	13.3	31	57.8	31	2.5	31	23.1
20	31	25.1	31	12.4	31	60.4	31	2.4	31	21.5
21	31	24.0	31	12.2	31	61.9	31	2.4	31	20.7
22	31	23.0	31	11.9	31	63.6	31	2.4	31	19.9
23	31	22.6	31	11.7	31	64.3	31	2.4	31	19.5
24	31	22.0	31	11.6	31	65.7	31	2.4	31	19.1
HOURLY MEAN		23.3		11.9		63.4		2.5		20.1
AVG DAILY MAX		33.5		20.1		79.5		3.4		28.4
AVG DAILY MIN		12.0		3.0		47.8		1.7		10.4
ABSOLUTE MAX		59.5		39.2		100.0		6.3		45.2
ABSOLUTE MIN		-9.8		-20.2		20.4		.5		-10.6
TOTAL OBS		744		744		744		744		744

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NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-MAR 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

FEBRUARY

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	28	21.6	28	14.8	28	75.8	28	2.7	28	19.6
2	28	21.0	28	14.6	28	77.0	28	2.7	28	19.2
3	28	20.5	28	14.4	28	77.8	28	2.7	28	18.8
4	28	19.9	28	13.9	28	78.0	28	2.6	28	18.3
5	28	19.2	28	13.6	28	79.0	28	2.6	28	17.7
6	28	18.7	28	13.2	28	79.6	28	2.6	28	17.2
7	28	18.4	28	13.2	28	80.2	28	2.6	28	17.0
8	28	18.1	28	13.1	28	81.0	28	2.5	28	16.7
9	28	17.9	28	12.7	28	80.1	28	2.5	28	16.5
10	28	18.4	28	12.3	28	77.2	28	2.5	28	16.8
11	28	20.2	28	12.4	28	72.0	28	2.5	28	18.2
12	28	22.3	28	13.0	28	67.7	28	2.5	28	19.7
13	28	24.2	28	13.7	28	65.0	28	2.6	28	21.2
14	28	25.8	28	14.0	28	62.1	28	2.6	28	22.3
15	28	27.1	28	14.5	28	60.3	28	2.7	28	23.3
16	28	28.5	28	15.3	28	59.5	28	2.8	28	24.3
17	28	29.3	28	16.1	28	59.6	28	2.8	28	25.0
18	28	29.4	28	16.4	28	60.2	28	2.9	28	25.1
19	28	28.4	28	16.0	28	61.5	28	2.8	28	24.4
20	28	26.9	28	16.3	28	65.0	28	2.8	28	23.5
21	28	25.6	28	16.3	28	68.3	28	2.8	28	22.7
22	28	24.5	28	15.9	28	70.2	28	2.8	28	21.9
23	28	23.4	28	15.6	28	72.3	28	2.8	28	21.1
24	28	22.5	28	15.2	28	73.7	28	2.7	28	20.4
HOURLY MEAN		23.0		14.4		70.9		2.7		20.4
AVG DAILY MAX		31.2		21.7		87.0		3.5		27.1
AVG DAILY MIN		15.3		7.8		53.5		2.0		13.7
ABSOLUTE MAX		63.1		39.1		100.0		6.3		50.4
ABSOLUTE MIN		-6.4		-13.5		29.8		.7		-7.0
TOTAL OBS		672		672		672		672		672

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-MAR 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

MARCH

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	33.8	31	24.0	31	69.0	31	3.8	31	30.2
2	31	33.2	31	23.7	31	69.5	31	3.7	31	29.7
3	31	32.8	31	23.5	31	70.1	31	3.7	31	29.4
4	31	32.1	31	23.5	31	72.0	31	3.7	31	29.0
5	31	31.3	31	23.4	31	73.7	31	3.7	31	28.5
6	31	30.3	31	23.1	31	75.8	31	3.7	31	27.7
7	31	30.0	31	22.8	31	75.7	31	3.6	31	27.5
8	31	29.5	31	22.6	31	76.3	31	3.6	31	27.1
9	31	30.0	31	22.3	31	73.8	31	3.6	31	27.4
10	31	32.4	31	22.6	31	68.2	31	3.7	31	28.9
11	31	35.5	31	23.0	31	61.9	31	3.8	31	30.9
12	31	38.7	31	23.5	31	56.9	31	3.8	31	32.9
13	31	41.6	31	23.6	31	52.1	31	3.8	31	34.5
14	31	43.9	31	23.4	31	48.0	31	3.7	31	35.7
15	31	45.5	31	23.3	31	45.0	31	3.7	31	36.5
16	31	46.0	31	23.5	31	44.6	31	3.7	31	36.9
17	31	46.5	31	23.7	31	44.1	31	3.7	31	37.2
18	31	46.6	31	23.7	31	44.1	31	3.7	31	37.3
19	31	45.4	31	23.9	31	46.3	31	3.7	31	36.8
20	31	42.8	31	24.2	31	50.9	31	3.8	31	35.4
21	31	39.9	31	23.9	31	55.3	31	3.8	31	33.7
22	31	37.7	31	23.7	31	59.1	31	3.7	31	32.4
23	31	36.0	31	24.0	31	63.4	31	3.8	31	31.5
24	31	34.9	31	24.1	31	66.3	31	3.8	31	30.9
HOURLY MEAN		37.3		23.5		60.9		3.7		32.0
AVG DAILY MAX		49.7		30.2		83.2		4.8		39.8
AVG DAILY MIN		26.4		17.7		39.9		2.9		24.3
ABSOLUTE MAX		75.1		54.4		100.0		10.9		57.3
ABSOLUTE MIN		-6.7		-14.4		20.3		.6		-7.3
TOTAL OBS		744		744		744		744		744

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-MAR 2014

JAN-MAR HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	90	25.7	90	16.8	90	70.3	90	3.0	90	22.9
2	90	25.2	90	16.6	90	71.2	90	3.0	90	22.5
3	90	24.7	90	16.5	90	72.0	90	3.0	90	22.2
4	90	24.2	90	16.3	90	72.9	90	3.0	90	21.8
5	90	23.8	90	16.1	90	73.6	90	2.9	90	21.4
6	90	23.1	90	16.0	90	74.9	90	2.9	90	20.9
7	90	22.9	90	15.9	90	75.5	90	2.9	90	20.8
8	90	22.5	90	15.8	90	76.1	90	2.9	90	20.5
9	90	22.7	90	15.7	90	75.3	90	2.9	90	20.6
10	90	23.8	90	15.7	90	71.8	90	2.9	90	21.3
11	90	25.9	90	15.8	90	66.6	90	2.9	90	22.8
12	90	28.3	90	16.2	90	61.9	90	2.9	90	24.4
13	90	30.6	90	16.5	90	58.1	90	2.9	90	25.9
14	90	32.4	90	16.6	90	54.8	90	2.9	90	27.0
15	90	33.9	90	16.6	90	52.2	90	2.9	90	27.9
16	90	34.8	90	17.0	90	51.5	90	2.9	90	28.6
17	90	35.4	90	17.6	90	51.7	90	3.0	90	29.1
18	90	35.2	90	17.9	90	52.4	90	3.0	90	29.0
19	90	33.8	90	17.8	90	55.0	90	3.0	90	28.2
20	90	31.8	90	17.7	90	58.6	90	3.0	90	26.9
21	90	30.0	90	17.5	90	61.6	90	3.0	90	25.8
22	90	28.5	90	17.2	90	64.1	90	3.0	90	24.8
23	90	27.4	90	17.1	90	66.5	90	3.0	90	24.1
24	90	26.6	90	17.0	90	68.4	90	3.0	90	23.6
HOURLY MEAN		28.1		16.7		64.9		3.0		24.3
AVG DAILY MAX		38.3		24.1		83.1		3.9		31.9
AVG DAILY MIN		18.0		9.5		46.8		2.2		16.2
ABSOLUTE MAX		75.1		54.4		100.0		10.9		57.3
ABSOLUTE MIN		-9.8		-20.2		20.3		.5		-10.6
TOTAL OBS		2160		2160		2160		2160		2160

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY APR-JUN 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

APRIL

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER	(DEG F)	NUMBER	(DEG F)	NUMBER	(%)	NUMBER	(GM/M3)	NUMBER	(DEG F)
	OBS		OBS		OBS		OBS		OBS	
1	30	50.1	30	38.8	30	67.6	30	6.6	30	44.8
2	30	49.2	30	39.0	30	70.0	30	6.6	30	44.4
3	30	48.5	30	38.8	30	70.9	30	6.6	30	43.9
4	30	48.5	30	38.9	30	71.4	30	6.6	30	44.0
5	30	47.4	30	39.0	30	74.3	30	6.7	30	43.6
6	30	46.5	29	38.8	29	76.1	29	6.7	29	43.0
7	30	45.6	29	38.7	29	78.0	29	6.6	29	42.6
8	30	45.4	29	38.6	29	78.2	29	6.7	29	42.5
9	30	47.1	29	39.0	29	74.4	29	6.7	29	43.6
10	30	49.9	29	38.7	29	67.3	29	6.7	29	45.0
11	30	52.2	29	38.3	29	62.1	29	6.6	29	46.0
12	30	54.3	30	38.3	30	59.2	30	6.5	30	46.8
13	30	56.1	30	38.3	30	55.9	30	6.5	30	47.7
14	30	57.8	30	38.5	30	53.8	30	6.5	30	48.5
15	30	59.2	30	38.4	30	51.6	30	6.4	30	49.1
16	30	60.3	30	38.2	30	49.7	30	6.3	30	49.5
17	30	60.9	30	38.2	30	48.4	30	6.3	30	49.8
18	30	61.2	30	38.3	30	48.0	30	6.3	30	50.0
19	30	60.7	30	38.5	30	49.3	30	6.4	30	49.9
20	30	59.0	30	38.7	30	52.3	30	6.5	30	49.2
21	30	56.5	30	39.1	30	57.1	30	6.6	30	48.2
22	30	54.6	30	39.6	30	61.2	30	6.8	30	47.5
23	30	53.1	30	39.4	30	63.2	30	6.6	30	46.6
24	30	51.9	30	39.4	30	65.5	30	6.6	30	46.0
HOURLY MEAN		53.2		38.7		62.6		6.6		46.4
AVG DAILY MAX		63.5		45.0		86.4		8.2		52.5
AVG DAILY MIN		42.6		31.9		41.1		4.9		39.3
ABSOLUTE MAX		82.7		63.7		100.0		15.0		68.4
ABSOLUTE MIN		25.3		15.6		17.0		2.4		23.0
TOTAL OBS		720		714		714		714		714

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY APR-JUN 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

MAY

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	62.2	31	52.9	31	72.5	31	10.9	31	57.1
2	31	61.2	31	52.7	31	74.9	31	10.9	31	56.6
3	31	60.0	31	52.7	31	77.8	31	11.0	31	56.2
4	31	59.0	31	52.6	31	80.3	31	11.0	31	55.7
5	31	58.0	31	52.5	31	82.7	31	10.9	31	55.1
6	31	57.4	31	52.5	31	84.2	31	11.0	31	54.9
7	31	56.6	31	52.5	31	86.7	31	11.0	31	54.5
8	31	57.4	31	52.7	31	84.9	31	11.0	31	55.0
9	31	59.8	31	52.6	31	77.8	31	10.9	31	56.1
10	31	62.7	31	52.4	31	70.3	31	10.8	31	57.2
11	31	65.5	31	51.7	31	62.6	31	10.6	31	58.1
12	31	68.0	31	50.6	31	55.8	31	10.3	31	58.7
13	31	69.8	31	50.4	31	52.5	31	10.2	31	59.3
14	31	71.7	31	49.9	31	48.4	31	9.9	31	59.8
15	31	73.0	31	49.7	31	46.1	31	9.8	31	60.1
16	31	73.5	31	50.3	31	46.7	31	10.0	31	60.6
17	31	74.2	31	50.5	31	46.0	31	10.0	31	60.9
18	31	74.7	31	50.6	31	45.2	31	10.0	31	61.1
19	31	74.4	31	51.2	31	46.6	31	10.2	31	61.3
20	31	73.2	31	52.4	31	50.5	31	10.7	31	61.4
21	31	70.5	31	53.2	31	56.0	31	11.0	31	60.7
22	31	67.9	31	53.6	31	61.3	31	11.2	31	59.9
23	31	66.2	31	53.7	31	65.3	31	11.2	31	59.2
24	31	64.4	31	53.8	31	69.3	31	11.3	31	58.6
HOURLY MEAN		65.9		52.0		64.4		10.7		58.2
AVG DAILY MAX		76.2		57.4		88.6		12.7		63.0
AVG DAILY MIN		55.5		46.6		41.3		8.7		52.9
ABSOLUTE MAX		95.9		70.7		100.0		18.8		72.3
ABSOLUTE MIN		35.9		23.5		23.1		3.2		33.7
TOTAL OBS		744		744		744		744		744

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY APR-JUN 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

JUNE

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER	(DEG F)	NUMBER	(DEG F)	NUMBER	(%)	NUMBER	(GM/M3)	NUMBER	(DEG F)
	OBS		OBS		OBS		OBS		OBS	
1	30	70.6	30	66.4	30	87.3	30	16.6	30	68.0
2	30	69.8	30	66.3	30	89.4	30	16.6	30	67.6
3	30	68.9	30	65.9	30	90.5	30	16.3	30	67.1
4	30	68.1	30	65.5	30	92.1	30	16.2	30	66.5
5	30	67.4	30	65.3	30	93.2	30	16.0	30	66.1
6	30	66.8	30	64.9	30	94.1	30	15.8	30	65.6
7	30	66.2	30	64.5	30	94.6	30	15.6	30	65.2
8	30	67.4	30	65.0	30	92.4	30	15.9	30	65.9
9	30	69.3	30	65.4	30	87.7	30	16.1	30	66.9
10	30	71.6	30	65.5	30	81.8	30	16.0	30	67.8
11	30	73.7	30	65.7	30	77.0	30	16.1	30	68.6
12	30	75.4	30	65.5	30	72.6	30	16.0	30	69.1
13	30	77.0	30	65.2	30	68.4	30	15.8	30	69.5
14	30	78.3	30	65.1	30	65.4	30	15.8	30	69.9
15	30	79.3	30	65.2	30	63.3	30	15.8	30	70.3
16	30	79.9	30	65.0	30	61.6	30	15.7	30	70.3
17	30	80.5	30	64.6	30	59.8	30	15.5	30	70.3
18	30	80.6	30	64.6	30	59.5	30	15.5	30	70.4
19	30	80.2	30	65.1	30	61.2	30	15.7	30	70.6
20	30	78.6	30	65.7	30	65.8	30	16.1	30	70.4
21	30	76.5	30	66.4	30	71.9	30	16.5	30	70.0
22	30	73.8	30	66.5	30	78.7	30	16.6	30	69.2
23	30	72.2	30	66.6	30	83.3	30	16.6	30	68.6
24	30	71.0	30	66.2	30	85.6	30	16.5	30	68.0
HOURLY MEAN		73.5		65.5		78.2		16.0		68.4
AVG DAILY MAX		81.4		69.6		96.5		18.3		72.3
AVG DAILY MIN		64.8		61.1		57.7		13.8		63.5
ABSOLUTE MAX		89.8		77.0		100.0		23.0		79.7
ABSOLUTE MIN		49.7		41.6		32.4		6.6		48.1
TOTAL OBS		720		720		720		720		720

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY APR-JUN 2014

APR-JUN HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	91	61.0	91	52.7	91	75.7	91	11.4	91	56.6
2	91	60.0	91	52.7	91	78.1	91	11.4	91	56.2
3	91	59.2	91	52.5	91	79.7	91	11.3	91	55.7
4	91	58.5	91	52.4	91	81.3	91	11.3	91	55.4
5	91	57.6	91	52.3	91	83.4	91	11.2	91	54.9
6	91	56.9	90	52.2	90	84.9	90	11.2	90	54.6
7	91	56.2	90	52.1	90	86.5	90	11.1	90	54.2
8	91	56.7	90	52.3	90	85.3	90	11.2	90	54.6
9	91	58.8	90	52.5	90	80.0	90	11.3	90	55.6
10	91	61.4	90	52.4	90	73.2	90	11.2	90	56.8
11	91	63.8	90	52.0	90	67.2	90	11.1	90	57.7
12	91	65.9	91	51.5	91	62.4	91	10.9	91	58.2
13	91	67.7	91	51.3	91	58.9	91	10.8	91	58.8
14	91	69.3	91	51.2	91	55.8	91	10.7	91	59.4
15	91	70.5	91	51.1	91	53.6	91	10.6	91	59.8
16	91	71.3	91	51.2	91	52.6	91	10.6	91	60.2
17	91	71.9	91	51.1	91	51.3	91	10.6	91	60.4
18	91	72.2	91	51.1	91	50.8	91	10.6	91	60.5
19	91	71.8	91	51.6	91	52.3	91	10.8	91	60.6
20	91	70.3	91	52.3	91	56.1	91	11.1	91	60.3
21	91	67.9	91	52.9	91	61.6	91	11.4	91	59.7
22	91	65.5	91	53.2	91	67.0	91	11.5	91	58.9
23	91	63.8	91	53.2	91	70.5	91	11.5	91	58.2
24	91	62.5	91	53.1	91	73.4	91	11.5	91	57.5
HOURLY MEAN		64.2		52.1		68.4		11.1		57.7
AVG DAILY MAX		73.8		57.3		90.5		13.1		62.6
AVG DAILY MIN		54.3		46.6		46.6		9.1		51.9
ABSOLUTE MAX		95.9		77.0		100.0		23.0		79.7
ABSOLUTE MIN		25.3		15.6		17.0		2.4		23.0
TOTAL OBS		2184		2178		2178		2178		2178

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-JUN 2014

JAN-JUN HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	181	43.4	181	34.9	181	73.0	181	7.2	181	39.9
2	181	42.7	181	34.8	181	74.7	181	7.2	181	39.5
3	181	42.0	181	34.6	181	75.9	181	7.2	181	39.1
4	181	41.5	181	34.4	181	77.1	181	7.1	181	38.7
5	181	40.8	181	34.3	181	78.5	181	7.1	181	38.3
6	181	40.1	180	34.1	180	79.9	180	7.1	180	37.8
7	181	39.6	180	34.0	180	81.0	180	7.0	180	37.5
8	181	39.7	180	34.0	180	80.7	180	7.1	180	37.6
9	181	40.8	180	34.1	180	77.7	180	7.1	180	38.1
10	181	42.7	180	34.0	180	72.5	180	7.1	180	39.1
11	181	45.0	180	33.9	180	66.9	180	7.0	180	40.2
12	181	47.2	181	33.9	181	62.2	181	6.9	181	41.4
13	181	49.2	181	34.0	181	58.5	181	6.9	181	42.4
14	181	51.0	181	34.0	181	55.3	181	6.8	181	43.3
15	181	52.3	181	33.9	181	52.9	181	6.8	181	44.0
16	181	53.1	181	34.2	181	52.1	181	6.8	181	44.5
17	181	53.7	181	34.4	181	51.5	181	6.8	181	44.8
18	181	53.8	181	34.6	181	51.6	181	6.8	181	44.9
19	181	52.9	181	34.8	181	53.6	181	6.9	181	44.5
20	181	51.1	181	35.1	181	57.3	181	7.1	181	43.7
21	181	49.0	181	35.3	181	61.6	181	7.2	181	42.8
22	181	47.1	181	35.3	181	65.5	181	7.3	181	41.9
23	181	45.7	181	35.3	181	68.5	181	7.3	181	41.2
24	181	44.6	181	35.2	181	70.9	181	7.2	181	40.6
HOURLY MEAN		46.2		34.5		66.6		7.0		41.1
AVG DAILY MAX		56.1		40.8		86.8		8.5		47.4
AVG DAILY MIN		36.2		28.1		46.7		5.7		34.2
ABSOLUTE MAX		95.9		77.0		100.0		23.0		79.7
ABSOLUTE MIN		-9.8		-20.2		17.0		.5		-10.6
TOTAL OBS		4344		4338		4338		4338		4338

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

JULY

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	68.8	31	65.2	31	88.3	31	16.0	31	66.5
2	31	67.9	31	64.7	31	90.0	31	15.8	31	65.9
3	31	67.2	31	64.2	31	90.5	31	15.5	31	65.3
4	31	66.5	31	63.7	31	91.1	31	15.3	31	64.8
5	31	65.5	31	63.3	31	92.7	31	15.1	31	64.1
6	31	64.9	31	62.9	31	93.3	31	14.9	31	63.7
7	31	65.4	31	62.9	31	91.9	31	14.9	31	63.9
8	31	67.8	31	63.3	31	86.1	31	15.0	31	65.1
9	31	70.6	31	63.3	31	78.0	31	14.9	31	66.1
10	31	73.2	31	63.2	31	71.4	31	14.8	31	66.9
11	31	75.5	31	62.6	31	64.9	31	14.5	31	67.5
12	31	77.2	31	62.0	31	60.1	31	14.2	31	67.7
13	31	78.7	31	61.9	31	57.1	31	14.2	31	68.2
14	31	80.0	31	61.9	31	54.8	31	14.2	31	68.6
15	31	80.8	31	62.3	31	54.1	31	14.4	31	69.1
16	31	81.3	31	62.6	31	53.7	31	14.5	31	69.4
17	31	81.3	31	63.3	31	55.0	31	14.9	31	69.8
18	31	81.1	31	64.0	31	56.5	31	15.3	31	70.2
19	31	80.0	31	65.1	31	61.0	31	15.9	31	70.5
20	31	77.5	31	66.2	31	68.7	31	16.6	31	70.3
21	31	74.6	31	66.3	31	75.7	31	16.6	31	69.3
22	31	72.7	31	66.1	31	80.0	31	16.5	31	68.6
23	31	71.3	31	65.7	31	83.0	31	16.3	31	67.8
24	30	69.9	30	65.5	30	86.2	30	16.2	30	67.1
HOURLY MEAN		73.3		63.8		74.3		15.3		67.4
AVG DAILY MAX		82.0		69.1		96.4		18.2		71.8
AVG DAILY MIN		64.1		59.4		52.2		13.1		62.5
ABSOLUTE MAX		97.1		81.1		100.0		25.9		82.5
ABSOLUTE MIN		52.3		47.4		39.3		8.2		51.4
TOTAL OBS		743		743		743		743		743

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

AUGUST

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER	(DEG F)	NUMBER	(DEG F)	NUMBER	(%)	NUMBER	(GM/M3)	NUMBER	(DEG F)
	OBS		OBS		OBS		OBS		OBS	
1	31	71.1	31	69.1	31	93.9	31	18.0	31	69.8
2	31	70.5	31	68.7	31	94.4	31	17.8	31	69.4
3	31	69.7	31	68.3	31	95.6	31	17.6	31	68.8
4	31	68.8	31	67.8	31	97.0	31	17.3	31	68.2
5	31	68.6	31	67.5	31	96.4	31	17.1	31	67.9
6	31	68.3	31	67.1	31	96.4	31	16.9	31	67.5
7	31	68.4	31	67.2	31	96.1	31	17.0	31	67.6
8	31	70.1	31	67.9	31	93.1	31	17.3	31	68.7
9	31	72.3	31	68.2	31	87.4	31	17.4	31	69.7
10	31	74.3	31	68.3	31	82.3	31	17.4	31	70.4
11	31	76.0	31	67.8	31	76.9	31	17.1	31	70.7
12	31	77.4	31	67.7	31	73.5	31	17.0	31	71.1
13	31	78.9	31	67.6	31	69.8	31	16.9	31	71.5
14	31	80.3	31	67.8	31	67.2	31	17.0	31	72.1
15	31	81.1	31	68.0	31	66.1	31	17.2	31	72.5
16	31	81.6	31	68.5	31	66.1	31	17.5	31	72.9
17	31	81.6	31	69.2	31	67.4	31	17.9	31	73.3
18	31	81.0	31	69.8	31	70.1	31	18.3	31	73.5
19	31	79.4	31	71.0	31	76.6	31	19.0	31	73.8
20	31	76.5	31	71.4	31	84.8	31	19.3	31	73.1
21	31	74.4	31	71.1	31	89.7	31	19.2	31	72.2
22	31	73.1	31	70.4	31	91.6	31	18.8	31	71.4
23	31	72.1	31	70.0	31	93.3	31	18.5	31	70.7
24	31	71.4	31	69.5	31	94.2	31	18.3	31	70.2
HOURLY MEAN		74.5		68.7		84.2		17.7		70.7
AVG DAILY MAX		82.3		72.8		99.1		20.2		74.6
AVG DAILY MIN		67.6		65.4		62.6		15.8		66.8
ABSOLUTE MAX		93.3		81.7		100.0		26.6		82.3
ABSOLUTE MIN		54.0		50.8		43.0		9.2		54.0
TOTAL OBS		744		744		744		744		744

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

SEPTEMBER

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	30	62.1	30	59.6	30	91.7	30	13.4	30	60.6
2	30	61.4	30	59.1	30	92.5	30	13.2	30	60.1
3	30	60.7	30	58.5	30	92.8	30	12.9	30	59.4
4	30	60.2	30	58.4	30	94.1	30	12.9	30	59.1
5	30	59.6	30	58.3	30	95.5	30	12.9	30	58.8
6	30	59.1	30	58.0	30	96.4	30	12.8	30	58.5
7	30	58.7	30	57.5	30	96.2	30	12.6	30	58.0
8	30	60.0	30	57.9	30	93.2	30	12.7	30	58.8
9	30	62.7	29	58.5	29	87.4	29	12.8	29	60.1
10	30	65.8	29	58.5	29	79.1	29	12.8	29	61.4
11	30	67.9	29	57.8	29	72.8	29	12.5	29	61.9
12	30	70.1	29	57.2	29	66.5	29	12.2	29	62.3
13	30	71.9	29	56.8	29	61.9	29	12.0	29	62.8
14	30	73.2	29	56.7	29	58.7	29	11.9	29	63.2
15	30	73.9	29	57.0	29	58.5	29	12.1	29	63.6
16	30	74.2	28	57.2	28	59.4	28	12.2	28	63.7
17	30	74.1	30	58.2	30	60.3	30	12.6	30	64.4
18	30	72.5	30	59.3	30	65.3	30	13.1	30	64.5
19	30	69.3	30	60.5	30	74.5	30	13.6	30	63.9
20	30	66.9	30	61.0	30	81.8	30	13.9	30	63.3
21	30	66.0	30	60.8	30	84.0	30	13.9	30	62.8
22	30	64.7	30	60.7	30	87.3	30	13.9	30	62.3
23	30	63.5	30	60.3	30	89.7	30	13.7	30	61.6
24	30	62.8	30	59.9	30	90.9	30	13.5	30	61.1
HOURLY MEAN		65.9		58.7		80.6		12.9		61.5
AVG DAILY MAX		75.9		63.8		99.0		15.3		66.2
AVG DAILY MIN		57.1		54.3		54.3		10.9		56.5
ABSOLUTE MAX		95.2		77.1		100.0		23.0		78.2
ABSOLUTE MIN		37.0		36.8		37.0		5.6		37.0
TOTAL OBS		720		711		711		711		711

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 2014

JUL-SEP HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	92	67.4	92	64.7	92	91.3	92	15.8	92	65.7
2	92	66.7	92	64.2	92	92.3	92	15.6	92	65.2
3	92	65.9	92	63.7	92	93.0	92	15.4	92	64.6
4	92	65.2	92	63.4	92	94.1	92	15.2	92	64.1
5	92	64.6	92	63.0	92	94.9	92	15.0	92	63.6
6	92	64.2	92	62.7	92	95.4	92	14.9	92	63.3
7	92	64.2	92	62.6	92	94.7	92	14.8	92	63.2
8	92	66.0	92	63.1	92	90.8	92	15.0	92	64.2
9	92	68.6	91	63.4	91	84.2	91	15.1	91	65.4
10	92	71.1	91	63.4	91	77.6	91	15.0	91	66.3
11	92	73.2	91	62.9	91	71.5	91	14.8	91	66.8
12	92	75.0	91	62.4	91	66.7	91	14.5	91	67.2
13	92	76.6	91	62.2	91	62.9	91	14.4	91	67.6
14	92	77.9	91	62.3	91	60.3	91	14.4	91	68.1
15	92	78.6	91	62.6	91	59.6	91	14.6	91	68.5
16	92	79.1	90	62.9	90	59.7	90	14.8	90	68.9
17	92	79.1	92	63.6	92	60.9	92	15.2	92	69.3
18	92	78.3	92	64.4	92	63.9	92	15.6	92	69.5
19	92	76.3	92	65.6	92	70.6	92	16.2	92	69.4
20	92	73.7	92	66.2	92	78.4	92	16.6	92	69.0
21	92	71.7	92	66.1	92	83.1	92	16.6	92	68.2
22	92	70.2	92	65.8	92	86.3	92	16.4	92	67.5
23	92	69.0	92	65.4	92	88.6	92	16.2	92	66.8
24	91	68.1	91	65.0	91	90.5	91	16.0	91	66.2
HOURLY MEAN		71.3		63.8		79.7		15.4		66.6
AVG DAILY MAX		80.1		68.6		98.2		17.9		70.9
AVG DAILY MIN		63.0		59.8		56.4		13.3		62.0
ABSOLUTE MAX		97.1		81.7		100.0		26.6		82.5
ABSOLUTE MIN		37.0		36.8		37.0		5.6		37.0
TOTAL OBS		2207		2198		2198		2198		2198

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

OCTOBER

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	53.2	31	46.9	31	80.4	31	8.7	31	50.1
2	31	51.9	31	46.5	31	82.7	31	8.6	31	49.3
3	31	50.8	31	46.2	31	84.8	31	8.5	31	48.6
4	31	50.1	31	45.9	31	86.3	31	8.5	31	48.1
5	31	49.4	31	45.5	31	87.1	31	8.4	31	47.6
6	31	49.1	31	45.1	31	86.6	31	8.2	31	47.2
7	31	48.8	31	44.6	31	86.3	31	8.1	31	46.8
8	31	49.3	31	44.6	31	84.8	31	8.1	31	47.1
9	31	52.5	31	45.5	31	78.1	31	8.4	31	49.2
10	31	55.6	31	45.6	31	70.3	31	8.4	31	50.7
11	31	58.6	31	45.3	31	62.9	31	8.3	31	52.0
12	31	60.8	31	44.8	31	57.5	31	8.1	31	52.8
13	31	62.7	31	44.6	31	53.9	31	8.0	31	53.5
14	31	64.3	31	44.3	31	50.5	31	7.9	31	54.0
15	31	65.5	31	44.1	31	48.2	31	7.8	31	54.5
16	31	66.1	31	44.1	31	47.3	31	7.8	31	54.7
17	31	65.7	31	45.1	31	49.4	31	8.1	31	55.0
18	31	63.2	31	46.2	31	55.4	31	8.4	31	54.4
19	31	59.9	31	46.7	31	63.1	31	8.6	31	53.1
20	31	57.7	31	46.5	31	67.6	31	8.5	31	52.0
21	31	56.1	31	46.5	31	71.7	31	8.5	31	51.3
22	31	54.8	31	46.7	31	75.5	31	8.6	31	50.7
23	31	53.7	31	46.7	31	78.3	31	8.6	31	50.2
24	31	54.0	31	47.5	31	79.9	31	8.9	31	50.8
HOURLY MEAN		56.4		45.7		70.4		8.3		51.0
AVG DAILY MAX		66.8		51.5		91.9		10.1		56.3
AVG DAILY MIN		47.1		40.8		45.7		6.9		45.3
ABSOLUTE MAX		86.0		67.6		100.0		17.1		69.9
ABSOLUTE MIN		30.7		19.0		30.0		2.8		27.8
TOTAL OBS		744		744		744		744		744

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

NOVEMBER

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	30	33.7	30	26.2	30	74.3	30	4.2	30	30.9
2	30	32.8	30	25.8	30	76.1	30	4.2	30	30.2
3	30	32.3	30	25.6	30	77.1	30	4.1	30	29.8
4	30	32.0	30	25.5	30	77.5	30	4.1	30	29.6
5	30	31.9	30	25.4	30	77.4	30	4.1	30	29.5
6	30	31.1	30	24.9	30	78.4	30	4.1	30	28.8
7	30	30.4	30	24.4	30	79.0	30	4.0	30	28.3
8	30	30.3	30	24.2	30	78.4	30	4.0	30	28.1
9	30	31.3	30	24.2	30	75.4	30	4.0	30	28.8
10	30	33.2	30	24.4	30	70.7	30	4.0	30	30.0
11	30	35.3	30	25.0	30	66.9	30	4.1	30	31.5
12	30	37.6	30	25.3	30	62.3	30	4.2	30	32.9
13	30	39.3	30	25.4	30	58.7	30	4.2	30	33.9
14	30	40.9	30	25.8	30	56.2	30	4.2	30	35.0
15	30	42.0	30	26.2	30	55.1	30	4.3	30	35.7
16	30	42.2	30	26.6	30	55.6	30	4.3	30	36.0
17	30	41.3	30	27.1	30	58.7	30	4.5	30	35.6
18	30	39.3	30	27.5	30	64.1	30	4.6	30	34.7
19	30	37.8	30	27.5	30	67.5	30	4.6	30	33.8
20	30	36.8	30	27.1	30	68.6	30	4.5	30	33.0
21	30	36.1	30	26.7	30	69.5	30	4.3	30	32.5
22	30	35.3	30	26.4	30	71.0	30	4.3	30	31.9
23	30	34.7	30	26.4	30	72.6	30	4.3	30	31.5
24	30	34.6	30	26.7	30	73.6	30	4.3	30	31.6
HOURLY MEAN		35.5		25.8		69.4		4.2		31.8
AVG DAILY MAX		45.2		33.6		85.3		5.6		39.5
AVG DAILY MIN		26.6		19.5		51.0		3.2		24.6
ABSOLUTE MAX		68.2		56.5		100.0		11.6		60.6
ABSOLUTE MIN		8.1		.9		30.8		1.3		6.8
TOTAL OBS		720		720		720		720		720

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 2014

MONTHLY HOUR AVERAGES FOR THE PERIOD

DECEMBER

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	31.5	31	28.4	31	88.7	31	4.7	31	30.6
2	31	31.1	31	28.1	31	89.3	31	4.6	31	30.2
3	31	30.7	31	28.0	31	89.9	31	4.6	31	29.9
4	31	30.3	31	27.8	31	90.4	31	4.6	31	29.6
5	31	30.0	31	27.6	31	91.0	31	4.6	31	29.3
6	31	29.6	31	27.3	31	91.1	31	4.5	31	29.0
7	31	29.5	31	27.1	31	91.0	31	4.5	31	28.8
8	31	29.6	31	27.2	31	90.7	31	4.5	31	28.9
9	31	30.0	31	27.3	31	89.7	31	4.5	31	29.2
10	31	31.0	31	27.7	31	87.8	31	4.6	31	30.0
11	31	32.1	31	27.9	31	85.1	31	4.6	31	30.8
12	31	33.4	31	28.2	31	82.6	31	4.6	31	31.7
13	31	34.6	31	28.6	31	80.4	31	4.7	31	32.6
14	31	35.6	31	29.0	31	78.9	31	4.8	31	33.3
15	31	36.3	31	29.2	31	78.0	31	4.8	31	33.8
16	31	36.6	31	29.4	31	78.0	31	4.8	31	34.0
17	31	36.2	31	29.5	31	79.2	31	4.8	31	33.8
18	31	35.1	31	29.5	31	81.9	31	4.8	31	33.2
19	31	34.4	31	29.4	31	83.4	31	4.8	31	32.7
20	31	33.7	31	29.3	31	85.0	31	4.8	31	32.2
21	31	32.9	31	29.2	31	86.7	31	4.8	31	31.7
22	31	32.4	31	29.0	31	87.7	31	4.8	31	31.3
23	31	32.2	31	28.8	31	88.1	31	4.8	31	31.1
24	31	31.4	31	28.1	31	87.9	31	4.7	31	30.4
HOURLY MEAN		32.5		28.4		85.9		4.7		31.2
AVG DAILY MAX		38.4		32.9		94.9		5.5		36.0
AVG DAILY MIN		27.1		24.3		74.5		4.0		26.5
ABSOLUTE MAX		59.7		55.4		100.0		11.4		57.0
ABSOLUTE MIN		.8		-4.3		29.6		1.0		.1
TOTAL OBS		744		744		744		744		744

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PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 2014

OCT-DEC HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	92	39.5	92	33.9	92	81.2	92	5.9	92	37.3
2	92	38.7	92	33.6	92	82.7	92	5.8	92	36.6
3	92	38.0	92	33.4	92	84.0	92	5.8	92	36.2
4	92	37.6	92	33.2	92	84.8	92	5.8	92	35.8
5	92	37.2	92	32.9	92	85.3	92	5.7	92	35.5
6	92	36.7	92	32.5	92	85.5	92	5.6	92	35.1
7	92	36.3	92	32.1	92	85.5	92	5.6	92	34.7
8	92	36.5	92	32.1	92	84.7	92	5.6	92	34.8
9	92	38.0	92	32.4	92	81.2	92	5.6	92	35.8
10	92	40.0	92	32.6	92	76.3	92	5.7	92	37.0
11	92	42.1	92	32.8	92	71.7	92	5.7	92	38.2
12	92	44.0	92	32.8	92	67.5	92	5.7	92	39.2
13	92	45.6	92	32.9	92	64.4	92	5.6	92	40.1
14	92	47.0	92	33.1	92	61.9	92	5.6	92	40.8
15	92	48.0	92	33.2	92	60.5	92	5.6	92	41.4
16	92	48.4	92	33.4	92	60.4	92	5.7	92	41.6
17	92	47.8	92	34.0	92	62.5	92	5.8	92	41.5
18	92	45.9	92	34.5	92	67.2	92	6.0	92	40.8
19	92	44.1	92	34.6	92	71.4	92	6.0	92	39.9
20	92	42.8	92	34.4	92	73.8	92	5.9	92	39.2
21	92	41.8	92	34.2	92	76.1	92	5.9	92	38.6
22	92	40.9	92	34.1	92	78.1	92	5.9	92	38.1
23	92	40.2	92	34.0	92	79.8	92	5.9	92	37.7
24	92	40.0	92	34.1	92	80.6	92	6.0	92	37.6
HOURLY MEAN		41.5	33.4		75.3		5.8		38.1	
AVG DAILY MAX		50.2	39.4		90.8		7.1		44.0	
AVG DAILY MIN		33.7	28.3		57.2		4.7		32.2	
ABSOLUTE MAX		86.0	67.6		100.0		17.1		69.9	
ABSOLUTE MIN		.8	-4.3		29.6		1.0		.1	
TOTAL OBS		2208	2208		2208		2208		2208	

B24

PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-DEC 2014

JUL-DEC HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	184	53.5	184	49.3	184	86.2	184	10.9	184	51.5
2	184	52.7	184	48.9	184	87.5	184	10.7	184	50.9
3	184	52.0	184	48.5	184	88.5	184	10.6	184	50.4
4	184	51.4	184	48.3	184	89.4	184	10.5	184	50.0
5	184	50.9	184	48.0	184	90.1	184	10.4	184	49.6
6	184	50.4	184	47.6	184	90.4	184	10.3	184	49.2
7	184	50.3	184	47.4	184	90.1	184	10.2	184	49.0
8	184	51.2	184	47.6	184	87.7	184	10.3	184	49.5
9	184	53.3	183	47.8	183	82.7	183	10.3	183	50.5
10	184	55.6	183	47.9	183	76.9	183	10.3	183	51.6
11	184	57.6	183	47.8	183	71.6	183	10.2	183	52.4
12	184	59.5	183	47.5	183	67.1	183	10.1	183	53.1
13	184	61.1	183	47.5	183	63.7	183	10.0	183	53.8
14	184	62.4	183	47.6	183	61.1	183	10.0	183	54.4
15	184	63.3	183	47.8	183	60.0	183	10.1	183	54.9
16	184	63.7	182	48.0	182	60.0	182	10.2	182	55.1
17	184	63.4	184	48.8	184	61.7	184	10.5	184	55.4
18	184	62.1	184	49.5	184	65.6	184	10.8	184	55.1
19	184	60.2	184	50.1	184	71.0	184	11.1	184	54.7
20	184	58.3	184	50.3	184	76.1	184	11.3	184	54.1
21	184	56.7	184	50.2	184	79.6	184	11.3	184	53.4
22	184	55.6	184	50.0	184	82.2	184	11.2	184	52.8
23	184	54.6	184	49.7	184	84.2	184	11.1	184	52.2
24	184	53.9	184	49.4	184	85.5	184	10.9	184	51.7
HOURLY MEAN		56.4		48.6		77.5		10.5		52.3
AVG DAILY MAX		65.1		54.0		94.5		12.5		57.5
AVG DAILY MIN		48.3		44.0		56.8		9.0		47.1
ABSOLUTE MAX		97.1		81.7		100.0		26.6		82.5
ABSOLUTE MIN		.8		-4.3		29.6		1.0		.1
TOTAL OBS		4416		4407		4407		4407		4407

B25

PROGRAM: WETTEMP
 VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-DEC 2014

JAN-DEC HOUR AVERAGES FOR THE PERIOD

10.0 METER LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG F)	OBS	(DEG F)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG F)
1	365	48.5	365	42.1	365	79.7	365	9.0	365	45.7
2	365	47.7	365	41.9	365	81.1	365	9.0	365	45.2
3	365	47.0	365	41.6	365	82.2	365	8.9	365	44.8
4	365	46.5	365	41.4	365	83.3	365	8.8	365	44.4
5	365	45.9	365	41.2	365	84.4	365	8.7	365	44.0
6	365	45.3	364	40.9	364	85.2	364	8.7	364	43.5
7	365	45.0	364	40.8	364	85.6	364	8.6	364	43.3
8	365	45.5	364	40.9	364	84.3	364	8.7	364	43.6
9	365	47.1	363	41.0	363	80.2	363	8.7	363	44.4
10	365	49.2	363	41.0	363	74.7	363	8.7	363	45.4
11	365	51.4	363	40.9	363	69.3	363	8.6	363	46.4
12	365	53.4	364	40.8	364	64.7	364	8.5	364	47.3
13	365	55.2	364	40.8	364	61.1	364	8.5	364	48.1
14	365	56.8	364	40.8	364	58.2	364	8.4	364	48.9
15	365	57.9	364	40.9	364	56.5	364	8.5	364	49.4
16	365	58.5	363	41.1	363	56.1	363	8.5	363	49.8
17	365	58.6	365	41.7	365	56.6	365	8.7	365	50.1
18	365	58.0	365	42.1	365	58.7	365	8.8	365	50.0
19	365	56.6	365	42.5	365	62.4	365	9.0	365	49.6
20	365	54.7	365	42.8	365	66.8	365	9.2	365	48.9
21	365	52.9	365	42.8	365	70.7	365	9.3	365	48.1
22	365	51.4	365	42.7	365	74.0	365	9.2	365	47.4
23	365	50.2	365	42.6	365	76.4	365	9.2	365	46.8
24	365	49.3	365	42.4	365	78.3	365	9.1	365	46.2
HOURLY MEAN		51.4		41.6		72.1		8.8		46.7
AVG DAILY MAX		60.7		47.4		90.7		10.5		52.4
AVG DAILY MIN		42.3		36.1		51.8		7.4		40.7
ABSOLUTE MAX		97.1		81.7		100.0		26.6		82.5
ABSOLUTE MIN		-9.8		-20.2		17.0		.5		-10.6
TOTAL OBS		8760		8745		8745		8745		8745

B26

Wind Direction Frequencies

10-Meter Level

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JANUARY

HR. OF DAY	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
1	6.5	3.2	00.0	3.2	00.0	00.0	3.2	3.2	9.7	19.4	3.2	9.7	3.2	00.0	12.9	22.6	00.0	100.
2	9.7	3.2	00.0	3.2	00.0	00.0	00.0	12.9	6.5	12.9	6.5	3.2	12.9	3.2	19.4	6.5	00.0	100.
3	6.5	6.5	3.2	00.0	00.0	00.0	00.0	3.2	25.8	6.5	00.0	12.9	00.0	9.7	16.1	9.7	00.0	100.
4	3.2	6.5	3.2	00.0	00.0	00.0	00.0	12.9	9.7	12.9	00.0	9.7	3.2	12.9	12.9	12.9	00.0	100.
5	9.7	3.2	00.0	3.2	00.0	00.0	00.0	9.7	12.9	3.2	6.5	6.5	3.2	16.1	19.4	6.5	00.0	100.
6	3.2	6.5	00.0	00.0	3.2	00.0	3.2	6.5	12.9	6.5	6.5	00.0	6.5	12.9	22.6	9.7	00.0	100.
7	6.5	3.2	00.0	3.2	00.0	00.0	9.7	6.5	9.7	3.2	6.5	3.2	3.2	9.7	22.6	12.9	00.0	100.
8	00.0	12.9	3.2	00.0	00.0	00.0	3.2	6.5	9.7	9.7	3.2	00.0	6.5	9.7	29.0	6.5	00.0	100.
9	00.0	9.7	00.0	3.2	00.0	00.0	3.2	6.5	9.7	3.2	3.2	3.2	6.5	16.1	25.8	9.7	00.0	100.
10	00.0	6.5	3.2	00.0	00.0	3.2	3.2	6.5	9.7	6.5	3.2	00.0	00.0	19.4	19.4	19.4	00.0	100.
11	9.7	3.2	3.2	00.0	00.0	00.0	6.5	3.2	6.5	6.5	9.7	00.0	00.0	12.9	19.4	19.4	00.0	100.
12	6.5	3.2	3.2	00.0	00.0	3.2	00.0	3.2	6.5	9.7	6.5	9.7	00.0	6.5	29.0	12.9	00.0	100.
13	3.2	3.2	3.2	00.0	00.0	3.2	00.0	6.5	3.2	6.5	6.5	3.2	9.7	9.7	25.8	16.1	00.0	100.
14	6.5	3.2	3.2	00.0	00.0	00.0	3.2	3.2	9.7	6.5	6.5	3.2	3.2	19.4	19.4	12.9	00.0	100.
15	6.5	3.2	3.2	00.0	00.0	00.0	00.0	3.2	6.5	12.9	6.5	00.0	6.5	9.7	19.4	19.4	3.2	100.
16	6.5	3.2	3.2	3.2	00.0	00.0	00.0	3.2	9.7	6.5	6.5	6.5	3.2	12.9	22.6	12.9	00.0	100.
17	9.7	3.2	6.5	00.0	00.0	00.0	3.2	3.2	9.7	00.0	9.7	3.2	00.0	19.4	9.7	22.6	00.0	100.
18	6.5	3.2	6.5	00.0	00.0	00.0	3.2	6.5	6.5	3.2	6.5	3.2	6.5	9.7	9.7	29.0	00.0	100.
19	9.7	3.2	3.2	3.2	00.0	00.0	3.2	3.2	16.1	9.7	3.2	00.0	3.2	6.5	9.7	25.8	00.0	100.
20	3.2	00.0	00.0	6.5	3.2	00.0	3.2	00.0	19.4	6.5	3.2	6.5	3.2	3.2	16.1	25.8	00.0	100.
21	3.2	3.2	00.0	6.5	00.0	00.0	3.2	00.0	22.6	3.2	9.7	00.0	3.2	3.2	12.9	29.0	00.0	100.
22	9.7	00.0	00.0	3.2	3.2	00.0	3.2	9.7	16.1	6.5	3.2	3.2	00.0	12.9	6.5	22.6	00.0	100.
23	6.5	3.2	00.0	6.5	00.0	00.0	00.0	9.7	12.9	12.9	6.5	00.0	9.7	3.2	9.7	19.4	00.0	100.
24	6.5	00.0	00.0	6.5	00.0	00.0	3.2	00.0	22.6	6.5	9.7	9.7	00.0	3.2	12.9	19.4	00.0	100.
ALL	5.8	4.0	2.0	2.2	.4	.4	2.4	5.4	11.8	7.5	5.5	4.0	3.9	10.1	17.6	16.8	.1	100.

NUMBER OF OBS = 744

B28

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

FEBRUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	14.3	3.6	10.7	00.0	3.6	3.6	3.6	00.0	25.0	00.0	00.0	7.1	00.0	7.1	10.7	10.7	00.0	100.
2	14.3	7.1	3.6	00.0	3.6	7.1	7.1	00.0	17.9	7.1	00.0	00.0	00.0	7.1	10.7	14.3	00.0	100.
3	3.6	7.1	10.7	3.6	3.6	3.6	00.0	00.0	21.4	3.6	3.6	00.0	00.0	10.7	14.3	14.3	00.0	100.
4	21.4	3.6	00.0	10.7	00.0	3.6	10.7	00.0	14.3	3.6	3.6	00.0	3.6	7.1	10.7	7.1	00.0	100.
5	32.1	3.6	7.1	00.0	00.0	00.0	7.1	7.1	21.4	3.6	00.0	00.0	3.6	00.0	7.1	7.1	00.0	100.
6	25.0	10.7	3.6	00.0	00.0	00.0	7.1	00.0	21.4	3.6	3.6	3.6	3.6	00.0	10.7	7.1	00.0	100.
7	14.3	7.1	3.6	00.0	00.0	00.0	3.6	10.7	3.6	14.3	00.0	00.0	7.1	3.6	10.7	21.4	00.0	100.
8	21.4	3.6	7.1	00.0	00.0	00.0	3.6	10.7	3.6	14.3	3.6	3.6	3.6	7.1	7.1	10.7	00.0	100.
9	21.4	3.6	3.6	3.6	00.0	00.0	7.1	7.1	17.9	7.1	3.6	7.1	00.0	7.1	3.6	7.1	00.0	100.
10	7.1	14.3	7.1	00.0	3.6	00.0	3.6	14.3	7.1	3.6	7.1	10.7	00.0	7.1	00.0	14.3	00.0	100.
11	17.9	3.6	3.6	3.6	7.1	00.0	3.6	17.9	7.1	7.1	3.6	3.6	00.0	7.1	3.6	10.7	00.0	100.
12	14.3	7.1	3.6	3.6	10.7	00.0	00.0	10.7	10.7	7.1	3.6	7.1	3.6	3.6	00.0	14.3	00.0	100.
13	14.3	00.0	7.1	00.0	3.6	7.1	00.0	10.7	10.7	3.6	7.1	10.7	00.0	3.6	00.0	21.4	00.0	100.
14	3.6	10.7	3.6	00.0	00.0	3.6	3.6	7.1	14.3	3.6	14.3	3.6	3.6	00.0	7.1	21.4	00.0	100.
15	7.1	7.1	00.0	3.6	00.0	3.6	7.1	7.1	7.1	7.1	10.7	10.7	00.0	00.0	7.1	21.4	00.0	100.
16	10.7	7.1	00.0	00.0	3.6	7.1	3.6	7.1	7.1	3.6	7.1	14.3	3.6	7.1	00.0	17.9	00.0	100.
17	10.7	7.1	00.0	00.0	3.6	3.6	10.7	7.1	3.6	00.0	10.7	10.7	7.1	7.1	3.6	14.3	00.0	100.
18	10.7	10.7	00.0	00.0	00.0	10.7	7.1	7.1	3.6	7.1	7.1	7.1	3.6	7.1	3.6	14.3	00.0	100.
19	7.1	7.1	7.1	00.0	3.6	7.1	7.1	7.1	3.6	3.6	7.1	3.6	7.1	3.6	10.7	14.3	00.0	100.
20	7.1	7.1	00.0	3.6	00.0	3.6	10.7	7.1	3.6	00.0	00.0	21.4	3.6	3.6	14.3	14.3	00.0	100.
21	10.7	7.1	3.6	00.0	7.1	00.0	7.1	7.1	3.6	7.1	10.7	00.0	00.0	3.6	21.4	10.7	00.0	100.
22	17.9	00.0	7.1	00.0	7.1	00.0	7.1	3.6	14.3	3.6	00.0	7.1	00.0	00.0	17.9	14.3	00.0	100.
23	21.4	3.6	00.0	00.0	10.7	00.0	3.6	00.0	14.3	3.6	00.0	3.6	3.6	10.7	7.1	14.3	3.6	100.
24	25.0	3.6	00.0	00.0	7.1	3.6	3.6	00.0	10.7	10.7	3.6	00.0	3.6	14.3	7.1	7.1	00.0	100.
ALL	14.7	6.1	3.9	1.3	3.3	2.8	5.4	6.3	11.2	5.4	4.6	5.7	2.5	5.4	7.9	13.5	.1	100.

NUMBER OF OBS = 672

B29

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MARCH

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	16.1	3.2	3.2	3.2	6.5	00.0	00.0	29.0	12.9	6.5	00.0	00.0	3.2	00.0	3.2	12.9	00.0	100.
2	16.1	3.2	00.0	6.5	3.2	00.0	00.0	16.1	16.1	12.9	00.0	3.2	3.2	00.0	3.2	16.1	00.0	100.
3	19.4	00.0	3.2	00.0	00.0	00.0	9.7	6.5	22.6	12.9	00.0	3.2	00.0	00.0	9.7	12.9	00.0	100.
4	19.4	00.0	00.0	00.0	3.2	00.0	12.9	12.9	12.9	3.2	6.5	6.5	00.0	00.0	3.2	16.1	3.2	100.
5	19.4	00.0	00.0	00.0	3.2	3.2	6.5	12.9	22.6	00.0	3.2	3.2	00.0	3.2	9.7	12.9	00.0	100.
6	22.6	00.0	00.0	00.0	00.0	00.0	16.1	12.9	12.9	6.5	00.0	00.0	3.2	3.2	12.9	9.7	00.0	100.
7	12.9	3.2	00.0	3.2	00.0	6.5	6.5	9.7	22.6	00.0	00.0	00.0	3.2	3.2	12.9	12.9	3.2	100.
8	22.6	3.2	00.0	00.0	00.0	6.5	6.5	19.4	9.7	00.0	3.2	00.0	00.0	00.0	16.1	9.7	3.2	100.
9	25.8	3.2	00.0	00.0	00.0	6.5	3.2	22.6	12.9	3.2	00.0	3.2	00.0	3.2	9.7	3.2	3.2	100.
10	22.6	3.2	3.2	00.0	3.2	3.2	6.5	16.1	16.1	9.7	00.0	00.0	00.0	00.0	9.7	6.5	00.0	100.
11	25.8	00.0	3.2	00.0	00.0	3.2	6.5	16.1	6.5	12.9	3.2	3.2	00.0	00.0	3.2	16.1	00.0	100.
12	12.9	9.7	3.2	00.0	00.0	00.0	6.5	6.5	19.4	9.7	6.5	3.2	00.0	3.2	9.7	9.7	00.0	100.
13	19.4	9.7	00.0	00.0	3.2	00.0	00.0	16.1	22.6	6.5	3.2	00.0	3.2	3.2	6.5	6.5	00.0	100.
14	19.4	00.0	3.2	00.0	6.5	00.0	00.0	9.7	9.7	19.4	12.9	00.0	3.2	00.0	6.5	9.7	00.0	100.
15	19.4	6.5	00.0	00.0	00.0	3.2	3.2	9.7	16.1	9.7	12.9	00.0	3.2	6.5	9.7	00.0	00.0	100.
16	16.1	6.5	3.2	00.0	00.0	3.2	3.2	6.5	19.4	9.7	6.5	00.0	00.0	9.7	9.7	6.5	00.0	100.
17	12.9	9.7	6.5	00.0	00.0	3.2	00.0	16.1	9.7	12.9	00.0	3.2	00.0	9.7	12.9	3.2	00.0	100.
18	16.1	9.7	6.5	00.0	00.0	3.2	9.7	9.7	9.7	6.5	00.0	00.0	3.2	12.9	3.2	9.7	00.0	100.
19	22.6	6.5	3.2	00.0	00.0	00.0	9.7	9.7	9.7	6.5	00.0	00.0	3.2	12.9	3.2	12.9	00.0	100.
20	22.6	9.7	3.2	00.0	00.0	3.2	3.2	16.1	9.7	3.2	00.0	00.0	00.0	16.1	3.2	9.7	00.0	100.
21	19.4	6.5	3.2	3.2	00.0	6.5	3.2	12.9	16.1	3.2	3.2	00.0	3.2	3.2	3.2	12.9	00.0	100.
22	19.4	3.2	00.0	6.5	3.2	3.2	00.0	16.1	16.1	3.2	00.0	00.0	6.5	3.2	3.2	12.9	3.2	100.
23	19.4	6.5	3.2	3.2	00.0	6.5	00.0	22.6	9.7	9.7	3.2	00.0	3.2	00.0	3.2	9.7	00.0	100.
24	19.4	6.5	00.0	3.2	00.0	00.0	6.5	12.9	22.6	3.2	6.5	00.0	00.0	3.2	6.5	9.7	00.0	100.
ALL	19.2	4.6	2.0	1.2	1.3	2.6	5.0	14.1	14.9	7.1	3.0	1.2	1.7	4.0	7.3	10.1	.7	100.

NUMBER OF OBS = 744

B30

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-MAR

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	12.2	3.3	4.4	2.2	3.3	1.1	2.2	11.1	15.6	8.9	1.1	5.6	2.2	2.2	8.9	15.6	00.0	100.
2	13.3	4.4	1.1	3.3	2.2	2.2	2.2	10.0	13.3	11.1	2.2	2.2	5.6	3.3	11.1	12.2	00.0	100.
3	10.0	4.4	5.6	1.1	1.1	1.1	3.3	3.3	23.3	7.8	1.1	5.6	00.0	6.7	13.3	12.2	00.0	100.
4	14.4	3.3	1.1	3.3	1.1	1.1	7.8	8.9	12.2	6.7	3.3	5.6	2.2	6.7	8.9	12.2	1.1	100.
5	20.0	2.2	2.2	1.1	1.1	1.1	4.4	10.0	18.9	2.2	3.3	3.3	2.2	6.7	12.2	8.9	00.0	100.
6	16.7	5.6	1.1	00.0	1.1	00.0	8.9	6.7	15.6	5.6	3.3	1.1	4.4	5.6	15.6	8.9	00.0	100.
7	11.1	4.4	1.1	2.2	00.0	2.2	6.7	8.9	12.2	5.6	2.2	1.1	4.4	5.6	15.6	15.6	1.1	100.
8	14.4	6.7	3.3	00.0	00.0	2.2	4.4	12.2	7.8	7.8	3.3	1.1	3.3	5.6	17.8	8.9	1.1	100.
9	15.6	5.6	1.1	2.2	00.0	2.2	4.4	12.2	13.3	4.4	2.2	4.4	2.2	8.9	13.3	6.7	1.1	100.
10	10.0	7.8	4.4	00.0	2.2	2.2	4.4	12.2	11.1	6.7	3.3	3.3	00.0	8.9	10.0	13.3	00.0	100.
11	17.8	2.2	3.3	1.1	2.2	1.1	5.6	12.2	6.7	8.9	5.6	2.2	00.0	6.7	8.9	15.6	00.0	100.
12	11.1	6.7	3.3	1.1	3.3	1.1	2.2	6.7	12.2	8.9	5.6	6.7	1.1	4.4	13.3	12.2	00.0	100.
13	12.2	4.4	3.3	00.0	2.2	3.3	00.0	11.1	12.2	5.6	5.6	4.4	4.4	5.6	11.1	14.4	00.0	100.
14	10.0	4.4	3.3	00.0	2.2	1.1	2.2	6.7	11.1	10.0	11.1	2.2	3.3	6.7	11.1	14.4	00.0	100.
15	11.1	5.6	1.1	1.1	00.0	2.2	3.3	6.7	10.0	10.0	10.0	3.3	3.3	5.6	12.2	13.3	1.1	100.
16	11.1	5.6	2.2	1.1	1.1	3.3	2.2	5.6	12.2	6.7	6.7	6.7	2.2	10.0	11.1	12.2	00.0	100.
17	11.1	6.7	4.4	00.0	1.1	2.2	4.4	8.9	7.8	4.4	6.7	5.6	2.2	12.2	8.9	13.3	00.0	100.
18	11.1	7.8	4.4	00.0	00.0	4.4	6.7	7.8	6.7	5.6	4.4	3.3	4.4	10.0	5.6	17.8	00.0	100.
19	13.3	5.6	4.4	1.1	1.1	2.2	6.7	6.7	10.0	6.7	3.3	1.1	4.4	7.8	7.8	17.8	00.0	100.
20	11.1	5.6	1.1	3.3	1.1	2.2	5.6	7.8	11.1	3.3	1.1	8.9	2.2	7.8	11.1	16.7	00.0	100.
21	11.1	5.6	2.2	3.3	2.2	2.2	4.4	6.7	14.4	4.4	7.8	00.0	2.2	3.3	12.2	17.8	00.0	100.
22	15.6	1.1	2.2	3.3	4.4	1.1	3.3	10.0	15.6	4.4	1.1	3.3	2.2	5.6	8.9	16.7	1.1	100.
23	15.6	4.4	1.1	3.3	3.3	2.2	1.1	11.1	12.2	8.9	3.3	1.1	5.6	4.4	6.7	14.4	1.1	100.
24	16.7	3.3	00.0	3.3	2.2	1.1	4.4	4.4	18.9	6.7	6.7	3.3	1.1	6.7	8.9	12.2	00.0	100.
ALL	13.2	4.9	2.6	1.6	1.6	1.9	4.2	8.7	12.7	6.7	4.4	3.6	2.7	6.5	11.0	13.5	.3	100.

NUMBER OF OBS = 2160

B31

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.3	6.7	3.3	00.0	00.0	6.7	6.7	13.3	16.7	13.3	3.3	00.0	3.3	3.3	10.0	10.0	00.0	100.
2	6.7	6.7	00.0	00.0	00.0	6.7	10.0	10.0	23.3	10.0	00.0	3.3	00.0	6.7	6.7	6.7	3.3	100.
3	6.7	3.3	3.3	00.0	00.0	3.3	6.7	23.3	20.0	00.0	3.3	6.7	00.0	3.3	10.0	10.0	00.0	100.
4	6.7	00.0	6.7	00.0	00.0	00.0	10.0	16.7	26.7	00.0	3.3	3.3	3.3	6.7	3.3	13.3	00.0	100.
5	6.7	3.3	3.3	00.0	00.0	00.0	6.7	16.7	16.7	3.3	3.3	3.3	00.0	6.7	10.0	20.0	00.0	100.
6	10.0	3.3	00.0	3.3	00.0	00.0	6.7	16.7	20.0	6.7	00.0	00.0	00.0	6.7	13.3	13.3	00.0	100.
7	6.7	6.7	3.3	3.3	00.0	00.0	6.7	10.0	23.3	3.3	6.7	00.0	6.7	3.3	6.7	10.0	3.3	100.
8	10.0	6.7	00.0	6.7	3.3	00.0	3.3	13.3	16.7	6.7	3.3	00.0	3.3	10.0	6.7	10.0	00.0	100.
9	10.0	00.0	3.3	3.3	3.3	3.3	10.0	16.7	10.0	3.3	3.3	3.3	3.3	00.0	16.7	10.0	00.0	100.
10	10.0	3.3	00.0	6.7	00.0	6.7	10.0	10.0	13.3	6.7	00.0	6.7	3.3	3.3	10.0	10.0	00.0	100.
11	6.7	10.0	00.0	6.7	00.0	00.0	3.3	13.3	16.7	10.0	3.3	3.3	00.0	00.0	10.0	16.7	00.0	100.
12	3.3	6.7	00.0	6.7	00.0	00.0	3.3	6.7	20.0	10.0	3.3	3.3	00.0	6.7	10.0	20.0	00.0	100.
13	00.0	10.0	3.3	3.3	00.0	3.3	6.7	3.3	23.3	6.7	10.0	00.0	00.0	00.0	10.0	20.0	00.0	100.
14	10.0	10.0	3.3	00.0	6.7	00.0	3.3	13.3	16.7	10.0	3.3	00.0	00.0	00.0	6.7	16.7	00.0	100.
15	13.3	6.7	3.3	3.3	00.0	00.0	6.7	13.3	16.7	10.0	3.3	00.0	00.0	00.0	6.7	16.7	00.0	100.
16	10.0	3.3	3.3	6.7	00.0	00.0	6.7	6.7	20.0	16.7	00.0	00.0	00.0	00.0	6.7	20.0	00.0	100.
17	13.3	3.3	00.0	3.3	3.3	00.0	6.7	6.7	16.7	20.0	00.0	00.0	00.0	00.0	3.3	23.3	00.0	100.
18	10.0	6.7	00.0	00.0	00.0	6.7	6.7	13.3	20.0	6.7	3.3	00.0	00.0	00.0	6.7	20.0	00.0	100.
19	10.0	3.3	00.0	3.3	00.0	00.0	10.0	23.3	13.3	6.7	00.0	00.0	00.0	00.0	13.3	16.7	00.0	100.
20	6.7	3.3	00.0	00.0	00.0	00.0	13.3	30.0	10.0	00.0	00.0	00.0	6.7	00.0	6.7	23.3	00.0	100.
21	3.3	3.3	3.3	00.0	00.0	6.7	13.3	13.3	13.3	3.3	00.0	3.3	00.0	3.3	13.3	20.0	00.0	100.
22	6.7	3.3	3.3	00.0	00.0	10.0	10.0	20.0	3.3	3.3	00.0	00.0	3.3	00.0	20.0	13.3	3.3	100.
23	6.7	3.3	3.3	00.0	3.3	3.3	13.3	16.7	6.7	00.0	6.7	00.0	3.3	10.0	3.3	20.0	00.0	100.
24	3.3	3.3	3.3	00.0	00.0	00.0	13.3	23.3	6.7	6.7	3.3	3.3	00.0	3.3	10.0	16.7	3.3	100.
ALL	7.5	4.9	2.1	2.4	.8	2.4	8.1	14.6	16.2	6.8	2.6	1.7	1.5	3.1	9.2	15.7	.6	100.

NUMBER OF OBS = 720

B32

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	12.9	00.0	3.2	6.5	3.2	6.5	9.7	6.5	6.5	6.5	00.0	6.5	3.2	6.5	12.9	9.7	00.0	100.
2	12.9	3.2	3.2	3.2	6.5	3.2	16.1	6.5	9.7	3.2	00.0	6.5	3.2	3.2	6.5	12.9	00.0	100.
3	16.1	3.2	9.7	00.0	3.2	00.0	9.7	3.2	12.9	3.2	00.0	00.0	9.7	6.5	16.1	3.2	3.2	100.
4	12.9	3.2	3.2	6.5	3.2	3.2	6.5	12.9	9.7	6.5	3.2	00.0	9.7	3.2	9.7	3.2	3.2	100.
5	9.7	6.5	3.2	6.5	00.0	6.5	6.5	12.9	9.7	9.7	00.0	00.0	6.5	9.7	00.0	9.7	3.2	100.
6	12.9	3.2	00.0	3.2	3.2	3.2	6.5	29.0	6.5	00.0	00.0	3.2	6.5	3.2	6.5	12.9	00.0	100.
7	6.5	6.5	6.5	3.2	3.2	00.0	9.7	12.9	12.9	3.2	00.0	3.2	3.2	6.5	6.5	16.1	00.0	100.
8	6.5	9.7	9.7	3.2	3.2	6.5	3.2	19.4	6.5	6.5	00.0	3.2	3.2	3.2	12.9	3.2	00.0	100.
9	6.5	6.5	3.2	9.7	3.2	9.7	6.5	22.6	3.2	6.5	00.0	00.0	3.2	9.7	00.0	9.7	00.0	100.
10	6.5	00.0	16.1	00.0	6.5	12.9	3.2	12.9	22.6	00.0	00.0	00.0	3.2	00.0	12.9	3.2	00.0	100.
11	3.2	9.7	9.7	3.2	6.5	9.7	3.2	12.9	22.6	3.2	00.0	00.0	3.2	3.2	3.2	6.5	00.0	100.
12	6.5	6.5	6.5	3.2	6.5	19.4	00.0	16.1	12.9	00.0	00.0	00.0	6.5	9.7	3.2	3.2	00.0	100.
13	6.5	12.9	6.5	00.0	6.5	3.2	12.9	9.7	16.1	00.0	3.2	00.0	6.5	6.5	6.5	3.2	00.0	100.
14	9.7	3.2	6.5	3.2	3.2	12.9	12.9	6.5	19.4	3.2	00.0	3.2	00.0	6.5	3.2	6.5	00.0	100.
15	00.0	6.5	12.9	6.5	3.2	6.5	6.5	9.7	12.9	9.7	3.2	9.7	00.0	3.2	3.2	6.5	00.0	100.
16	00.0	6.5	6.5	3.2	6.5	9.7	9.7	9.7	12.9	9.7	00.0	6.5	3.2	3.2	6.5	6.5	00.0	100.
17	3.2	3.2	3.2	6.5	3.2	16.1	3.2	12.9	12.9	3.2	6.5	6.5	6.5	00.0	6.5	6.5	00.0	100.
18	00.0	6.5	3.2	6.5	6.5	9.7	3.2	22.6	3.2	6.5	6.5	3.2	9.7	00.0	6.5	6.5	00.0	100.
19	00.0	3.2	6.5	6.5	9.7	3.2	9.7	16.1	9.7	00.0	00.0	12.9	3.2	3.2	9.7	6.5	00.0	100.
20	00.0	00.0	6.5	9.7	6.5	9.7	3.2	9.7	12.9	3.2	6.5	6.5	6.5	00.0	6.5	12.9	00.0	100.
21	9.7	00.0	6.5	12.9	6.5	3.2	9.7	9.7	6.5	3.2	3.2	6.5	6.5	3.2	3.2	9.7	00.0	100.
22	16.1	3.2	6.5	6.5	00.0	12.9	6.5	9.7	9.7	3.2	3.2	3.2	00.0	12.9	3.2	3.2	00.0	100.
23	12.9	6.5	6.5	6.5	00.0	9.7	6.5	6.5	9.7	3.2	3.2	00.0	12.9	3.2	00.0	12.9	00.0	100.
24	16.1	3.2	9.7	6.5	6.5	6.5	3.2	6.5	6.5	6.5	6.5	00.0	6.5	9.7	3.2	3.2	00.0	100.
ALL	7.8	4.7	6.5	5.1	4.4	7.7	7.0	12.4	11.2	4.2	1.9	3.4	5.1	4.8	6.2	7.4	.4	100.

NUMBER OF OBS = 744

B33

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.0	3.3	3.3	00.0	00.0	6.7	6.7	26.7	16.7	3.3	6.7	00.0	00.0	3.3	3.3	6.7	3.3	100.
2	13.3	3.3	00.0	00.0	00.0	6.7	6.7	13.3	30.0	3.3	3.3	10.0	3.3	00.0	3.3	3.3	00.0	100.
3	13.3	00.0	3.3	3.3	00.0	3.3	6.7	16.7	20.0	3.3	6.7	3.3	00.0	3.3	6.7	6.7	3.3	100.
4	6.7	3.3	3.3	00.0	3.3	10.0	00.0	16.7	30.0	6.7	00.0	00.0	3.3	3.3	3.3	10.0	00.0	100.
5	3.3	00.0	00.0	3.3	6.7	6.7	00.0	16.7	16.7	13.3	00.0	00.0	3.3	13.3	3.3	13.3	00.0	100.
6	3.3	3.3	00.0	00.0	10.0	3.3	10.0	10.0	20.0	10.0	6.7	3.3	00.0	3.3	10.0	6.7	00.0	100.
7	10.0	3.3	00.0	00.0	6.7	6.7	3.3	16.7	13.3	6.7	6.7	6.7	3.3	00.0	00.0	6.7	10.0	100.
8	3.3	13.3	00.0	3.3	00.0	6.7	10.0	13.3	13.3	6.7	6.7	00.0	00.0	6.7	00.0	3.3	13.3	100.
9	3.3	6.7	3.3	3.3	3.3	3.3	10.0	26.7	16.7	3.3	6.7	3.3	00.0	3.3	3.3	3.3	00.0	100.
10	6.7	3.3	3.3	3.3	3.3	3.3	10.0	20.0	20.0	3.3	10.0	00.0	00.0	00.0	6.7	6.7	00.0	100.
11	16.7	3.3	3.3	6.7	3.3	6.7	6.7	10.0	23.3	6.7	00.0	6.7	3.3	00.0	3.3	00.0	00.0	100.
12	16.7	00.0	00.0	13.3	10.0	00.0	10.0	16.7	20.0	3.3	00.0	3.3	3.3	00.0	3.3	00.0	00.0	100.
13	10.0	3.3	3.3	6.7	3.3	13.3	16.7	13.3	13.3	6.7	3.3	00.0	6.7	00.0	00.0	00.0	00.0	100.
14	10.0	00.0	3.3	3.3	3.3	10.0	13.3	20.0	20.0	00.0	6.7	00.0	6.7	00.0	00.0	3.3	00.0	100.
15	6.7	00.0	6.7	3.3	6.7	3.3	20.0	10.0	20.0	3.3	6.7	00.0	6.7	00.0	00.0	6.7	00.0	100.
16	3.3	00.0	6.7	00.0	6.7	00.0	6.7	26.7	13.3	00.0	6.7	6.7	10.0	00.0	3.3	10.0	00.0	100.
17	6.7	00.0	6.7	00.0	3.3	3.3	6.7	23.3	16.7	6.7	00.0	10.0	00.0	6.7	00.0	10.0	00.0	100.
18	6.7	00.0	6.7	00.0	3.3	3.3	6.7	13.3	23.3	10.0	3.3	3.3	3.3	00.0	00.0	16.7	00.0	100.
19	10.0	3.3	6.7	00.0	6.7	00.0	00.0	20.0	26.7	6.7	6.7	00.0	3.3	00.0	00.0	10.0	00.0	100.
20	6.7	3.3	3.3	10.0	00.0	6.7	00.0	20.0	16.7	10.0	3.3	00.0	6.7	00.0	00.0	13.3	00.0	100.
21	3.3	6.7	6.7	6.7	3.3	6.7	6.7	16.7	13.3	6.7	00.0	3.3	6.7	00.0	6.7	6.7	00.0	100.
22	3.3	10.0	3.3	3.3	3.3	00.0	6.7	20.0	10.0	3.3	6.7	00.0	00.0	6.7	20.0	3.3	00.0	100.
23	10.0	6.7	00.0	00.0	3.3	6.7	13.3	13.3	20.0	00.0	00.0	3.3	00.0	3.3	6.7	6.7	6.7	100.
24	6.7	00.0	3.3	6.7	00.0	10.0	6.7	16.7	26.7	00.0	6.7	00.0	00.0	00.0	3.3	13.3	00.0	100.
ALL	7.9	3.2	3.2	3.2	3.8	5.3	7.6	17.4	19.2	5.1	4.3	2.6	2.9	2.2	3.6	6.9	1.5	100.

NUMBER OF OBS = 720

B34

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APR-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.8	3.3	3.3	2.2	1.1	6.6	7.7	15.4	13.2	7.7	3.3	2.2	2.2	4.4	8.8	8.8	1.1	100.
2	11.0	4.4	1.1	1.1	2.2	5.5	11.0	9.9	20.9	5.5	1.1	6.6	2.2	3.3	5.5	7.7	1.1	100.
3	12.1	2.2	5.5	1.1	1.1	2.2	7.7	14.3	17.6	2.2	3.3	3.3	3.3	4.4	11.0	6.6	2.2	100.
4	8.8	2.2	4.4	2.2	2.2	4.4	5.5	15.4	22.0	4.4	2.2	1.1	5.5	4.4	5.5	8.8	1.1	100.
5	6.6	3.3	2.2	3.3	2.2	4.4	4.4	15.4	14.3	8.8	1.1	1.1	3.3	9.9	4.4	14.3	1.1	100.
6	8.8	3.3	00.0	2.2	4.4	2.2	7.7	18.7	15.4	5.5	2.2	2.2	2.2	4.4	9.9	11.0	00.0	100.
7	7.7	5.5	3.3	2.2	3.3	2.2	6.6	13.2	16.5	4.4	4.4	3.3	4.4	3.3	4.4	11.0	4.4	100.
8	6.6	9.9	3.3	4.4	2.2	4.4	5.5	15.4	12.1	6.6	3.3	1.1	2.2	6.6	6.6	5.5	4.4	100.
9	6.6	4.4	3.3	5.5	3.3	5.5	8.8	22.0	9.9	4.4	3.3	2.2	2.2	4.4	6.6	7.7	00.0	100.
10	7.7	2.2	6.6	3.3	3.3	7.7	7.7	14.3	18.7	3.3	3.3	2.2	2.2	1.1	9.9	6.6	00.0	100.
11	8.8	7.7	4.4	5.5	3.3	5.5	4.4	12.1	20.9	6.6	1.1	3.3	2.2	1.1	5.5	7.7	00.0	100.
12	8.8	4.4	2.2	7.7	5.5	6.6	4.4	13.2	17.6	4.4	1.1	2.2	3.3	5.5	5.5	7.7	00.0	100.
13	5.5	8.8	4.4	3.3	3.3	6.6	12.1	8.8	17.6	4.4	5.5	00.0	4.4	2.2	5.5	7.7	00.0	100.
14	9.9	4.4	4.4	2.2	4.4	7.7	9.9	13.2	18.7	4.4	3.3	1.1	2.2	2.2	3.3	8.8	00.0	100.
15	6.6	4.4	7.7	4.4	3.3	3.3	11.0	11.0	16.5	7.7	4.4	3.3	2.2	1.1	3.3	9.9	00.0	100.
16	4.4	3.3	5.5	3.3	4.4	3.3	7.7	14.3	15.4	8.8	2.2	4.4	4.4	1.1	5.5	12.1	00.0	100.
17	7.7	2.2	3.3	3.3	3.3	6.6	5.5	14.3	15.4	9.9	2.2	5.5	2.2	2.2	3.3	13.2	00.0	100.
18	5.5	4.4	3.3	2.2	3.3	6.6	5.5	16.5	15.4	7.7	4.4	2.2	4.4	00.0	4.4	14.3	00.0	100.
19	6.6	3.3	4.4	3.3	5.5	1.1	6.6	19.8	16.5	4.4	2.2	4.4	2.2	1.1	7.7	11.0	00.0	100.
20	4.4	2.2	3.3	6.6	2.2	5.5	5.5	19.8	13.2	4.4	3.3	2.2	6.6	00.0	4.4	16.5	00.0	100.
21	5.5	3.3	5.5	6.6	3.3	5.5	9.9	13.2	11.0	4.4	1.1	4.4	4.4	2.2	7.7	12.1	00.0	100.
22	8.8	5.5	4.4	3.3	1.1	7.7	7.7	16.5	7.7	3.3	3.3	1.1	1.1	6.6	14.3	6.6	1.1	100.
23	9.9	5.5	3.3	2.2	2.2	6.6	11.0	12.1	12.1	1.1	3.3	1.1	5.5	5.5	3.3	13.2	2.2	100.
24	8.8	2.2	5.5	4.4	2.2	5.5	7.7	15.4	13.2	4.4	5.5	1.1	2.2	4.4	5.5	11.0	1.1	100.
ALL	7.7	4.3	3.9	3.6	3.0	5.1	7.6	14.7	15.5	5.4	2.9	2.6	3.2	3.4	6.3	10.0	.8	100.

NUMBER OF OBS = 2184

B35

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-JUN

HR. OF DAY	WIND DIRECTION																	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	
1	10.5	3.3	3.9	2.2	2.2	3.9	5.0	13.3	14.4	8.3	2.2	3.9	2.2	3.3	8.8	12.2	.6	100.
2	12.2	4.4	1.1	2.2	2.2	3.9	6.6	9.9	17.1	8.3	1.7	4.4	3.9	3.3	8.3	9.9	.6	100.
3	11.0	3.3	5.5	1.1	1.1	1.7	5.5	8.8	20.4	5.0	2.2	4.4	1.7	5.5	12.2	9.4	1.1	100.
4	11.6	2.8	2.8	2.8	1.7	2.8	6.6	12.2	17.1	5.5	2.8	3.3	3.9	5.5	7.2	10.5	1.1	100.
5	13.3	2.8	2.2	2.2	1.7	2.8	4.4	12.7	16.6	5.5	2.2	2.2	2.8	8.3	8.3	11.6	.6	100.
6	12.7	4.4	.6	1.1	2.8	1.1	8.3	12.7	15.5	5.5	2.8	1.7	3.3	5.0	12.7	9.9	00.0	100.
7	9.4	5.0	2.2	2.2	1.7	2.2	6.6	11.0	14.4	5.0	3.3	2.2	4.4	4.4	9.9	13.3	2.8	100.
8	10.5	8.3	3.3	2.2	1.1	3.3	5.0	13.8	9.9	7.2	3.3	1.1	2.8	6.1	12.2	7.2	2.8	100.
9	11.0	5.0	2.2	3.9	1.7	3.9	6.6	17.1	11.6	4.4	2.8	3.3	2.2	6.6	9.9	7.2	.6	100.
10	8.8	5.0	5.5	1.7	2.8	5.0	6.1	13.3	14.9	5.0	3.3	2.8	1.1	5.0	9.9	9.9	00.0	100.
11	13.3	5.0	3.9	3.3	2.8	3.3	5.0	12.2	13.8	7.7	3.3	2.8	1.1	3.9	7.2	11.6	00.0	100.
12	9.9	5.5	2.8	4.4	4.4	3.9	3.3	9.9	14.9	6.6	3.3	4.4	2.2	5.0	9.4	9.9	00.0	100.
13	8.8	6.6	3.9	1.7	2.8	5.0	6.1	9.9	14.9	5.0	5.5	2.2	4.4	3.9	8.3	11.0	00.0	100.
14	9.9	4.4	3.9	1.1	3.3	4.4	6.1	9.9	14.9	7.2	7.2	1.7	2.8	4.4	7.2	11.6	00.0	100.
15	8.8	5.0	4.4	2.8	1.7	2.8	7.2	8.8	13.3	8.8	7.2	3.3	2.8	3.3	7.7	11.6	.6	100.
16	7.7	4.4	3.9	2.2	2.8	3.3	5.0	9.9	13.8	7.7	4.4	5.5	3.3	5.5	8.3	12.2	00.0	100.
17	9.4	4.4	3.9	1.7	2.2	4.4	5.0	11.6	11.6	7.2	4.4	5.5	2.2	7.2	6.1	13.3	00.0	100.
18	8.3	6.1	3.9	1.1	1.7	5.5	6.1	12.2	11.0	6.6	4.4	2.8	4.4	5.0	5.0	16.0	00.0	100.
19	9.9	4.4	4.4	2.2	3.3	1.7	6.6	13.3	13.3	5.5	2.8	2.8	3.3	4.4	7.7	14.4	00.0	100.
20	7.7	3.9	2.2	5.0	1.7	3.9	5.5	13.8	12.2	3.9	2.2	5.5	4.4	3.9	7.7	16.6	00.0	100.
21	8.3	4.4	3.9	5.0	2.8	3.9	7.2	9.9	12.7	4.4	4.4	2.2	3.3	2.8	9.9	14.9	00.0	100.
22	12.2	3.3	3.3	3.3	2.8	4.4	5.5	13.3	11.6	3.9	2.2	2.2	1.7	6.1	11.6	11.6	1.1	100.
23	12.7	5.0	2.2	2.8	2.8	4.4	6.1	11.6	12.2	5.0	3.3	1.1	5.5	5.0	5.0	13.8	1.7	100.
24	12.7	2.8	2.8	3.9	2.2	3.3	6.1	9.9	16.0	5.5	6.1	2.2	1.7	5.5	7.2	11.6	.6	100.
ALL	10.5	4.6	3.3	2.6	2.3	3.5	5.9	11.7	14.1	6.0	3.6	3.1	3.0	4.9	8.7	11.7	.6	100.

NUMBER OF OBS = 4344

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JULY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	19.4	3.2	00.0	00.0	00.0	3.2	6.5	6.5	22.6	3.2	3.2	6.5	9.7	9.7	00.0	3.2	3.2	100.
2	9.7	00.0	00.0	00.0	6.5	00.0	3.2	9.7	19.4	6.5	3.2	00.0	16.1	6.5	9.7	9.7	00.0	100.
3	12.9	00.0	00.0	00.0	00.0	6.5	00.0	12.9	12.9	9.7	00.0	00.0	12.9	12.9	6.5	12.9	00.0	100.
4	6.5	00.0	00.0	00.0	00.0	3.2	3.2	19.4	3.2	19.4	3.2	00.0	6.5	9.7	16.1	6.5	3.2	100.
5	6.5	3.2	00.0	00.0	00.0	00.0	9.7	19.4	6.5	3.2	3.2	00.0	16.1	6.5	6.5	6.5	12.9	100.
6	16.1	3.2	00.0	00.0	00.0	00.0	6.5	19.4	12.9	6.5	00.0	3.2	00.0	22.6	3.2	3.2	3.2	100.
7	6.5	00.0	3.2	00.0	00.0	00.0	3.2	25.8	16.1	6.5	00.0	3.2	3.2	00.0	6.5	12.9	12.9	100.
8	12.9	3.2	00.0	00.0	00.0	6.5	9.7	12.9	22.6	3.2	6.5	00.0	00.0	3.2	9.7	6.5	3.2	100.
9	16.1	6.5	3.2	00.0	3.2	3.2	9.7	19.4	12.9	6.5	00.0	6.5	3.2	00.0	9.7	00.0	00.0	100.
10	12.9	3.2	3.2	3.2	3.2	3.2	6.5	12.9	22.6	3.2	00.0	9.7	6.5	3.2	6.5	00.0	00.0	100.
11	6.5	9.7	3.2	00.0	3.2	00.0	6.5	16.1	16.1	6.5	9.7	00.0	3.2	3.2	9.7	6.5	00.0	100.
12	6.5	9.7	00.0	6.5	00.0	00.0	6.5	16.1	22.6	00.0	6.5	3.2	00.0	3.2	9.7	9.7	00.0	100.
13	3.2	6.5	3.2	3.2	6.5	00.0	3.2	22.6	19.4	3.2	3.2	3.2	00.0	3.2	12.9	6.5	00.0	100.
14	3.2	3.2	6.5	00.0	00.0	6.5	3.2	22.6	19.4	6.5	3.2	00.0	00.0	6.5	6.5	12.9	00.0	100.
15	3.2	9.7	3.2	00.0	6.5	00.0	6.5	9.7	22.6	9.7	3.2	00.0	00.0	3.2	6.5	16.1	00.0	100.
16	3.2	9.7	9.7	00.0	00.0	00.0	00.0	25.8	16.1	3.2	6.5	3.2	3.2	3.2	00.0	16.1	00.0	100.
17	9.7	6.5	3.2	00.0	3.2	3.2	9.7	25.8	6.5	00.0	6.5	3.2	00.0	3.2	6.5	12.9	00.0	100.
18	3.2	6.5	12.9	00.0	9.7	3.2	6.5	22.6	6.5	00.0	6.5	3.2	00.0	00.0	6.5	12.9	00.0	100.
19	6.5	3.2	9.7	3.2	3.2	6.5	9.7	16.1	9.7	3.2	3.2	00.0	00.0	3.2	6.5	16.1	00.0	100.
20	16.1	6.5	00.0	00.0	3.2	6.5	9.7	12.9	12.9	3.2	00.0	6.5	00.0	00.0	16.1	6.5	00.0	100.
21	12.9	6.5	00.0	00.0	00.0	00.0	16.1	12.9	6.5	6.5	00.0	3.2	00.0	9.7	12.9	9.7	3.2	100.
22	6.5	3.2	00.0	3.2	00.0	00.0	12.9	6.5	19.4	3.2	00.0	00.0	00.0	6.5	16.1	16.1	6.5	100.
23	3.2	6.5	00.0	00.0	3.2	3.2	6.5	6.5	16.1	6.5	6.5	3.2	3.2	9.7	9.7	12.9	3.2	100.
24	16.7	3.3	00.0	00.0	00.0	3.3	00.0	16.7	16.7	10.0	3.3	00.0	10.0	6.7	6.7	3.3	3.3	100.
ALL	9.2	4.7	2.6	.8	2.2	2.4	6.5	16.3	15.1	5.4	3.2	2.4	3.9	5.7	8.3	9.2	2.3	100.

NUMBER OF OBS = 743

B37

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

AUGUST

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	00.0	9.7	3.2	3.2	6.5	12.9	9.7	16.1	3.2	3.2	00.0	00.0	9.7	6.5	12.9	00.0	100.
2	9.7	3.2	3.2	6.5	9.7	00.0	16.1	3.2	16.1	3.2	3.2	00.0	3.2	3.2	3.2	6.5	9.7	100.
3	00.0	9.7	3.2	3.2	9.7	6.5	3.2	6.5	9.7	12.9	3.2	00.0	3.2	3.2	3.2	22.6	00.0	100.
4	12.9	00.0	6.5	9.7	3.2	3.2	6.5	12.9	19.4	3.2	3.2	6.5	00.0	3.2	3.2	6.5	00.0	100.
5	9.7	9.7	3.2	00.0	3.2	6.5	12.9	12.9	6.5	9.7	6.5	3.2	00.0	00.0	6.5	6.5	3.2	100.
6	00.0	3.2	9.7	00.0	3.2	16.1	9.7	6.5	12.9	3.2	9.7	00.0	6.5	6.5	00.0	9.7	3.2	100.
7	00.0	3.2	00.0	6.5	3.2	6.5	12.9	19.4	9.7	3.2	3.2	00.0	00.0	00.0	9.7	9.7	12.9	100.
8	3.2	00.0	00.0	3.2	6.5	6.5	9.7	19.4	22.6	3.2	00.0	00.0	6.5	00.0	3.2	12.9	3.2	100.
9	3.2	3.2	3.2	6.5	3.2	16.1	6.5	9.7	25.8	3.2	00.0	9.7	00.0	00.0	3.2	6.5	00.0	100.
10	6.5	00.0	3.2	6.5	9.7	16.1	12.9	9.7	9.7	9.7	00.0	3.2	3.2	3.2	3.2	3.2	00.0	100.
11	6.5	00.0	00.0	6.5	19.4	9.7	16.1	6.5	12.9	3.2	00.0	00.0	00.0	6.5	00.0	12.9	00.0	100.
12	9.7	00.0	6.5	12.9	6.5	29.0	6.5	9.7	12.9	00.0	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
13	6.5	00.0	12.9	9.7	9.7	22.6	6.5	12.9	12.9	00.0	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
14	6.5	00.0	3.2	9.7	9.7	25.8	16.1	16.1	6.5	00.0	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
15	3.2	6.5	6.5	3.2	12.9	19.4	12.9	16.1	6.5	3.2	3.2	00.0	00.0	00.0	00.0	6.5	00.0	100.
16	9.7	16.1	3.2	3.2	16.1	12.9	19.4	6.5	3.2	6.5	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
17	9.7	6.5	6.5	9.7	12.9	19.4	19.4	6.5	3.2	00.0	00.0	00.0	3.2	00.0	00.0	3.2	00.0	100.
18	9.7	6.5	3.2	9.7	12.9	16.1	25.8	6.5	00.0	00.0	00.0	00.0	00.0	00.0	3.2	6.5	00.0	100.
19	12.9	6.5	3.2	12.9	19.4	9.7	16.1	6.5	3.2	3.2	00.0	00.0	00.0	3.2	00.0	3.2	00.0	100.
20	9.7	3.2	9.7	6.5	12.9	9.7	3.2	6.5	9.7	3.2	3.2	00.0	00.0	6.5	9.7	3.2	3.2	100.
21	12.9	00.0	3.2	9.7	16.1	9.7	3.2	6.5	3.2	00.0	3.2	3.2	00.0	6.5	6.5	6.5	9.7	100.
22	9.7	3.2	3.2	3.2	12.9	16.1	00.0	6.5	6.5	3.2	3.2	3.2	3.2	6.5	3.2	6.5	9.7	100.
23	6.5	6.5	3.2	3.2	9.7	6.5	6.5	3.2	9.7	00.0	3.2	3.2	00.0	00.0	16.1	9.7	12.9	100.
24	3.2	6.5	6.5	6.5	9.7	3.2	12.9	6.5	12.9	3.2	3.2	6.5	3.2	3.2	9.7	00.0	3.2	100.
ALL	6.9	3.9	4.7	6.3	9.8	12.2	11.2	9.4	10.5	3.4	2.2	1.6	1.3	2.6	3.8	7.4	3.0	100.

NUMBER OF OBS = 744

B38

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

SEPTEMBER

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	16.7	00.0	00.0	00.0	6.7	3.3	6.7	20.0	20.0	3.3	00.0	3.3	00.0	00.0	00.0	6.7	13.3	100.
2	13.3	3.3	00.0	00.0	3.3	6.7	10.0	16.7	20.0	10.0	00.0	00.0	00.0	3.3	3.3	6.7	3.3	100.
3	10.0	3.3	00.0	00.0	6.7	6.7	10.0	6.7	16.7	16.7	6.7	00.0	00.0	6.7	00.0	3.3	6.7	100.
4	3.3	3.3	00.0	00.0	3.3	13.3	00.0	20.0	10.0	6.7	3.3	00.0	00.0	3.3	10.0	6.7	16.7	100.
5	6.7	3.3	00.0	00.0	00.0	6.7	3.3	16.7	10.0	13.3	3.3	3.3	3.3	10.0	13.3	3.3	3.3	100.
6	13.3	3.3	00.0	3.3	00.0	3.3	3.3	20.0	16.7	3.3	10.0	00.0	6.7	3.3	10.0	00.0	3.3	100.
7	6.7	10.0	00.0	3.3	00.0	6.7	3.3	16.7	13.3	3.3	00.0	00.0	3.3	6.7	10.0	3.3	13.3	100.
8	10.0	6.7	00.0	00.0	13.3	00.0	16.7	16.7	13.3	00.0	3.3	00.0	00.0	3.3	6.7	00.0	10.0	100.
9	16.7	3.3	00.0	3.3	3.3	3.3	26.7	20.0	10.0	00.0	00.0	00.0	3.3	00.0	6.7	3.3	00.0	100.
10	10.0	6.7	00.0	00.0	00.0	6.7	16.7	20.0	20.0	6.7	00.0	00.0	3.3	00.0	3.3	6.7	00.0	100.
11	6.7	10.0	00.0	00.0	00.0	3.3	13.3	26.7	16.7	6.7	3.3	00.0	3.3	00.0	3.3	6.7	00.0	100.
12	6.7	10.0	00.0	00.0	00.0	10.0	6.7	26.7	13.3	10.0	3.3	00.0	3.3	00.0	00.0	10.0	00.0	100.
13	10.0	6.7	00.0	00.0	00.0	3.3	13.3	16.7	30.0	3.3	00.0	10.0	00.0	00.0	00.0	6.7	00.0	100.
14	10.0	3.3	00.0	00.0	00.0	6.7	20.0	23.3	13.3	3.3	00.0	6.7	00.0	3.3	00.0	10.0	00.0	100.
15	10.0	00.0	3.3	00.0	00.0	13.3	6.7	20.0	16.7	6.7	00.0	3.3	6.7	3.3	00.0	10.0	00.0	100.
16	6.7	00.0	3.3	00.0	3.3	6.7	10.0	23.3	16.7	3.3	00.0	00.0	3.3	6.7	6.7	10.0	00.0	100.
17	6.7	3.3	3.3	3.3	00.0	00.0	23.3	13.3	20.0	3.3	00.0	00.0	6.7	00.0	3.3	13.3	00.0	100.
18	10.0	10.0	3.3	00.0	00.0	6.7	16.7	23.3	10.0	3.3	00.0	00.0	00.0	3.3	3.3	10.0	00.0	100.
19	3.3	10.0	00.0	6.7	3.3	3.3	3.3	16.7	13.3	3.3	3.3	3.3	00.0	00.0	13.3	16.7	00.0	100.
20	6.7	00.0	3.3	00.0	00.0	3.3	10.0	23.3	6.7	3.3	00.0	00.0	00.0	00.0	16.7	20.0	6.7	100.
21	6.7	6.7	00.0	00.0	00.0	6.7	3.3	20.0	6.7	3.3	00.0	00.0	10.0	00.0	16.7	13.3	6.7	100.
22	6.7	3.3	3.3	00.0	00.0	10.0	13.3	10.0	10.0	00.0	00.0	3.3	10.0	00.0	10.0	13.3	6.7	100.
23	16.7	3.3	00.0	00.0	00.0	6.7	3.3	26.7	13.3	00.0	3.3	00.0	3.3	3.3	6.7	10.0	00.0	100.
24	13.3	6.7	3.3	00.0	3.3	00.0	3.3	20.0	13.3	10.0	00.0	00.0	00.0	00.0	10.0	6.7	10.0	100.
ALL	9.4	4.9	1.0	.8	1.9	5.7	10.1	19.3	14.6	5.1	1.7	1.4	2.8	2.1	6.1	8.5	4.6	100.

NUMBER OF OBS = 720

B39

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-SEP

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	13.0	1.1	3.3	1.1	3.3	4.3	8.7	12.0	19.6	3.3	2.2	3.3	3.3	6.5	2.2	7.6	5.4	100.
2	10.9	2.2	1.1	2.2	6.5	2.2	9.8	9.8	18.5	6.5	2.2	00.0	6.5	4.3	5.4	7.6	4.3	100.
3	7.6	4.3	1.1	1.1	5.4	6.5	4.3	8.7	13.0	13.0	3.3	00.0	5.4	7.6	3.3	13.0	2.2	100.
4	7.6	1.1	2.2	3.3	2.2	6.5	3.3	17.4	10.9	9.8	3.3	2.2	2.2	5.4	9.8	6.5	6.5	100.
5	7.6	5.4	1.1	00.0	1.1	4.3	8.7	16.3	7.6	8.7	4.3	2.2	6.5	3.3	7.6	8.7	6.5	100.
6	9.8	3.3	3.3	1.1	1.1	6.5	6.5	15.2	14.1	4.3	6.5	1.1	4.3	10.9	4.3	4.3	3.3	100.
7	4.3	4.3	1.1	3.3	1.1	4.3	6.5	20.7	13.0	4.3	1.1	1.1	2.2	2.2	8.7	8.7	13.0	100.
8	8.7	3.3	00.0	1.1	6.5	4.3	12.0	16.3	19.6	2.2	3.3	00.0	2.2	2.2	6.5	6.5	5.4	100.
9	12.0	4.3	2.2	3.3	3.3	7.6	14.1	16.3	16.3	3.3	00.0	5.4	2.2	00.0	6.5	3.3	00.0	100.
10	9.8	3.3	2.2	3.3	4.3	8.7	12.0	14.1	17.4	6.5	00.0	4.3	4.3	2.2	4.3	3.3	00.0	100.
11	6.5	6.5	1.1	2.2	7.6	4.3	12.0	16.3	15.2	5.4	4.3	00.0	2.2	3.3	4.3	8.7	00.0	100.
12	7.6	6.5	2.2	6.5	2.2	13.0	6.5	17.4	16.3	3.3	3.3	1.1	1.1	1.1	3.3	8.7	00.0	100.
13	6.5	4.3	5.4	4.3	5.4	8.7	7.6	17.4	20.7	2.2	1.1	4.3	00.0	1.1	4.3	6.5	00.0	100.
14	6.5	2.2	3.3	3.3	3.3	13.0	13.0	20.7	13.0	3.3	1.1	2.2	00.0	3.3	2.2	9.8	00.0	100.
15	5.4	5.4	4.3	1.1	6.5	10.9	8.7	15.2	15.2	6.5	2.2	1.1	2.2	2.2	2.2	10.9	00.0	100.
16	6.5	8.7	5.4	1.1	6.5	6.5	9.8	18.5	12.0	4.3	2.2	1.1	2.2	3.3	2.2	9.8	00.0	100.
17	8.7	5.4	4.3	4.3	5.4	7.6	17.4	15.2	9.8	1.1	2.2	1.1	3.3	1.1	3.3	9.8	00.0	100.
18	7.6	7.6	6.5	3.3	7.6	8.7	16.3	17.4	5.4	1.1	2.2	1.1	00.0	1.1	4.3	9.8	00.0	100.
19	7.6	6.5	4.3	7.6	8.7	6.5	9.8	13.0	8.7	3.3	2.2	1.1	00.0	2.2	6.5	12.0	00.0	100.
20	10.9	3.3	4.3	2.2	5.4	6.5	7.6	14.1	9.8	3.3	1.1	2.2	00.0	2.2	14.1	9.8	3.3	100.
21	10.9	4.3	1.1	3.3	5.4	5.4	7.6	13.0	5.4	3.3	1.1	2.2	3.3	5.4	12.0	9.8	6.5	100.
22	7.6	3.3	2.2	2.2	4.3	8.7	8.7	7.6	12.0	2.2	1.1	2.2	4.3	4.3	9.8	12.0	7.6	100.
23	8.7	5.4	1.1	1.1	4.3	5.4	5.4	12.0	13.0	2.2	4.3	2.2	2.2	4.3	9.8	9.8	8.7	100.
24	11.0	5.5	3.3	2.2	4.4	2.2	5.5	14.3	14.3	7.7	2.2	2.2	4.4	3.3	8.8	3.3	5.5	100.
ALL	8.5	4.5	2.8	2.7	4.7	6.8	9.2	15.0	13.4	4.6	2.4	1.8	2.7	3.4	6.1	8.3	3.3	100.

NUMBER OF OBS = 2207

B40

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCTOBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	9.7	00.0	3.2	00.0	9.7	6.5	6.5	12.9	6.5	00.0	3.2	3.2	9.7	12.9	9.7	3.2	100.
2	6.5	00.0	00.0	3.2	3.2	3.2	6.5	6.5	12.9	9.7	3.2	6.5	00.0	6.5	19.4	3.2	9.7	100.
3	12.9	3.2	3.2	3.2	00.0	6.5	6.5	6.5	6.5	9.7	6.5	3.2	6.5	9.7	3.2	9.7	3.2	100.
4	9.7	00.0	3.2	3.2	3.2	6.5	3.2	6.5	12.9	6.5	00.0	6.5	6.5	3.2	6.5	16.1	6.5	100.
5	6.5	00.0	00.0	9.7	3.2	6.5	00.0	3.2	19.4	3.2	3.2	6.5	3.2	9.7	6.5	9.7	9.7	100.
6	19.4	00.0	3.2	3.2	00.0	6.5	3.2	3.2	9.7	9.7	00.0	00.0	12.9	12.9	12.9	3.2	00.0	100.
7	9.7	3.2	3.2	00.0	3.2	00.0	9.7	00.0	9.7	9.7	00.0	00.0	6.5	16.1	12.9	9.7	6.5	100.
8	9.7	00.0	00.0	6.5	3.2	00.0	9.7	6.5	12.9	00.0	3.2	00.0	00.0	19.4	16.1	9.7	3.2	100.
9	19.4	6.5	3.2	3.2	3.2	00.0	12.9	3.2	6.5	00.0	00.0	3.2	3.2	3.2	22.6	6.5	3.2	100.
10	12.9	6.5	00.0	3.2	3.2	3.2	9.7	6.5	6.5	3.2	00.0	3.2	00.0	3.2	19.4	19.4	00.0	100.
11	12.9	3.2	6.5	6.5	00.0	6.5	3.2	6.5	3.2	9.7	00.0	3.2	00.0	3.2	16.1	19.4	00.0	100.
12	12.9	3.2	00.0	3.2	6.5	6.5	3.2	6.5	3.2	6.5	3.2	00.0	00.0	9.7	16.1	19.4	00.0	100.
13	9.7	3.2	00.0	6.5	3.2	3.2	6.5	9.7	00.0	6.5	6.5	3.2	3.2	9.7	12.9	16.1	00.0	100.
14	6.5	3.2	00.0	6.5	6.5	6.5	3.2	9.7	00.0	6.5	00.0	3.2	9.7	9.7	6.5	22.6	00.0	100.
15	6.5	3.2	6.5	3.2	00.0	00.0	6.5	16.1	00.0	6.5	00.0	00.0	6.5	16.1	9.7	19.4	00.0	100.
16	16.1	00.0	6.5	00.0	00.0	3.2	3.2	9.7	6.5	3.2	3.2	3.2	00.0	22.6	00.0	22.6	00.0	100.
17	6.5	9.7	3.2	3.2	00.0	00.0	9.7	9.7	3.2	3.2	3.2	00.0	00.0	16.1	9.7	22.6	00.0	100.
18	6.5	3.2	6.5	00.0	00.0	3.2	6.5	9.7	3.2	3.2	00.0	3.2	00.0	12.9	16.1	22.6	3.2	100.
19	3.2	6.5	6.5	00.0	00.0	3.2	6.5	6.5	00.0	6.5	00.0	00.0	9.7	00.0	29.0	22.6	00.0	100.
20	6.5	00.0	6.5	3.2	00.0	00.0	9.7	00.0	3.2	6.5	00.0	00.0	6.5	6.5	25.8	22.6	3.2	100.
21	00.0	6.5	6.5	3.2	00.0	00.0	00.0	19.4	6.5	00.0	3.2	3.2	00.0	00.0	22.6	19.4	9.7	100.
22	6.5	6.5	6.5	00.0	00.0	3.2	00.0	6.5	12.9	00.0	6.5	3.2	3.2	12.9	16.1	9.7	6.5	100.
23	9.7	6.5	3.2	3.2	00.0	6.5	3.2	3.2	9.7	6.5	3.2	9.7	3.2	9.7	3.2	12.9	6.5	100.
24	6.5	3.2	3.2	3.2	9.7	00.0	9.7	3.2	9.7	6.5	6.5	3.2	3.2	9.7	9.7	9.7	3.2	100.
ALL	9.1	3.6	3.2	3.4	2.0	3.5	5.8	6.9	7.1	5.4	2.2	2.8	3.6	9.7	13.6	14.9	3.2	100.

NUMBER OF OBS = 744

B41

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

NOVEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	00.0	00.0	00.0	00.0	00.0	00.0	10.0	13.3	13.3	3.3	6.7	3.3	3.3	00.0	26.7	20.0	00.0	100.
2	3.3	00.0	00.0	00.0	3.3	00.0	3.3	20.0	10.0	3.3	10.0	3.3	00.0	13.3	20.0	10.0	00.0	100.
3	00.0	00.0	00.0	00.0	3.3	3.3	6.7	16.7	10.0	00.0	10.0	00.0	3.3	16.7	16.7	13.3	00.0	100.
4	00.0	00.0	00.0	00.0	00.0	3.3	3.3	20.0	10.0	3.3	6.7	3.3	6.7	6.7	23.3	13.3	00.0	100.
5	6.7	00.0	00.0	00.0	00.0	00.0	10.0	16.7	00.0	13.3	3.3	3.3	6.7	13.3	16.7	10.0	00.0	100.
6	6.7	00.0	00.0	00.0	00.0	6.7	3.3	16.7	00.0	16.7	6.7	00.0	3.3	10.0	20.0	6.7	3.3	100.
7	00.0	3.3	00.0	00.0	00.0	00.0	10.0	20.0	00.0	10.0	10.0	3.3	00.0	10.0	20.0	10.0	3.3	100.
8	00.0	00.0	3.3	00.0	00.0	3.3	6.7	20.0	10.0	3.3	3.3	6.7	00.0	10.0	20.0	10.0	3.3	100.
9	3.3	00.0	00.0	00.0	00.0	00.0	10.0	10.0	20.0	3.3	6.7	3.3	00.0	6.7	26.7	10.0	00.0	100.
10	00.0	00.0	00.0	3.3	00.0	00.0	6.7	10.0	16.7	6.7	10.0	3.3	00.0	6.7	16.7	20.0	00.0	100.
11	00.0	3.3	3.3	00.0	00.0	00.0	10.0	3.3	16.7	10.0	13.3	00.0	3.3	3.3	13.3	20.0	00.0	100.
12	00.0	00.0	6.7	00.0	00.0	3.3	3.3	3.3	13.3	13.3	10.0	3.3	6.7	3.3	16.7	16.7	00.0	100.
13	00.0	3.3	00.0	00.0	3.3	3.3	6.7	3.3	10.0	13.3	6.7	10.0	3.3	3.3	16.7	16.7	00.0	100.
14	3.3	00.0	00.0	00.0	6.7	00.0	6.7	3.3	16.7	13.3	00.0	6.7	3.3	6.7	16.7	16.7	00.0	100.
15	3.3	00.0	00.0	00.0	3.3	00.0	6.7	10.0	16.7	10.0	00.0	6.7	00.0	3.3	20.0	20.0	00.0	100.
16	3.3	00.0	00.0	00.0	00.0	3.3	3.3	16.7	10.0	10.0	6.7	3.3	3.3	00.0	16.7	23.3	00.0	100.
17	00.0	3.3	00.0	00.0	3.3	3.3	3.3	20.0	6.7	10.0	6.7	3.3	00.0	00.0	20.0	20.0	00.0	100.
18	00.0	00.0	00.0	3.3	00.0	10.0	6.7	10.0	16.7	6.7	00.0	3.3	00.0	13.3	6.7	23.3	00.0	100.
19	00.0	3.3	00.0	00.0	00.0	00.0	10.0	13.3	20.0	3.3	3.3	6.7	6.7	10.0	20.0	20.0	00.0	100.
20	00.0	00.0	00.0	3.3	00.0	3.3	10.0	6.7	20.0	10.0	00.0	00.0	3.3	13.3	13.3	16.7	00.0	100.
21	3.3	00.0	00.0	3.3	00.0	3.3	10.0	10.0	23.3	00.0	3.3	00.0	3.3	16.7	13.3	10.0	00.0	100.
22	3.3	00.0	00.0	6.7	00.0	00.0	10.0	13.3	13.3	6.7	3.3	00.0	3.3	6.7	20.0	13.3	00.0	100.
23	3.3	00.0	3.3	00.0	00.0	00.0	6.7	10.0	13.3	3.3	10.0	00.0	3.3	00.0	26.7	16.7	3.3	100.
24	00.0	00.0	3.3	00.0	00.0	3.3	3.3	16.7	10.0	00.0	6.7	3.3	6.7	00.0	30.0	13.3	3.3	100.
ALL	1.7	.7	.8	.8	1.0	2.1	6.9	12.6	12.4	7.2	6.0	3.1	2.9	7.1	18.6	15.4	.7	100.

NUMBER OF OBS = 720

B42

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

DECEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	12.9	00.0	00.0	00.0	6.5	6.5	6.5	25.8	12.9	00.0	3.2	3.2	00.0	3.2	9.7	9.7	00.0	100.
2	12.9	00.0	00.0	00.0	6.5	3.2	6.5	25.8	9.7	00.0	3.2	6.5	00.0	3.2	9.7	12.9	00.0	100.
3	12.9	6.5	00.0	3.2	6.5	00.0	9.7	16.1	12.9	00.0	3.2	9.7	00.0	6.5	00.0	12.9	00.0	100.
4	12.9	3.2	3.2	00.0	3.2	9.7	9.7	12.9	6.5	9.7	00.0	00.0	9.7	3.2	3.2	12.9	00.0	100.
5	19.4	00.0	3.2	00.0	6.5	6.5	9.7	16.1	9.7	00.0	3.2	00.0	9.7	00.0	12.9	3.2	00.0	100.
6	9.7	3.2	00.0	6.5	6.5	3.2	6.5	22.6	12.9	00.0	00.0	3.2	6.5	00.0	3.2	16.1	00.0	100.
7	6.5	6.5	3.2	6.5	3.2	3.2	12.9	22.6	00.0	3.2	3.2	00.0	3.2	3.2	9.7	12.9	00.0	100.
8	9.7	3.2	00.0	3.2	6.5	6.5	6.5	25.8	6.5	3.2	00.0	00.0	3.2	3.2	6.5	16.1	00.0	100.
9	16.1	6.5	3.2	00.0	6.5	3.2	12.9	16.1	12.9	00.0	3.2	00.0	3.2	3.2	3.2	9.7	00.0	100.
10	9.7	9.7	00.0	6.5	6.5	00.0	16.1	16.1	9.7	3.2	3.2	00.0	00.0	6.5	6.5	6.5	00.0	100.
11	6.5	12.9	00.0	6.5	00.0	3.2	12.9	6.5	19.4	3.2	6.5	00.0	00.0	00.0	19.4	3.2	00.0	100.
12	6.5	12.9	6.5	3.2	3.2	00.0	12.9	9.7	12.9	9.7	3.2	00.0	00.0	3.2	12.9	3.2	00.0	100.
13	3.2	12.9	6.5	3.2	3.2	3.2	6.5	22.6	9.7	3.2	6.5	00.0	00.0	3.2	12.9	3.2	00.0	100.
14	3.2	6.5	9.7	3.2	3.2	3.2	9.7	9.7	19.4	3.2	6.5	00.0	00.0	6.5	9.7	6.5	00.0	100.
15	3.2	3.2	12.9	3.2	6.5	00.0	3.2	12.9	19.4	3.2	6.5	00.0	3.2	9.7	6.5	6.5	00.0	100.
16	3.2	3.2	9.7	9.7	00.0	3.2	6.5	19.4	9.7	6.5	3.2	00.0	6.5	6.5	9.7	3.2	00.0	100.
17	6.5	00.0	6.5	9.7	3.2	00.0	9.7	16.1	12.9	6.5	3.2	3.2	3.2	6.5	6.5	6.5	00.0	100.
18	3.2	6.5	3.2	00.0	9.7	6.5	6.5	19.4	12.9	00.0	3.2	6.5	00.0	6.5	6.5	9.7	00.0	100.
19	3.2	00.0	6.5	3.2	9.7	6.5	12.9	12.9	9.7	3.2	3.2	3.2	00.0	6.5	9.7	9.7	00.0	100.
20	9.7	3.2	3.2	3.2	3.2	6.5	12.9	12.9	9.7	3.2	3.2	00.0	00.0	9.7	9.7	3.2	6.5	100.
21	16.1	00.0	00.0	6.5	00.0	9.7	6.5	19.4	16.1	00.0	3.2	00.0	00.0	6.5	9.7	6.5	00.0	100.
22	12.9	00.0	3.2	3.2	3.2	00.0	12.9	19.4	12.9	9.7	3.2	00.0	00.0	6.5	12.9	00.0	00.0	100.
23	9.7	00.0	00.0	00.0	6.5	3.2	9.7	25.8	3.2	6.5	6.5	3.2	6.5	00.0	16.1	3.2	00.0	100.
24	6.3	00.0	00.0	6.3	3.1	9.4	6.3	18.8	18.8	00.0	00.0	9.4	3.1	00.0	12.5	6.3	00.0	100.
ALL	9.0	4.2	3.4	3.6	4.7	4.0	9.4	17.7	11.7	3.2	3.4	2.0	2.4	4.3	9.1	7.7	.3	100.

NUMBER OF OBS = 744

B43

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014.

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCT-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	5.4	3.3	00.0	1.1	2.2	5.4	7.6	15.2	13.0	3.3	3.3	3.3	2.2	4.3	16.3	13.0	1.1	100.
2	7.6	00.0	00.0	1.1	4.3	2.2	5.4	17.4	10.9	4.3	5.4	5.4	00.0	7.6	16.3	8.7	3.3	100.
3	8.7	3.3	1.1	2.2	3.3	3.3	7.6	13.0	9.8	3.3	6.5	4.3	3.3	10.9	6.5	12.0	1.1	100.
4	7.6	1.1	2.2	1.1	2.2	6.5	5.4	13.0	9.8	6.5	2.2	3.3	7.6	4.3	10.9	14.1	2.2	100.
5	10.9	00.0	1.1	3.3	3.3	4.3	6.5	12.0	9.8	5.4	3.3	3.3	6.5	7.6	12.0	7.6	3.3	100.
6	12.0	1.1	1.1	3.3	2.2	5.4	4.3	14.1	7.6	8.7	2.2	1.1	7.6	7.6	12.0	8.7	1.1	100.
7	5.4	4.3	2.2	2.2	2.2	1.1	10.9	14.1	3.3	7.6	4.3	1.1	3.3	9.8	14.1	10.9	3.3	100.
8	6.5	1.1	1.1	3.3	3.3	3.3	7.6	17.4	9.8	2.2	2.2	2.2	1.1	10.9	14.1	12.0	2.2	100.
9	13.0	4.3	2.2	1.1	3.3	1.1	12.0	9.8	13.0	1.1	3.3	2.2	2.2	4.3	17.4	8.7	1.1	100.
10	7.6	5.4	00.0	4.3	3.3	1.1	10.9	10.9	10.9	4.3	4.3	2.2	00.0	5.4	14.1	15.2	00.0	100.
11	6.5	6.5	3.3	4.3	00.0	3.3	8.7	5.4	13.0	7.6	6.5	1.1	1.1	2.2	16.3	14.1	00.0	100.
12	6.5	5.4	4.3	2.2	3.3	3.3	6.5	6.5	9.8	9.8	5.4	1.1	2.2	5.4	15.2	13.0	00.0	100.
13	4.3	6.5	2.2	3.3	3.3	3.3	6.5	12.0	6.5	7.6	6.5	4.3	2.2	5.4	14.1	12.0	00.0	100.
14	4.3	3.3	3.3	3.3	5.4	3.3	6.5	7.6	12.0	7.6	2.2	3.3	4.3	7.6	10.9	15.2	00.0	100.
15	4.3	2.2	6.5	2.2	3.3	00.0	5.4	13.0	12.0	6.5	2.2	2.2	3.3	9.8	12.0	15.2	00.0	100.
16	7.6	1.1	5.4	3.3	00.0	3.3	4.3	15.2	8.7	6.5	4.3	2.2	3.3	9.8	8.7	16.3	00.0	100.
17	4.3	4.3	3.3	4.3	2.2	1.1	7.6	15.2	7.6	6.5	4.3	2.2	1.1	7.6	12.0	16.3	00.0	100.
18	3.3	3.3	3.3	1.1	3.3	6.5	6.5	13.0	10.9	3.3	1.1	4.3	00.0	10.9	9.8	18.5	1.1	100.
19	2.2	3.3	4.3	1.1	3.3	3.3	9.8	10.9	9.8	4.3	2.2	2.2	5.4	4.3	16.3	17.4	00.0	100.
20	5.4	1.1	3.3	3.3	1.1	3.3	10.9	6.5	10.9	6.5	1.1	00.0	3.3	9.8	16.3	14.1	3.3	100.
21	6.5	2.2	2.2	4.3	00.0	4.3	5.4	16.3	15.2	00.0	3.3	1.1	1.1	7.6	15.2	12.0	3.3	100.
22	7.6	2.2	3.3	3.3	1.1	1.1	7.6	13.0	13.0	5.4	4.3	1.1	2.2	8.7	16.3	7.6	2.2	100.
23	7.6	2.2	2.2	1.1	2.2	3.3	6.5	13.0	8.7	5.4	6.5	4.3	4.3	3.3	15.2	10.9	3.3	100.
24	4.3	1.1	2.2	3.2	4.3	4.3	6.5	12.9	12.9	2.2	4.3	5.4	4.3	3.2	17.2	9.7	2.2	100.
ALL	6.7	2.9	2.5	2.6	2.6	3.2	7.4	12.4	10.4	5.3	3.8	2.6	3.0	7.0	13.7	12.6	1.4	100.

NUMBER OF OBS = 2208

B44

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.2	2.2	1.6	1.1	2.7	4.9	8.2	13.6	16.3	3.3	2.7	3.3	2.7	5.4	9.2	10.3	3.3	100.
2	9.2	1.1	.5	1.6	5.4	2.2	7.6	13.6	14.7	5.4	3.8	2.7	3.3	6.0	10.9	8.2	3.8	100.
3	8.2	3.8	1.1	1.6	4.3	4.9	6.0	10.9	11.4	8.2	4.9	2.2	4.3	9.2	4.9	12.5	1.6	100.
4	7.6	1.1	2.2	2.2	2.2	6.5	4.3	15.2	10.3	8.2	2.7	2.7	4.9	4.9	10.3	10.3	4.3	100.
5	9.2	2.7	1.1	1.6	2.2	4.3	7.6	14.1	8.7	7.1	3.8	2.7	6.5	5.4	9.8	8.2	4.9	100.
6	10.9	2.2	2.2	2.2	1.6	6.0	5.4	14.7	10.9	6.5	4.3	1.1	6.0	9.2	8.2	6.5	2.2	100.
7	4.9	4.3	1.6	2.7	1.6	2.7	8.7	17.4	8.2	6.0	2.7	1.1	2.7	6.0	11.4	9.8	8.2	100.
8	7.6	2.2	.5	2.2	4.9	3.8	9.8	16.8	14.7	2.2	2.7	1.1	1.6	6.5	10.3	9.2	3.8	100.
9	12.5	4.3	2.2	2.2	3.3	4.3	13.0	13.0	14.7	2.2	1.6	3.8	2.2	2.2	12.0	6.0	.5	100.
10	8.7	4.3	1.1	3.8	3.8	4.9	11.4	12.5	14.1	5.4	2.2	3.3	2.2	3.8	9.2	9.2	00.0	100.
11	6.5	6.5	2.2	3.3	3.8	3.8	10.3	10.9	14.1	6.5	5.4	.5	1.6	2.7	10.3	11.4	00.0	100.
12	7.1	6.0	3.3	4.3	2.7	8.2	6.5	12.0	13.0	6.5	4.3	1.1	1.6	3.3	9.2	10.9	00.0	100.
13	5.4	5.4	3.8	3.8	4.3	6.0	7.1	14.7	13.6	4.9	3.8	4.3	1.1	3.3	9.2	9.2	00.0	100.
14	5.4	2.7	3.3	3.3	4.3	8.2	9.8	14.1	12.5	5.4	1.6	2.7	2.2	5.4	6.5	12.5	00.0	100.
15	4.9	3.8	5.4	1.6	4.9	5.4	7.1	14.1	13.6	6.5	2.2	1.6	2.7	6.0	7.1	13.0	00.0	100.
16	7.1	4.9	5.4	2.2	3.3	4.9	7.1	16.8	10.3	5.4	3.3	1.6	2.7	6.5	5.4	13.0	00.0	100.
17	6.5	4.9	3.8	4.3	3.8	4.3	12.5	15.2	8.7	3.8	3.3	1.6	2.2	4.3	7.6	13.0	00.0	100.
18	5.4	5.4	4.9	2.2	5.4	7.6	11.4	15.2	8.2	2.2	1.6	2.7	00.0	6.0	7.1	14.1	.5	100.
19	4.9	4.9	4.3	4.3	6.0	4.9	9.8	12.0	9.2	3.8	2.2	1.6	2.7	3.3	11.4	14.7	00.0	100.
20	8.2	2.2	3.8	2.7	3.3	4.9	9.2	10.3	10.3	4.9	1.1	1.1	1.6	6.0	15.2	12.0	3.3	100.
21	8.7	3.3	1.6	3.8	2.7	4.9	6.5	14.7	10.3	1.6	2.2	1.6	2.2	6.5	13.6	10.9	4.9	100.
22	7.6	2.7	2.7	2.7	2.7	4.9	8.2	10.3	12.5	3.8	2.7	1.6	3.3	6.5	13.0	9.8	4.9	100.
23	8.2	3.8	1.6	1.1	3.3	4.3	6.0	12.5	10.9	3.8	5.4	3.3	3.3	3.8	12.5	10.3	6.0	100.
24	7.6	3.3	2.7	2.7	4.3	3.3	6.0	13.6	13.6	4.9	3.3	3.8	4.3	3.3	13.0	6.5	3.8	100.
ALL	7.6	3.7	2.6	2.6	3.6	5.0	8.3	13.7	11.9	4.9	3.1	2.2	2.8	5.2	9.9	10.5	2.3	100.

NUMBER OF OBS = 4416

B45

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.9	2.7	2.7	1.6	2.5	4.4	6.6	13.4	15.3	5.8	2.5	3.6	2.5	4.4	9.0	11.2	1.9	100.
2	10.7	2.7	.8	1.9	3.8	3.0	7.1	11.8	15.9	6.8	2.7	3.6	3.6	4.7	9.6	9.0	2.2	100.
3	9.6	3.6	3.3	1.4	2.7	3.3	5.8	9.9	15.9	6.6	3.6	3.3	3.0	7.4	8.5	11.0	1.4	100.
4	9.6	1.9	2.5	2.5	1.9	4.7	5.5	13.7	13.7	6.8	2.7	3.0	4.4	5.2	8.8	10.4	2.7	100.
5	11.2	2.7	1.6	1.9	1.9	3.6	6.0	13.4	12.6	6.3	3.0	2.5	4.7	6.8	9.0	9.9	2.7	100.
6	11.8	3.3	1.4	1.6	2.2	3.6	6.8	13.7	13.2	6.0	3.6	1.4	4.7	7.1	10.4	8.2	1.1	100.
7	7.1	4.7	1.9	2.5	1.6	2.5	7.7	14.2	11.2	5.5	3.0	1.6	3.6	5.2	10.7	11.5	5.5	100.
8	9.0	5.2	1.9	2.2	3.0	3.6	7.4	15.3	12.3	4.7	3.0	1.1	2.2	6.3	11.2	8.2	3.3	100.
9	11.8	4.7	2.2	3.0	2.5	4.1	9.9	15.1	13.2	3.3	2.2	3.6	2.2	4.4	11.0	6.6	.5	100.
10	8.8	4.7	3.3	2.7	3.3	4.9	8.8	12.9	14.5	5.2	2.7	3.0	1.6	4.4	9.6	9.6	00.0	100.
11	9.9	5.8	3.0	3.3	3.3	3.6	7.7	11.5	14.0	7.1	4.4	1.6	1.4	3.3	8.8	11.5	00.0	100.
12	8.5	5.8	3.0	4.4	3.6	6.0	4.9	11.0	14.0	6.6	3.8	2.7	1.9	4.1	9.3	10.4	00.0	100.
13	7.1	6.0	3.8	2.7	3.6	5.5	6.6	12.3	14.2	4.9	4.7	3.3	2.7	3.6	8.8	10.1	00.0	100.
14	7.7	3.6	3.6	2.2	3.8	6.3	7.9	12.1	13.7	6.3	4.4	2.2	2.5	4.9	6.8	12.1	00.0	100.
15	6.8	4.4	4.9	2.2	3.3	4.1	7.1	11.5	13.4	7.7	4.7	2.5	2.7	4.7	7.4	12.3	.3	100.
16	7.4	4.7	4.7	2.2	3.0	4.1	6.0	13.4	12.1	6.6	3.8	3.6	3.0	6.0	6.8	12.6	00.0	100.
17	7.9	4.7	3.8	3.0	3.0	4.4	8.8	13.4	10.1	5.5	3.8	3.6	2.2	5.8	6.8	13.2	00.0	100.
18	6.8	5.8	4.4	1.6	3.6	6.6	8.8	13.7	9.6	4.4	3.0	2.7	2.2	5.5	6.0	15.1	.3	100.
19	7.4	4.7	4.4	3.3	4.7	3.3	8.2	12.6	11.2	4.7	2.5	2.2	3.0	3.8	9.6	14.5	00.0	100.
20	7.9	3.0	3.0	3.8	2.5	4.4	7.4	12.1	11.2	4.4	1.6	3.3	3.0	4.9	11.5	14.2	1.6	100.
21	8.5	3.8	2.7	4.4	2.7	4.4	6.8	12.3	11.5	3.0	3.3	1.9	2.7	4.7	11.8	12.9	2.5	100.
22	9.9	3.0	3.0	3.0	2.7	4.7	6.8	11.8	12.1	3.8	2.5	1.9	2.5	6.3	12.3	10.7	3.0	100.
23	10.4	4.4	1.9	1.9	3.0	4.4	6.0	12.1	11.5	4.4	4.4	2.2	4.4	4.4	8.8	12.1	3.8	100.
24	10.1	3.0	2.7	3.3	3.3	3.3	6.0	11.8	14.8	5.2	4.7	3.0	3.0	4.4	10.1	9.0	2.2	100.
ALL	9.0	4.1	2.9	2.6	3.0	4.3	7.1	12.7	13.0	5.5	3.4	2.6	2.9	5.1	9.3	11.1	1.5	100.

NUMBER OF OBS = 8760

B46

Wind Direction Frequencies

100-Meter Level

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JANUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	00.0	6.5	3.2	3.2	00.0	00.0	6.5	3.2	6.5	9.7	9.7	9.7	3.2	3.2	16.1	19.4	00.0	100.
2	6.5	6.5	00.0	00.0	3.2	00.0	3.2	6.5	6.5	6.5	12.9	3.2	6.5	6.5	12.9	19.4	00.0	100.
3	6.5	3.2	3.2	00.0	3.2	00.0	00.0	6.5	6.5	9.7	9.7	6.5	3.2	6.5	16.1	19.4	00.0	100.
4	6.5	3.2	3.2	00.0	3.2	00.0	00.0	6.5	9.7	9.7	9.7	3.2	9.7	9.7	12.9	12.9	00.0	100.
5	9.7	3.2	3.2	00.0	3.2	00.0	00.0	6.5	9.7	3.2	9.7	6.5	6.5	9.7	19.4	9.7	00.0	100.
6	6.5	6.5	00.0	00.0	00.0	3.2	3.2	3.2	9.7	6.5	3.2	6.5	3.2	16.1	16.1	16.1	00.0	100.
7	00.0	9.7	00.0	00.0	00.0	3.2	3.2	6.5	6.5	9.7	6.5	00.0	3.2	6.5	29.0	16.1	00.0	100.
8	3.2	9.7	00.0	00.0	00.0	3.2	3.2	6.5	3.2	6.5	9.7	3.2	3.2	12.9	22.6	12.9	00.0	100.
9	00.0	6.5	3.2	00.0	00.0	3.2	3.2	3.2	6.5	6.5	6.5	3.2	00.0	12.9	32.3	12.9	00.0	100.
10	3.2	6.5	3.2	00.0	00.0	00.0	6.5	3.2	3.2	12.9	3.2	3.2	00.0	6.5	32.3	16.1	00.0	100.
11	6.5	6.5	3.2	00.0	00.0	00.0	6.5	00.0	6.5	6.5	6.5	6.5	00.0	12.9	22.6	16.1	00.0	100.
12	3.2	6.5	00.0	3.2	00.0	00.0	3.2	3.2	6.5	9.7	3.2	12.9	00.0	6.5	29.0	12.9	00.0	100.
13	00.0	6.5	3.2	00.0	00.0	00.0	3.2	3.2	6.5	6.5	6.5	6.5	6.5	9.7	25.8	16.1	00.0	100.
14	6.5	3.2	3.2	00.0	00.0	00.0	3.2	3.2	6.5	6.5	3.2	9.7	00.0	22.6	19.4	12.9	00.0	100.
15	9.7	3.2	3.2	00.0	00.0	00.0	00.0	3.2	6.5	9.7	6.5	6.5	6.5	9.7	22.6	12.9	00.0	100.
16	6.5	3.2	3.2	3.2	00.0	00.0	00.0	3.2	9.7	6.5	3.2	6.5	6.5	19.4	16.1	12.9	00.0	100.
17	9.7	3.2	3.2	3.2	00.0	00.0	3.2	3.2	9.7	00.0	9.7	3.2	3.2	16.1	16.1	16.1	00.0	100.
18	6.5	3.2	9.7	00.0	00.0	00.0	3.2	3.2	9.7	00.0	9.7	3.2	6.5	9.7	16.1	19.4	00.0	100.
19	6.5	00.0	9.7	3.2	00.0	00.0	00.0	3.2	12.9	6.5	6.5	6.5	3.2	6.5	9.7	25.8	00.0	100.
20	3.2	00.0	3.2	9.7	00.0	00.0	00.0	3.2	16.1	6.5	3.2	6.5	6.5	00.0	16.1	25.8	00.0	100.
21	12.9	00.0	6.5	6.5	00.0	00.0	00.0	3.2	19.4	3.2	3.2	6.5	6.5	3.2	6.5	22.6	00.0	100.
22	6.5	3.2	3.2	9.7	3.2	00.0	00.0	3.2	19.4	3.2	3.2	6.5	3.2	3.2	9.7	22.6	00.0	100.
23	3.2	6.5	00.0	6.5	3.2	3.2	00.0	6.5	16.1	6.5	6.5	3.2	3.2	3.2	9.7	22.6	00.0	100.
24	3.2	3.2	00.0	9.7	3.2	00.0	6.5	00.0	9.7	12.9	12.9	00.0	3.2	6.5	9.7	19.4	00.0	100.
ALL	5.2	4.6	3.0	2.4	.9	.7	2.4	3.9	9.3	6.9	6.9	5.4	3.9	9.1	18.3	17.2	00.0	100.

NUMBER OF OBS = 744

B48

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

FEBRUARY

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	10.7	10.7	3.6	00.0	14.3	10.7	3.6	00.0	7.1	14.3	00.0	3.6	00.0	7.1	7.1	7.1	00.0	100.
2	17.9	3.6	3.6	3.6	7.1	10.7	7.1	00.0	10.7	10.7	00.0	3.6	00.0	3.6	10.7	7.1	00.0	100.
3	7.1	14.3	3.6	3.6	7.1	7.1	00.0	7.1	17.9	00.0	3.6	3.6	00.0	3.6	10.7	10.7	00.0	100.
4	17.9	7.1	00.0	3.6	7.1	7.1	3.6	7.1	10.7	7.1	3.6	3.6	00.0	3.6	10.7	7.1	00.0	100.
5	17.9	10.7	00.0	3.6	3.6	00.0	7.1	7.1	10.7	7.1	3.6	00.0	7.1	00.0	10.7	10.7	00.0	100.
6	21.4	10.7	3.6	7.1	00.0	00.0	3.6	3.6	14.3	10.7	3.6	00.0	3.6	3.6	10.7	00.0	100.	
7	14.3	17.9	3.6	3.6	00.0	00.0	3.6	3.6	10.7	14.3	00.0	00.0	3.6	3.6	7.1	14.3	00.0	100.
8	25.0	10.7	3.6	3.6	00.0	00.0	3.6	7.1	7.1	7.1	7.1	3.6	3.6	3.6	7.1	7.1	00.0	100.
9	21.4	10.7	00.0	3.6	7.1	00.0	3.6	7.1	7.1	7.1	7.1	3.6	3.6	7.1	3.6	7.1	00.0	100.
10	14.3	14.3	3.6	7.1	00.0	3.6	3.6	7.1	7.1	7.1	3.6	14.3	00.0	7.1	00.0	7.1	00.0	100.
11	17.9	7.1	3.6	3.6	7.1	00.0	00.0	10.7	3.6	7.1	10.7	10.7	00.0	3.6	7.1	7.1	00.0	100.
12	17.9	7.1	3.6	3.6	3.6	3.6	00.0	7.1	10.7	10.7	3.6	7.1	00.0	7.1	00.0	14.3	00.0	100.
13	7.1	7.1	7.1	00.0	3.6	7.1	00.0	7.1	14.3	3.6	3.6	7.1	7.1	3.6	3.6	17.9	00.0	100.
14	3.6	7.1	3.6	3.6	00.0	3.6	3.6	7.1	14.3	3.6	3.6	14.3	3.6	00.0	7.1	21.4	00.0	100.
15	3.6	7.1	3.6	3.6	00.0	3.6	7.1	3.6	10.7	3.6	10.7	10.7	3.6	00.0	7.1	21.4	00.0	100.
16	3.6	10.7	3.6	00.0	3.6	3.6	7.1	7.1	7.1	3.6	7.1	7.1	10.7	7.1	00.0	17.9	00.0	100.
17	3.6	14.3	00.0	00.0	3.6	3.6	10.7	7.1	3.6	00.0	7.1	14.3	7.1	7.1	3.6	14.3	00.0	100.
18	7.1	14.3	00.0	00.0	00.0	7.1	10.7	7.1	00.0	3.6	14.3	3.6	7.1	7.1	3.6	14.3	00.0	100.
19	3.6	7.1	7.1	3.6	3.6	7.1	7.1	7.1	00.0	3.6	7.1	3.6	7.1	10.7	7.1	14.3	00.0	100.
20	7.1	3.6	7.1	3.6	00.0	3.6	10.7	7.1	00.0	3.6	00.0	21.4	00.0	7.1	7.1	17.9	00.0	100.
21	10.7	7.1	10.7	00.0	00.0	7.1	7.1	3.6	3.6	3.6	3.6	10.7	7.1	3.6	7.1	14.3	00.0	100.
22	10.7	00.0	10.7	3.6	3.6	3.6	7.1	00.0	10.7	3.6	7.1	7.1	00.0	00.0	10.7	21.4	00.0	100.
23	14.3	7.1	10.7	3.6	3.6	7.1	3.6	00.0	10.7	3.6	3.6	7.1	3.6	3.6	3.6	14.3	00.0	100.
24	14.3	7.1	7.1	10.7	3.6	10.7	00.0	00.0	7.1	7.1	3.6	3.6	3.6	7.1	3.6	10.7	00.0	100.
ALL	12.2	9.1	4.3	3.3	3.4	4.6	4.8	5.2	8.3	6.1	4.9	6.8	3.4	4.6	6.0	12.9	00.0	100.

NUMBER OF OBS = 672

B49

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MARCH

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	19.4	3.2	00.0	00.0	3.2	9.7	9.7	9.7	19.4	3.2	3.2	3.2	00.0	00.0	6.5	9.7	00.0	100.
2	19.4	3.2	00.0	00.0	00.0	9.7	6.5	16.1	16.1	6.5	6.5	00.0	00.0	3.2	3.2	9.7	00.0	100.
3	12.9	6.5	00.0	00.0	3.2	6.5	3.2	12.9	22.6	6.5	3.2	3.2	00.0	00.0	3.2	16.1	00.0	100.
4	12.9	6.5	00.0	00.0	00.0	3.2	9.7	12.9	16.1	6.5	6.5	6.5	00.0	00.0	3.2	16.1	00.0	100.
5	12.9	6.5	00.0	00.0	00.0	3.2	6.5	6.5	22.6	6.5	3.2	3.2	6.5	00.0	3.2	19.4	00.0	100.
6	12.9	9.7	00.0	00.0	00.0	00.0	12.9	6.5	19.4	6.5	6.5	00.0	3.2	3.2	9.7	9.7	00.0	100.
7	12.9	9.7	00.0	00.0	00.0	3.2	9.7	9.7	19.4	6.5	3.2	00.0	00.0	3.2	12.9	9.7	00.0	100.
8	9.7	16.1	00.0	00.0	00.0	00.0	12.9	6.5	22.6	3.2	00.0	3.2	3.2	3.2	12.9	6.5	00.0	100.
9	19.4	6.5	3.2	00.0	00.0	00.0	12.9	12.9	12.9	6.5	00.0	6.5	00.0	00.0	12.9	6.5	00.0	100.
10	19.4	3.2	3.2	3.2	3.2	3.2	00.0	12.9	16.1	9.7	00.0	6.5	00.0	00.0	16.1	3.2	00.0	100.
11	19.4	3.2	00.0	6.5	00.0	00.0	6.5	6.5	19.4	12.9	00.0	3.2	3.2	00.0	3.2	16.1	00.0	100.
12	12.9	9.7	00.0	3.2	00.0	00.0	6.5	6.5	22.6	6.5	3.2	3.2	00.0	3.2	9.7	12.9	00.0	100.
13	12.9	9.7	3.2	00.0	3.2	00.0	00.0	12.9	22.6	6.5	6.5	00.0	3.2	3.2	6.5	9.7	00.0	100.
14	12.9	6.5	3.2	3.2	3.2	00.0	00.0	6.5	16.1	12.9	16.1	00.0	3.2	3.2	6.5	6.5	00.0	100.
15	16.1	9.7	00.0	00.0	3.2	00.0	3.2	6.5	16.1	9.7	12.9	3.2	3.2	6.5	9.7	00.0	00.0	100.
16	12.9	12.9	3.2	00.0	00.0	00.0	6.5	6.5	19.4	9.7	6.5	00.0	00.0	9.7	9.7	3.2	00.0	100.
17	3.2	19.4	6.5	00.0	00.0	3.2	3.2	12.9	12.9	3.2	6.5	3.2	00.0	9.7	12.9	3.2	00.0	100.
18	9.7	16.1	3.2	3.2	00.0	00.0	6.5	12.9	12.9	3.2	3.2	00.0	3.2	16.1	3.2	6.5	00.0	100.
19	9.7	16.1	6.5	00.0	00.0	00.0	9.7	9.7	9.7	3.2	3.2	00.0	6.5	9.7	3.2	12.9	00.0	100.
20	9.7	22.6	00.0	3.2	00.0	00.0	6.5	16.1	6.5	3.2	3.2	00.0	3.2	9.7	6.5	9.7	00.0	100.
21	12.9	12.9	6.5	3.2	00.0	00.0	9.7	12.9	9.7	3.2	3.2	00.0	00.0	6.5	9.7	9.7	00.0	100.
22	19.4	6.5	00.0	9.7	3.2	9.7	3.2	12.9	6.5	6.5	3.2	00.0	3.2	3.2	3.2	9.7	00.0	100.
23	12.9	9.7	3.2	3.2	9.7	3.2	9.7	6.5	12.9	9.7	3.2	00.0	3.2	00.0	3.2	9.7	00.0	100.
24	12.9	6.5	00.0	3.2	6.5	6.5	9.7	3.2	22.6	6.5	3.2	00.0	00.0	3.2	3.2	12.9	00.0	100.
ALL	13.7	9.7	1.7	1.7	1.6	2.6	6.9	9.9	16.5	6.6	4.4	1.9	1.9	4.0	7.3	9.5	00.0	100.

NUMBER OF OBS = 744

B50

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-MAR

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.0	6.7	2.2	1.1	5.6	6.7	6.7	4.4	11.1	8.9	4.4	5.6	1.1	3.3	10.0	12.2	00.0	100.
2	14.4	4.4	1.1	1.1	3.3	6.7	5.6	7.8	11.1	7.8	6.7	2.2	2.2	4.4	8.9	12.2	00.0	100.
3	8.9	7.8	2.2	1.1	4.4	4.4	1.1	8.9	15.6	5.6	5.6	4.4	1.1	3.3	10.0	15.6	00.0	100.
4	12.2	5.6	1.1	1.1	3.3	3.3	4.4	8.9	12.2	7.8	6.7	4.4	3.3	4.4	8.9	12.2	00.0	100.
5	13.3	6.7	1.1	1.1	2.2	1.1	4.4	6.7	14.4	5.6	5.6	3.3	6.7	3.3	11.1	13.3	00.0	100.
6	13.3	8.9	1.1	2.2	00.0	1.1	6.7	4.4	14.4	7.8	4.4	2.2	3.3	7.8	10.0	12.2	00.0	100.
7	8.9	12.2	1.1	1.1	00.0	2.2	5.6	6.7	12.2	10.0	3.3	00.0	2.2	4.4	16.7	13.3	00.0	100.
8	12.2	12.2	1.1	1.1	00.0	1.1	6.7	6.7	11.1	5.6	5.6	3.3	3.3	6.7	14.4	8.9	00.0	100.
9	13.3	7.8	2.2	1.1	2.2	1.1	6.7	7.8	8.9	6.7	4.4	4.4	1.1	6.7	16.7	8.9	00.0	100.
10	12.2	7.8	3.3	3.3	1.1	2.2	3.3	7.8	8.9	10.0	2.2	7.8	00.0	4.4	16.7	8.9	00.0	100.
11	14.4	5.6	2.2	3.3	2.2	00.0	4.4	5.6	10.0	8.9	5.6	6.7	1.1	5.6	11.1	13.3	00.0	100.
12	11.1	7.8	1.1	3.3	1.1	1.1	3.3	5.6	13.3	8.9	3.3	7.8	00.0	5.6	13.3	13.3	00.0	100.
13	6.7	7.8	4.4	00.0	2.2	2.2	1.1	7.8	14.4	5.6	5.6	4.4	5.6	5.6	12.2	14.4	00.0	100.
14	7.8	5.6	3.3	2.2	1.1	1.1	2.2	5.6	12.2	7.8	7.8	7.8	2.2	8.9	11.1	13.3	00.0	100.
15	10.0	6.7	2.2	1.1	1.1	1.1	3.3	4.4	11.1	7.8	10.0	6.7	4.4	5.6	13.3	11.1	00.0	100.
16	7.8	8.9	3.3	1.1	1.1	1.1	4.4	5.6	12.2	6.7	5.6	4.4	5.6	12.2	8.9	11.1	00.0	100.
17	5.6	12.2	3.3	1.1	1.1	2.2	5.6	7.8	8.9	1.1	7.8	6.7	3.3	11.1	11.1	11.1	00.0	100.
18	7.8	11.1	4.4	1.1	00.0	2.2	6.7	7.8	7.8	2.2	8.9	2.2	5.6	11.1	7.8	13.3	00.0	100.
19	6.7	7.8	7.8	2.2	1.1	2.2	5.6	6.7	7.8	4.4	5.6	3.3	5.6	8.9	6.7	17.8	00.0	100.
20	6.7	8.9	3.3	5.6	00.0	1.1	5.6	8.9	7.8	4.4	2.2	8.9	3.3	5.6	10.0	17.8	00.0	100.
21	12.2	6.7	7.8	3.3	00.0	2.2	5.6	6.7	11.1	3.3	3.3	5.6	4.4	4.4	7.8	15.6	00.0	100.
22	12.2	3.3	4.4	7.8	3.3	4.4	3.3	5.6	12.2	4.4	4.4	4.4	2.2	2.2	7.8	17.8	00.0	100.
23	10.0	7.8	4.4	4.4	5.6	4.4	4.4	4.4	13.3	6.7	4.4	3.3	3.3	2.2	5.6	15.6	00.0	100.
24	10.0	5.6	2.2	7.8	4.4	5.6	5.6	1.1	13.3	8.9	6.7	1.1	2.2	5.6	5.6	14.4	00.0	100.
ALL	10.3	7.7	3.0	2.5	1.9	2.5	4.7	6.4	11.5	6.5	5.4	4.6	3.1	6.0	10.6	13.2	00.0	100.

NUMBER OF OBS = 2160

BS1

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	3.3	3.3	3.3	3.3	10.0	3.3	16.7	13.3	10.0	3.3	00.0	00.0	3.3	6.7	13.3	00.0	100.
2	6.7	3.3	6.7	00.0	00.0	13.3	3.3	16.7	20.0	6.7	00.0	00.0	00.0	3.3	10.0	6.7	3.3	100.
3	3.3	6.7	3.3	3.3	00.0	3.3	13.3	10.0	20.0	10.0	3.3	00.0	00.0	6.7	10.0	6.7	00.0	100.
4	3.3	00.0	6.7	3.3	00.0	3.3	10.0	6.7	20.0	10.0	6.7	3.3	00.0	6.7	6.7	13.3	00.0	100.
5	00.0	6.7	3.3	3.3	00.0	00.0	13.3	6.7	16.7	6.7	3.3	10.0	00.0	6.7	10.0	13.3	00.0	100.
6	6.7	6.7	3.3	00.0	3.3	00.0	10.0	6.7	16.7	6.7	3.3	6.7	00.0	6.7	10.0	13.3	00.0	100.
7	13.3	3.3	3.3	3.3	00.0	00.0	6.7	10.0	16.7	6.7	10.0	00.0	3.3	6.7	6.7	10.0	00.0	100.
8	13.3	6.7	3.3	3.3	00.0	3.3	6.7	6.7	20.0	3.3	3.3	3.3	3.3	6.7	6.7	10.0	00.0	100.
9	10.0	3.3	6.7	3.3	00.0	3.3	6.7	6.7	20.0	3.3	3.3	3.3	3.3	00.0	13.3	13.3	00.0	100.
10	6.7	3.3	3.3	3.3	00.0	6.7	00.0	10.0	16.7	10.0	00.0	6.7	00.0	6.7	10.0	16.7	00.0	100.
11	3.3	6.7	3.3	3.3	00.0	00.0	3.3	10.0	16.7	10.0	6.7	3.3	00.0	00.0	13.3	20.0	00.0	100.
12	3.3	6.7	00.0	6.7	00.0	00.0	3.3	6.7	16.7	6.7	10.0	3.3	00.0	6.7	10.0	20.0	00.0	100.
13	00.0	10.0	3.3	3.3	00.0	00.0	6.7	6.7	20.0	6.7	6.7	00.0	00.0	3.3	16.7	16.7	00.0	100.
14	3.3	10.0	6.7	00.0	6.7	00.0	3.3	13.3	13.3	13.3	3.3	00.0	00.0	3.3	13.3	10.0	00.0	100.
15	13.3	10.0	00.0	3.3	00.0	3.3	3.3	10.0	16.7	13.3	3.3	00.0	00.0	00.0	6.7	16.7	00.0	100.
16	10.0	3.3	3.3	6.7	00.0	3.3	3.3	10.0	16.7	16.7	00.0	00.0	00.0	00.0	6.7	20.0	00.0	100.
17	10.0	3.3	00.0	3.3	3.3	3.3	3.3	6.7	16.7	20.0	00.0	00.0	00.0	00.0	3.3	26.7	00.0	100.
18	3.3	10.0	00.0	3.3	00.0	3.3	6.7	13.3	16.7	6.7	6.7	00.0	00.0	00.0	10.0	20.0	00.0	100.
19	3.3	6.7	3.3	00.0	00.0	00.0	10.0	23.3	10.0	10.0	00.0	00.0	00.0	00.0	16.7	16.7	00.0	100.
20	00.0	6.7	3.3	00.0	00.0	6.7	6.7	26.7	6.7	00.0	6.7	3.3	00.0	00.0	10.0	23.3	00.0	100.
21	00.0	6.7	3.3	3.3	00.0	10.0	3.3	26.7	10.0	3.3	00.0	00.0	00.0	00.0	10.0	23.3	00.0	100.
22	6.7	00.0	6.7	00.0	3.3	10.0	13.3	23.3	00.0	10.0	00.0	00.0	00.0	00.0	13.3	13.3	00.0	100.
23	00.0	00.0	13.3	00.0	3.3	6.7	13.3	16.7	6.7	6.7	3.3	00.0	00.0	3.3	6.7	20.0	00.0	100.
24	6.7	00.0	3.3	3.3	3.3	13.3	6.7	16.7	6.7	10.0	3.3	00.0	00.0	3.3	10.0	13.3	00.0	100.
ALL	5.6	5.1	3.9	2.6	1.1	4.3	6.7	12.8	14.7	8.6	3.6	1.8	.4	3.1	9.9	15.7	.1	100.

NUMBER OF OBS = 720

BS2

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	00.0	9.7	12.9	00.0	16.1	3.2	12.9	9.7	3.2	9.7	00.0	00.0	3.2	9.7	6.5	3.2	00.0	100.
2	6.5	3.2	6.5	9.7	6.5	19.4	9.7	3.2	6.5	6.5	00.0	00.0	6.5	3.2	9.7	3.2	00.0	100.
3	9.7	3.2	16.1	3.2	3.2	9.7	16.1	3.2	9.7	6.5	00.0	00.0	6.5	3.2	6.5	3.2	00.0	100.
4	6.5	9.7	3.2	6.5	6.5	00.0	22.6	3.2	12.9	6.5	00.0	00.0	3.2	9.7	6.5	3.2	00.0	100.
5	3.2	6.5	3.2	9.7	3.2	6.5	12.9	6.5	12.9	00.0	3.2	6.5	3.2	9.7	6.5	6.5	00.0	100.
6	3.2	6.5	3.2	6.5	3.2	6.5	9.7	12.9	12.9	00.0	6.5	00.0	3.2	9.7	12.9	3.2	00.0	100.
7	00.0	3.2	9.7	3.2	9.7	00.0	16.1	6.5	16.1	00.0	00.0	00.0	6.5	9.7	16.1	3.2	00.0	100.
8	00.0	6.5	3.2	6.5	6.5	3.2	6.5	25.8	6.5	00.0	00.0	3.2	3.2	9.7	12.9	6.5	00.0	100.
9	6.5	3.2	3.2	3.2	9.7	6.5	3.2	19.4	9.7	3.2	00.0	00.0	3.2	12.9	6.5	9.7	00.0	100.
10	6.5	3.2	12.9	00.0	6.5	9.7	3.2	9.7	22.6	00.0	00.0	00.0	3.2	6.5	9.7	6.5	00.0	100.
11	3.2	9.7	6.5	00.0	9.7	12.9	3.2	9.7	19.4	6.5	00.0	00.0	3.2	3.2	6.5	6.5	00.0	100.
12	3.2	6.5	9.7	6.5	3.2	16.1	00.0	12.9	12.9	3.2	00.0	00.0	6.5	9.7	3.2	6.5	00.0	100.
13	3.2	9.7	6.5	3.2	6.5	3.2	12.9	9.7	12.9	3.2	3.2	00.0	6.5	6.5	9.7	3.2	00.0	100.
14	9.7	3.2	6.5	6.5	3.2	9.7	9.7	9.7	16.1	3.2	3.2	3.2	3.2	3.2	3.2	6.5	00.0	100.
15	6.5	6.5	9.7	3.2	3.2	6.5	9.7	9.7	9.7	9.7	3.2	00.0	9.7	3.2	6.5	3.2	00.0	100.
16	00.0	9.7	3.2	3.2	6.5	9.7	9.7	9.7	12.9	6.5	3.2	6.5	3.2	3.2	9.7	3.2	00.0	100.
17	3.2	3.2	6.5	00.0	6.5	16.1	3.2	12.9	16.1	00.0	6.5	6.5	6.5	00.0	6.5	6.5	00.0	100.
18	00.0	6.5	3.2	6.5	9.7	6.5	3.2	16.1	9.7	6.5	6.5	6.5	6.5	00.0	6.5	6.5	00.0	100.
19	00.0	3.2	6.5	6.5	6.5	6.5	6.5	12.9	12.9	3.2	00.0	12.9	6.5	00.0	9.7	6.5	00.0	100.
20	00.0	00.0	6.5	9.7	9.7	6.5	3.2	9.7	16.1	3.2	6.5	3.2	6.5	00.0	6.5	12.9	00.0	100.
21	3.2	00.0	6.5	12.9	6.5	9.7	9.7	6.5	9.7	00.0	6.5	6.5	3.2	6.5	6.5	6.5	00.0	100.
22	6.5	00.0	6.5	12.9	00.0	9.7	12.9	9.7	6.5	3.2	6.5	3.2	3.2	9.7	3.2	6.5	00.0	100.
23	6.5	3.2	6.5	9.7	3.2	12.9	9.7	6.5	12.9	3.2	3.2	00.0	6.5	9.7	3.2	3.2	00.0	100.
24	00.0	6.5	6.5	9.7	12.9	9.7	6.5	9.7	6.5	6.5	3.2	00.0	6.5	9.7	6.5	00.0	00.0	100.
ALL	3.6	5.1	6.9	5.8	6.6	8.3	8.9	10.2	12.0	3.8	2.6	2.4	5.0	6.2	7.5	5.2	00.0	100.

NUMBER OF OBS = 744

BS3

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	6.7	3.3	00.0	6.7	6.7	10.0	30.0	16.7	3.3	3.3	00.0	00.0	00.0	3.3	3.3	00.0	100.
2	3.3	6.7	00.0	6.7	3.3	3.3	6.7	16.7	26.7	6.7	6.7	3.3	00.0	00.0	3.3	6.7	00.0	100.
3	6.7	6.7	00.0	00.0	3.3	6.7	6.7	10.0	30.0	3.3	10.0	3.3	00.0	6.7	3.3	3.3	00.0	100.
4	10.0	3.3	3.3	00.0	6.7	3.3	3.3	10.0	33.3	3.3	3.3	6.7	00.0	6.7	3.3	3.3	00.0	100.
5	6.7	3.3	3.3	3.3	3.3	10.0	00.0	6.7	26.7	13.3	00.0	00.0	10.0	3.3	00.0	10.0	00.0	100.
6	10.0	3.3	00.0	10.0	3.3	13.3	3.3	6.7	20.0	6.7	3.3	00.0	6.7	10.0	3.3	00.0	00.0	100.
7	6.7	6.7	3.3	6.7	10.0	3.3	6.7	10.0	16.7	3.3	6.7	00.0	10.0	3.3	3.3	3.3	00.0	100.
8	3.3	10.0	00.0	3.3	6.7	10.0	10.0	13.3	16.7	00.0	6.7	6.7	00.0	3.3	3.3	6.7	00.0	100.
9	3.3	6.7	3.3	3.3	3.3	10.0	3.3	23.3	16.7	3.3	3.3	10.0	00.0	3.3	3.3	3.3	00.0	100.
10	6.7	6.7	00.0	3.3	3.3	6.7	6.7	16.7	20.0	6.7	00.0	10.0	00.0	3.3	3.3	6.7	00.0	100.
11	13.3	3.3	00.0	13.3	00.0	3.3	6.7	13.3	20.0	6.7	3.3	6.7	00.0	3.3	3.3	3.3	00.0	100.
12	6.7	00.0	3.3	13.3	6.7	00.0	13.3	16.7	13.3	6.7	00.0	3.3	3.3	00.0	3.3	10.0	00.0	100.
13	6.7	00.0	3.3	3.3	6.7	13.3	16.7	13.3	13.3	6.7	3.3	3.3	3.3	00.0	00.0	6.7	00.0	100.
14	6.7	00.0	00.0	6.7	00.0	10.0	20.0	20.0	13.3	3.3	6.7	00.0	6.7	00.0	00.0	6.7	00.0	100.
15	3.3	3.3	6.7	3.3	3.3	3.3	20.0	10.0	20.0	3.3	6.7	00.0	6.7	00.0	00.0	10.0	00.0	100.
16	3.3	00.0	6.7	00.0	6.7	00.0	6.7	26.7	13.3	00.0	3.3	13.3	6.7	00.0	6.7	6.7	00.0	100.
17	3.3	00.0	6.7	00.0	3.3	3.3	6.7	23.3	16.7	3.3	3.3	10.0	3.3	3.3	3.3	10.0	00.0	100.
18	6.7	00.0	6.7	00.0	6.7	00.0	10.0	10.0	23.3	6.7	10.0	00.0	3.3	00.0	3.3	13.3	00.0	100.
19	10.0	3.3	6.7	00.0	6.7	00.0	6.7	10.0	30.0	6.7	3.3	3.3	3.3	00.0	00.0	10.0	00.0	100.
20	6.7	6.7	6.7	6.7	00.0	00.0	10.0	13.3	20.0	10.0	3.3	00.0	3.3	00.0	00.0	13.3	00.0	100.
21	00.0	3.3	10.0	6.7	3.3	3.3	10.0	23.3	20.0	00.0	00.0	3.3	00.0	00.0	6.7	10.0	00.0	100.
22	10.0	6.7	3.3	6.7	00.0	3.3	20.0	26.7	6.7	3.3	00.0	00.0	3.3	00.0	00.0	10.0	00.0	100.
23	3.3	6.7	3.3	3.3	10.0	00.0	20.0	26.7	13.3	00.0	00.0	00.0	3.3	00.0	00.0	10.0	00.0	100.
24	00.0	3.3	6.7	6.7	3.3	6.7	13.3	23.3	20.0	3.3	00.0	00.0	00.0	00.0	00.0	13.3	00.0	100.
ALL	6.0	4.0	3.6	4.4	4.4	5.0	9.9	16.7	19.4	4.6	3.6	3.5	3.1	1.9	2.4	7.5	00.0	100.

NUMBER OF OBS = 720

BS4

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APR-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	4.4	6.6	6.6	1.1	8.8	6.6	8.8	18.7	11.0	7.7	2.2	00.0	1.1	4.4	5.5	6.6	00.0	100.
2	5.5	4.4	4.4	5.5	3.3	12.1	6.6	12.1	17.6	6.6	2.2	1.1	2.2	2.2	7.7	5.5	1.1	100.
3	6.6	5.5	6.6	2.2	2.2	6.6	12.1	7.7	19.8	6.6	4.4	1.1	2.2	5.5	6.6	4.4	00.0	100.
4	6.6	4.4	4.4	3.3	4.4	2.2	12.1	6.6	22.0	6.6	3.3	3.3	1.1	7.7	5.5	6.6	00.0	100.
5	3.3	5.5	3.3	5.5	2.2	5.5	8.8	6.6	18.7	6.6	2.2	5.5	4.4	6.6	5.5	9.9	00.0	100.
6	6.6	5.5	2.2	5.5	3.3	6.6	7.7	8.8	16.5	4.4	4.4	2.2	3.3	8.8	8.8	5.5	00.0	100.
7	6.6	4.4	5.5	4.4	6.6	1.1	9.9	8.8	16.5	3.3	5.5	00.0	6.6	6.6	8.8	5.5	00.0	100.
8	5.5	7.7	2.2	4.4	4.4	5.5	7.7	15.4	14.3	1.1	3.3	4.4	2.2	6.6	7.7	7.7	00.0	100.
9	6.6	4.4	4.4	3.3	4.4	6.6	4.4	16.5	15.4	3.3	2.2	4.4	2.2	5.5	7.7	8.8	00.0	100.
10	6.6	4.4	5.5	2.2	3.3	7.7	3.3	12.1	19.8	5.5	00.0	5.5	1.1	5.5	7.7	9.9	00.0	100.
11	6.6	6.6	3.3	5.5	3.3	5.5	4.4	11.0	18.7	7.7	3.3	3.3	1.1	2.2	7.7	9.9	00.0	100.
12	4.4	4.4	4.4	8.8	3.3	5.5	5.5	12.1	14.3	5.5	3.3	2.2	3.3	5.5	5.5	12.1	00.0	100.
13	3.3	6.6	4.4	3.3	4.4	5.5	12.1	9.9	15.4	5.5	4.4	1.1	3.3	3.3	8.8	8.8	00.0	100.
14	6.6	4.4	4.4	4.4	3.3	6.6	11.0	14.3	14.3	6.6	4.4	1.1	3.3	2.2	5.5	7.7	00.0	100.
15	7.7	6.6	5.5	3.3	2.2	4.4	11.0	9.9	15.4	8.8	4.4	00.0	5.5	1.1	4.4	9.9	00.0	100.
16	4.4	4.4	4.4	3.3	4.4	4.4	6.6	15.4	14.3	7.7	2.2	6.6	3.3	1.1	7.7	9.9	00.0	100.
17	5.5	2.2	4.4	1.1	4.4	7.7	4.4	14.3	16.5	7.7	3.3	5.5	3.3	1.1	4.4	14.3	00.0	100.
18	3.3	5.5	3.3	3.3	5.5	3.3	6.6	13.2	16.5	6.6	7.7	2.2	3.3	00.0	6.6	13.2	00.0	100.
19	4.4	4.4	5.5	2.2	4.4	2.2	7.7	15.4	17.6	6.6	1.1	5.5	3.3	00.0	8.8	11.0	00.0	100.
20	2.2	4.4	5.5	5.5	3.3	4.4	6.6	16.5	14.3	4.4	5.5	2.2	3.3	00.0	5.5	16.5	00.0	100.
21	1.1	3.3	6.6	7.7	3.3	7.7	7.7	18.7	13.2	1.1	2.2	3.3	1.1	2.2	7.7	13.2	00.0	100.
22	7.7	2.2	5.5	6.6	1.1	7.7	15.4	19.8	4.4	5.5	2.2	1.1	2.2	3.3	5.5	9.9	00.0	100.
23	3.3	3.3	7.7	4.4	5.5	6.6	14.3	16.5	11.0	3.3	2.2	00.0	3.3	4.4	3.3	11.0	00.0	100.
24	2.2	3.3	5.5	6.6	6.6	9.9	8.8	16.5	11.0	6.6	2.2	00.0	2.2	4.4	5.5	8.8	00.0	100.
ALL	5.0	4.8	4.8	4.3	4.1	5.9	8.5	13.2	15.3	5.6	3.3	2.6	2.8	3.8	6.6	9.4	.0	100.

NUMBER OF OBS = 2184

BSS

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.2	6.6	4.4	1.1	7.2	6.6	7.7	11.6	11.0	8.3	3.3	2.8	1.1	3.9	7.7	9.4	00.0	100.
2	9.9	4.4	2.8	3.3	3.3	9.4	6.1	9.9	14.4	7.2	4.4	1.7	2.2	3.3	8.3	8.8	.6	100.
3	7.7	6.6	4.4	1.7	3.3	5.5	6.6	8.3	17.7	6.1	5.0	2.8	1.7	4.4	8.3	9.9	00.0	100.
4	9.4	5.0	2.8	2.2	3.9	2.8	8.3	7.7	17.1	7.2	5.0	3.9	2.2	6.1	7.2	9.4	00.0	100.
5	8.3	6.1	2.2	3.3	2.2	3.3	6.6	6.6	16.6	6.1	3.9	4.4	5.5	5.0	8.3	11.6	00.0	100.
6	9.9	7.2	1.7	3.9	1.7	3.9	7.2	6.6	15.5	6.1	4.4	2.2	3.3	8.3	9.4	8.8	00.0	100.
7	7.7	8.3	3.3	2.8	3.3	1.7	7.7	7.7	14.4	6.6	4.4	00.0	4.4	5.5	12.7	9.4	00.0	100.
8	8.8	9.9	1.7	2.8	2.2	3.3	7.2	11.0	12.7	3.3	4.4	3.9	2.8	6.6	11.0	8.3	00.0	100.
9	9.9	6.1	3.3	2.2	3.3	3.9	5.5	12.2	12.2	5.0	3.3	4.4	1.7	6.1	12.2	8.8	00.0	100.
10	9.4	6.1	4.4	2.8	2.2	5.0	3.3	9.9	14.4	7.7	1.1	6.6	.6	5.0	12.2	9.4	00.0	100.
11	10.5	6.1	2.8	4.4	2.8	2.8	4.4	8.3	14.4	8.3	4.4	5.0	1.1	3.9	9.4	11.6	00.0	100.
12	7.7	6.1	2.8	6.1	2.2	3.3	4.4	8.8	13.8	7.2	3.3	5.0	1.7	5.5	9.4	12.7	00.0	100.
13	5.0	7.2	4.4	1.7	3.3	3.9	6.6	8.8	14.9	5.5	5.0	2.8	4.4	4.4	10.5	11.6	00.0	100.
14	7.2	5.0	3.9	3.3	2.2	3.9	6.6	9.9	13.3	7.2	6.1	4.4	2.8	5.5	8.3	10.5	00.0	100.
15	8.8	6.6	3.9	2.2	1.7	2.8	7.2	7.2	13.3	8.3	7.2	3.3	5.0	3.3	8.8	10.5	00.0	100.
16	6.1	6.6	3.9	2.2	2.8	2.8	5.5	10.5	13.3	7.2	3.9	5.5	4.4	6.6	8.3	10.5	00.0	100.
17	5.5	7.2	3.9	1.1	2.8	5.0	5.0	11.0	12.7	4.4	5.5	6.1	3.3	6.1	7.7	12.7	00.0	100.
18	5.5	8.3	3.9	2.2	2.8	2.8	6.6	10.5	12.2	4.4	8.3	2.2	4.4	5.5	7.2	13.3	00.0	100.
19	5.5	6.1	6.6	2.2	2.8	2.2	6.6	11.0	12.7	5.5	3.3	4.4	4.4	4.4	7.7	14.4	00.0	100.
20	4.4	6.6	4.4	5.5	1.7	2.8	6.1	12.7	11.0	4.4	3.9	5.5	3.3	2.8	7.7	17.1	00.0	100.
21	6.6	5.0	7.2	5.5	1.7	5.0	6.6	12.7	12.2	2.2	2.8	4.4	2.8	3.3	7.7	14.4	00.0	100.
22	9.9	2.8	5.0	7.2	2.2	6.1	9.4	12.7	8.3	5.0	3.3	2.8	2.2	2.8	6.6	13.8	00.0	100.
23	6.6	5.5	6.1	4.4	5.5	5.5	9.4	10.5	12.2	5.0	3.3	1.7	3.3	3.3	4.4	13.3	00.0	100.
24	6.1	4.4	3.9	7.2	5.5	7.7	7.2	8.8	12.2	7.7	4.4	.6	2.2	5.0	5.5	11.6	00.0	100.
ALL	7.7	6.2	3.9	3.4	3.0	4.2	6.6	9.8	13.4	6.1	4.3	3.6	2.9	4.9	8.6	11.3	.0	100.

NUMBER OF OBS = 4344

BS6

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JULY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	9.7	3.2	3.2	3.2	3.2	3.2	12.9	19.4	6.5	6.5	3.2	3.2	6.5	3.2	6.5	00.0	100.
2	9.7	9.7	00.0	00.0	3.2	3.2	6.5	12.9	16.1	6.5	6.5	3.2	6.5	3.2	3.2	9.7	00.0	100.
3	9.7	12.9	00.0	00.0	00.0	9.7	00.0	19.4	9.7	3.2	3.2	3.2	6.5	9.7	3.2	9.7	00.0	100.
4	6.5	12.9	00.0	00.0	3.2	3.2	9.7	12.9	6.5	6.5	6.5	3.2	3.2	00.0	16.1	9.7	00.0	100.
5	00.0	6.5	6.5	00.0	00.0	00.0	9.7	16.1	9.7	9.7	3.2	00.0	9.7	9.7	3.2	16.1	00.0	100.
6	6.5	6.5	00.0	3.2	00.0	00.0	6.5	22.6	9.7	6.5	00.0	3.2	3.2	6.5	16.1	9.7	00.0	100.
7	9.7	00.0	00.0	3.2	00.0	00.0	6.5	19.4	16.1	3.2	3.2	3.2	6.5	3.2	6.5	19.4	00.0	100.
8	16.1	00.0	00.0	00.0	00.0	3.2	12.9	6.5	16.1	9.7	3.2	6.5	00.0	9.7	6.5	9.7	00.0	100.
9	16.1	3.2	00.0	3.2	3.2	3.2	3.2	19.4	9.7	3.2	6.5	9.7	00.0	9.7	6.5	3.2	00.0	100.
10	6.5	6.5	3.2	00.0	00.0	6.5	6.5	12.9	9.7	9.7	6.5	9.7	6.5	3.2	6.5	6.5	00.0	100.
11	6.5	9.7	00.0	00.0	3.2	00.0	6.5	19.4	12.9	6.5	9.7	00.0	3.2	3.2	12.9	6.5	00.0	100.
12	6.5	6.5	3.2	3.2	00.0	00.0	6.5	16.1	16.1	9.7	6.5	00.0	00.0	3.2	12.9	9.7	00.0	100.
13	3.2	6.5	00.0	3.2	6.5	00.0	3.2	19.4	19.4	6.5	6.5	00.0	00.0	3.2	9.7	12.9	00.0	100.
14	3.2	6.5	3.2	00.0	00.0	6.5	3.2	25.8	16.1	6.5	3.2	00.0	00.0	6.5	12.9	6.5	00.0	100.
15	3.2	9.7	3.2	00.0	3.2	3.2	3.2	12.9	19.4	12.9	3.2	00.0	00.0	3.2	9.7	12.9	00.0	100.
16	6.5	12.9	00.0	3.2	00.0	00.0	00.0	25.8	16.1	3.2	3.2	6.5	00.0	6.5	6.5	9.7	00.0	100.
17	6.5	12.9	00.0	00.0	3.2	3.2	9.7	22.6	9.7	00.0	3.2	3.2	3.2	3.2	6.5	12.9	00.0	100.
18	6.5	12.9	3.2	00.0	9.7	3.2	9.7	16.1	9.7	00.0	3.2	3.2	3.2	00.0	9.7	9.7	00.0	100.
19	6.5	6.5	9.7	3.2	3.2	6.5	12.9	12.9	9.7	00.0	3.2	3.2	00.0	00.0	9.7	12.9	00.0	100.
20	9.7	16.1	3.2	00.0	3.2	6.5	19.4	16.1	00.0	3.2	00.0	3.2	00.0	00.0	6.5	12.9	00.0	100.
21	12.9	12.9	00.0	3.2	00.0	00.0	25.8	16.1	3.2	3.2	00.0	00.0	3.2	00.0	9.7	9.7	00.0	100.
22	16.1	9.7	3.2	00.0	3.2	3.2	19.4	16.1	6.5	00.0	3.2	00.0	00.0	00.0	12.9	6.5	00.0	100.
23	12.9	6.5	6.5	00.0	00.0	6.5	12.9	16.1	9.7	3.2	00.0	6.5	00.0	00.0	9.7	9.7	00.0	100.
24	16.7	3.3	3.3	3.3	3.3	3.3	6.7	23.3	6.7	6.7	3.3	10.0	00.0	3.3	3.3	3.3	00.0	100.
ALL	8.5	8.3	2.2	1.3	2.2	3.1	8.5	17.2	11.6	5.2	3.9	3.4	2.4	3.9	8.5	9.8	00.0	100.

NUMBER OF OBS = 743

BS7

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

AUGUST

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	00.0	3.2	3.2	6.5	12.9	9.7	29.0	6.5	9.7	3.2	3.2	3.2	3.2	00.0	3.2	3.2	00.0	100.
2	00.0	3.2	9.7	3.2	16.1	00.0	25.8	12.9	12.9	6.5	00.0	3.2	00.0	00.0	3.2	3.2	00.0	100.
3	00.0	6.5	6.5	3.2	12.9	9.7	12.9	3.2	16.1	00.0	12.9	00.0	3.2	00.0	3.2	9.7	00.0	100.
4	6.5	3.2	00.0	19.4	3.2	9.7	16.1	9.7	6.5	6.5	3.2	3.2	00.0	3.2	6.5	3.2	00.0	100.
5	6.5	3.2	00.0	12.9	6.5	9.7	9.7	16.1	6.5	9.7	00.0	3.2	3.2	3.2	3.2	6.5	00.0	100.
6	00.0	00.0	9.7	9.7	3.2	16.1	12.9	6.5	9.7	6.5	6.5	3.2	00.0	6.5	3.2	6.5	00.0	100.
7	00.0	00.0	3.2	3.2	12.9	12.9	12.9	16.1	6.5	6.5	00.0	6.5	3.2	00.0	9.7	6.5	00.0	100.
8	6.5	00.0	00.0	3.2	6.5	6.5	19.4	16.1	9.7	6.5	3.2	3.2	3.2	3.2	6.5	6.5	00.0	100.
9	3.2	3.2	3.2	3.2	3.2	12.9	12.9	9.7	19.4	6.5	3.2	9.7	00.0	00.0	3.2	6.5	00.0	100.
10	3.2	3.2	3.2	3.2	6.5	22.6	3.2	16.1	9.7	6.5	3.2	3.2	3.2	3.2	3.2	6.5	00.0	100.
11	3.2	00.0	3.2	3.2	16.1	19.4	9.7	6.5	6.5	9.7	00.0	00.0	3.2	3.2	3.2	12.9	00.0	100.
12	9.7	00.0	3.2	12.9	6.5	29.0	6.5	9.7	12.9	00.0	00.0	00.0	00.0	00.0	00.0	9.7	00.0	100.
13	3.2	3.2	12.9	6.5	12.9	19.4	3.2	12.9	16.1	00.0	00.0	00.0	00.0	00.0	00.0	9.7	00.0	100.
14	3.2	00.0	6.5	6.5	16.1	22.6	6.5	19.4	9.7	00.0	00.0	00.0	00.0	00.0	3.2	6.5	00.0	100.
15	6.5	3.2	3.2	6.5	12.9	22.6	9.7	9.7	12.9	3.2	3.2	00.0	00.0	00.0	00.0	6.5	00.0	100.
16	9.7	9.7	3.2	3.2	12.9	19.4	12.9	9.7	6.5	6.5	00.0	00.0	00.0	00.0	3.2	3.2	00.0	100.
17	6.5	9.7	6.5	12.9	9.7	22.6	16.1	6.5	3.2	00.0	00.0	3.2	00.0	00.0	00.0	3.2	00.0	100.
18	6.5	6.5	3.2	12.9	9.7	19.4	22.6	6.5	00.0	00.0	00.0	00.0	00.0	3.2	3.2	6.5	00.0	100.
19	6.5	12.9	00.0	16.1	12.9	22.6	12.9	9.7	00.0	00.0	00.0	00.0	00.0	3.2	00.0	3.2	00.0	100.
20	6.5	3.2	3.2	16.1	16.1	16.1	16.1	3.2	12.9	00.0	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
21	3.2	00.0	9.7	12.9	19.4	16.1	16.1	6.5	6.5	00.0	3.2	00.0	00.0	00.0	3.2	3.2	00.0	100.
22	3.2	00.0	6.5	00.0	25.8	19.4	12.9	12.9	9.7	00.0	00.0	3.2	00.0	3.2	00.0	3.2	00.0	100.
23	3.2	00.0	3.2	9.7	16.1	19.4	9.7	16.1	9.7	00.0	00.0	3.2	3.2	3.2	00.0	3.2	00.0	100.
24	00.0	3.2	6.5	9.7	9.7	22.6	12.9	6.5	16.1	3.2	00.0	3.2	3.2	00.0	00.0	3.2	00.0	100.
ALL	4.0	3.2	4.6	8.2	11.7	16.7	13.4	10.3	9.5	3.4	1.7	2.2	1.2	1.5	2.6	5.8	00.0	100.

NUMBER OF OBS = 744

BS8

HOURLY WIND ROSES (PERCENT)
SEPTEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	10.0	00.0	3.3	6.7	3.3	26.7	26.7	3.3	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
2	6.7	13.3	6.7	00.0	3.3	10.0	23.3	23.3	6.7	00.0	3.3	00.0	00.0	00.0	00.0	00.0	3.3	100.0
3	10.0	6.7	3.3	00.0	6.7	10.0	23.3	23.3	6.7	6.7	3.3	00.0	00.0	00.0	00.0	00.0	6.7	100.0
4	6.7	3.3	6.7	00.0	00.0	00.0	13.3	20.0	23.3	6.7	3.3	3.3	00.0	00.0	00.0	00.0	6.7	100.0
5	10.0	00.0	00.0	6.7	00.0	3.3	10.0	20.0	23.3	3.3	3.3	00.0	00.0	00.0	00.0	00.0	3.3	100.0
6	10.0	6.7	00.0	10.0	00.0	6.7	00.0	23.3	23.3	3.3	3.3	00.0	00.0	00.0	00.0	00.0	6.7	100.0
7	3.3	13.3	00.0	00.0	6.7	6.7	00.0	16.7	00.0	6.7	00.0	00.0	00.0	00.0	00.0	10.0	00.0	100.0
8	6.7	10.0	00.0	00.0	3.3	10.0	00.0	33.3	16.7	00.0	6.7	00.0	00.0	00.0	00.0	3.3	00.0	100.0
9	6.7	13.3	00.0	00.0	6.7	00.0	10.0	36.7	10.0	00.0	3.3	00.0	00.0	00.0	00.0	3.3	6.7	100.0
10	3.3	10.0	00.0	00.0	00.0	00.0	20.0	30.0	3.3	00.0	3.3	00.0	00.0	00.0	00.0	3.3	10.0	100.0
11	6.7	10.0	00.0	00.0	3.3	00.0	10.0	20.0	23.3	10.0	3.3	00.0	00.0	00.0	00.0	3.3	6.7	100.0
12	3.3	10.0	00.0	00.0	3.3	6.7	20.0	23.3	6.7	6.7	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
13	6.7	10.0	00.0	00.0	00.0	3.3	30.0	23.3	6.7	00.0	10.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
14	6.7	6.7	00.0	00.0	6.7	3.3	30.0	26.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
15	6.7	3.3	3.3	00.0	3.3	13.3	13.3	33.3	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
16	6.7	3.3	3.3	00.0	6.7	3.3	30.0	20.0	3.3	00.0	3.3	00.0	00.0	00.0	00.0	00.0	6.7	100.0
17	6.7	10.0	3.3	00.0	00.0	00.0	16.7	23.3	3.3	00.0	3.3	00.0	00.0	00.0	00.0	00.0	6.7	100.0
18	6.7	10.0	10.0	00.0	00.0	00.0	20.0	16.7	20.0	3.3	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
19	10.0	10.0	3.3	00.0	6.7	6.7	33.3	13.3	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
20	6.7	6.7	10.0	00.0	3.3	10.0	13.3	33.3	10.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
21	3.3	13.3	6.7	3.3	00.0	3.3	10.0	33.3	10.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	3.3	100.0
22	13.3	6.7	3.3	6.7	6.7	00.0	10.0	33.3	10.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	100.0
23	13.3	6.7	00.0	3.3	3.3	10.0	6.7	30.0	13.3	3.3	00.0	00.0	00.0	00.0	00.0	00.0	3.3	100.0
24	6.7	13.3	00.0	3.3	00.0	10.0	6.7	30.0	16.7	3.3	00.0	00.0	00.0	00.0	00.0	00.0	3.3	100.0
ALL	7.2	8.6	2.5	1.3	2.1	5.3	8.2	26.2	20.0	3.1	1.9	1.8	1.7	1.7	2.9	5.6	00.0	100.0

NUMBER OF OBS = 720

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-SEP

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	4.3	7.6	2.2	4.3	6.5	6.5	12.0	15.2	18.5	4.3	3.3	2.2	2.2	2.2	3.3	5.4	00.0	100.
2	5.4	8.7	5.4	1.1	6.5	2.2	14.1	16.3	17.4	6.5	2.2	3.3	2.2	1.1	3.3	4.3	00.0	100.
3	6.5	8.7	3.3	2.2	4.3	8.7	7.6	15.2	15.2	3.3	7.6	1.1	3.3	4.3	2.2	6.5	00.0	100.
4	6.5	6.5	2.2	6.5	2.2	4.3	13.0	14.1	12.0	6.5	4.3	3.3	2.2	1.1	8.7	6.5	00.0	100.
5	5.4	3.3	2.2	6.5	2.2	4.3	9.8	17.4	13.0	7.6	2.2	1.1	6.5	5.4	4.3	8.7	00.0	100.
6	5.4	4.3	3.3	4.3	4.3	7.6	6.5	17.4	14.1	5.4	3.3	2.2	2.2	5.4	7.6	6.5	00.0	100.
7	4.3	4.3	1.1	2.2	6.5	6.5	6.5	22.8	13.0	3.3	3.3	3.3	3.3	2.2	8.7	8.7	00.0	100.
8	9.8	3.3	00.0	1.1	3.3	6.5	10.9	18.5	14.1	5.4	4.3	3.3	1.1	4.3	7.6	6.5	00.0	100.
9	8.7	6.5	1.1	2.2	4.3	5.4	8.7	21.7	13.0	3.3	4.3	7.6	00.0	3.3	4.3	5.4	00.0	100.
10	4.3	6.5	2.2	1.1	2.2	10.9	6.5	16.3	16.3	6.5	4.3	4.3	4.3	2.2	4.3	7.6	00.0	100.
11	5.4	6.5	1.1	1.1	7.6	6.5	8.7	15.2	14.1	8.7	4.3	00.0	3.3	2.2	6.5	8.7	00.0	100.
12	6.5	5.4	2.2	5.4	3.3	10.9	6.5	15.2	17.4	5.4	4.3	00.0	1.1	1.1	4.3	10.9	00.0	100.
13	4.3	6.5	4.3	3.3	6.5	7.6	3.3	20.7	19.6	4.3	2.2	3.3	00.0	1.1	3.3	9.8	00.0	100.
14	4.3	4.3	3.3	2.2	5.4	12.0	4.3	25.0	17.4	2.2	1.1	3.3	00.0	2.2	5.4	7.6	00.0	100.
15	5.4	5.4	3.3	2.2	5.4	9.8	8.7	12.0	21.7	5.4	2.2	2.2	2.2	1.1	3.3	9.8	00.0	100.
16	7.6	8.7	2.2	2.2	4.3	8.7	5.4	21.7	14.1	4.3	1.1	3.3	1.1	3.3	5.4	6.5	00.0	100.
17	6.5	10.9	3.3	4.3	4.3	8.7	14.1	15.2	12.0	1.1	1.1	3.3	1.1	2.2	3.3	8.7	00.0	100.
18	6.5	9.8	5.4	4.3	6.5	7.6	17.4	13.0	9.8	1.1	1.1	1.1	1.1	3.3	4.3	7.6	00.0	100.
19	7.6	9.8	4.3	6.5	7.6	12.0	10.9	18.5	7.6	00.0	1.1	1.1	00.0	2.2	3.3	7.6	00.0	100.
20	7.6	8.7	5.4	5.4	7.6	10.9	16.3	17.4	7.6	1.1	00.0	1.1	00.0	00.0	2.2	8.7	00.0	100.
21	6.5	8.7	5.4	6.5	6.5	8.7	17.4	18.5	6.5	1.1	1.1	00.0	1.1	1.1	5.4	5.4	00.0	100.
22	10.9	5.4	4.3	2.2	9.8	10.9	14.1	20.7	8.7	00.0	1.1	1.1	00.0	3.3	4.3	3.3	00.0	100.
23	9.8	4.3	3.3	4.3	6.5	12.0	9.8	20.7	10.9	2.2	00.0	3.3	2.2	1.1	4.3	5.4	00.0	100.
24	7.7	6.6	3.3	5.5	4.4	12.1	8.8	19.8	13.2	4.4	1.1	4.4	2.2	1.1	2.2	3.3	00.0	100.
ALL	6.6	6.7	3.1	3.6	5.3	8.4	10.1	17.9	13.6	3.9	2.5	2.4	1.8	2.4	4.7	7.1	00.0	100.

NUMBER OF OBS = 2207

B60

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCTOBER

HR. OF DAY	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
1	9.7	6.5	00.0	00.0	6.5	3.2	12.9	9.7	3.2	9.7	00.0	3.2	6.5	3.2	12.9	12.9	00.0	100.
2	6.5	9.7	00.0	00.0	6.5	6.5	6.5	12.9	6.5	3.2	6.5	00.0	6.5	00.0	12.9	16.1	00.0	100.
3	3.2	9.7	6.5	3.2	6.5	3.2	6.5	6.5	12.9	00.0	6.5	00.0	3.2	3.2	16.1	12.9	00.0	100.
4	6.5	9.7	00.0	3.2	6.5	3.2	9.7	3.2	12.9	6.5	6.5	00.0	3.2	12.9	3.2	12.9	00.0	100.
5	6.5	6.5	3.2	00.0	9.7	3.2	3.2	9.7	3.2	9.7	3.2	6.5	6.5	9.7	6.5	12.9	00.0	100.
6	3.2	9.7	6.5	00.0	3.2	6.5	3.2	3.2	6.5	12.9	00.0	3.2	3.2	19.4	3.2	16.1	00.0	100.
7	9.7	12.9	3.2	3.2	00.0	00.0	9.7	3.2	6.5	3.2	6.5	3.2	00.0	19.4	6.5	12.9	00.0	100.
8	12.9	9.7	00.0	6.5	3.2	3.2	6.5	6.5	9.7	3.2	00.0	3.2	00.0	16.1	9.7	9.7	00.0	100.
9	9.7	12.9	00.0	6.5	3.2	3.2	6.5	6.5	6.5	6.5	00.0	3.2	00.0	00.0	25.8	9.7	00.0	100.
10	9.7	6.5	6.5	3.2	9.7	00.0	3.2	9.7	00.0	9.7	00.0	00.0	3.2	00.0	19.4	19.4	00.0	100.
11	12.9	6.5	3.2	6.5	3.2	6.5	3.2	3.2	6.5	9.7	00.0	3.2	00.0	00.0	19.4	16.1	00.0	100.
12	6.5	9.7	00.0	3.2	3.2	6.5	6.5	6.5	00.0	9.7	00.0	3.2	00.0	6.5	19.4	19.4	00.0	100.
13	6.5	6.5	00.0	6.5	3.2	00.0	9.7	9.7	00.0	6.5	00.0	6.5	6.5	9.7	12.9	16.1	00.0	100.
14	6.5	3.2	00.0	6.5	6.5	3.2	3.2	9.7	3.2	3.2	3.2	3.2	6.5	9.7	9.7	22.6	00.0	100.
15	9.7	3.2	3.2	6.5	00.0	00.0	6.5	9.7	6.5	3.2	3.2	3.2	00.0	16.1	12.9	16.1	00.0	100.
16	6.5	6.5	3.2	6.5	00.0	00.0	6.5	9.7	6.5	3.2	00.0	3.2	3.2	16.1	6.5	22.6	00.0	100.
17	6.5	6.5	00.0	6.5	00.0	00.0	9.7	9.7	3.2	3.2	3.2	00.0	00.0	12.9	12.9	22.6	3.2	100.
18	00.0	9.7	3.2	3.2	6.5	00.0	12.9	6.5	3.2	00.0	9.7	00.0	00.0	9.7	9.7	25.8	00.0	100.
19	00.0	9.7	3.2	00.0	9.7	00.0	16.1	6.5	3.2	3.2	6.5	00.0	00.0	6.5	9.7	25.8	00.0	100.
20	6.5	9.7	3.2	00.0	6.5	6.5	12.9	6.5	3.2	3.2	3.2	00.0	3.2	00.0	9.7	25.8	00.0	100.
21	3.2	6.5	6.5	00.0	6.5	6.5	16.1	6.5	3.2	3.2	3.2	3.2	3.2	00.0	3.2	29.0	00.0	100.
22	6.5	00.0	9.7	3.2	6.5	6.5	9.7	3.2	9.7	3.2	6.5	3.2	3.2	00.0	6.5	22.6	00.0	100.
23	12.9	00.0	6.5	00.0	12.9	00.0	9.7	9.7	3.2	6.5	3.2	3.2	00.0	6.5	12.9	9.7	3.2	100.
24	9.7	6.5	00.0	00.0	9.7	9.7	3.2	9.7	00.0	16.1	3.2	00.0	3.2	3.2	16.1	9.7	00.0	100.
ALL	7.1	7.4	2.8	3.1	5.4	3.2	8.1	7.4	5.0	5.8	3.1	2.3	2.6	7.5	11.6	17.5	.3	100.

NUMBER OF OBS = 744

B61

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

NOVEMBER

HR. OF DAY	WIND DIRECTION																CALM	TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW			
1	00.0	00.0	00.0	00.0	00.0	6.7	3.3	6.7	23.3	00.0	3.3	3.3	3.3	3.3	26.7	20.0	00.0	100.	
2	3.3	00.0	00.0	00.0	00.0	3.3	6.7	6.7	16.7	3.3	10.0	00.0	3.3	10.0	23.3	13.3	00.0	100.	
3	3.3	00.0	00.0	00.0	00.0	3.3	3.3	10.0	10.0	10.0	6.7	3.3	00.0	10.0	30.0	10.0	00.0	100.	
4	3.3	00.0	00.0	00.0	00.0	00.0	10.0	6.7	10.0	10.0	6.7	00.0	00.0	16.7	20.0	16.7	00.0	100.	
5	3.3	3.3	00.0	00.0	00.0	00.0	10.0	6.7	10.0	3.3	13.3	00.0	00.0	16.7	20.0	13.3	00.0	100.	
6	10.0	00.0	00.0	00.0	00.0	00.0	10.0	10.0	6.7	3.3	13.3	00.0	00.0	16.7	20.0	10.0	00.0	100.	
7	00.0	3.3	3.3	00.0	00.0	00.0	10.0	10.0	6.7	3.3	10.0	3.3	00.0	10.0	23.3	16.7	00.0	100.	
8	3.3	3.3	3.3	00.0	00.0	00.0	6.7	6.7	13.3	10.0	3.3	3.3	3.3	6.7	23.3	13.3	00.0	100.	
9	00.0	00.0	00.0	3.3	00.0	00.0	6.7	3.3	16.7	10.0	6.7	00.0	6.7	00.0	30.0	16.7	00.0	100.	
10	00.0	00.0	00.0	00.0	3.3	00.0	6.7	3.3	13.3	13.3	3.3	10.0	00.0	6.7	16.7	23.3	00.0	100.	
11	00.0	3.3	00.0	3.3	00.0	3.3	3.3	6.7	6.7	16.7	13.3	3.3	00.0	6.7	13.3	20.0	00.0	100.	
12	00.0	00.0	3.3	3.3	00.0	3.3	3.3	3.3	6.7	13.3	16.7	3.3	6.7	3.3	16.7	16.7	00.0	100.	
13	00.0	3.3	00.0	00.0	3.3	3.3	3.3	3.3	6.7	6.7	10.0	13.3	6.7	6.7	00.0	20.0	16.7	00.0	100.
14	3.3	3.3	00.0	00.0	00.0	6.7	6.7	3.3	16.7	10.0	3.3	3.3	6.7	3.3	16.7	16.7	00.0	100.	
15	00.0	3.3	00.0	00.0	00.0	3.3	6.7	3.3	16.7	10.0	6.7	6.7	00.0	3.3	20.0	20.0	00.0	100.	
16	3.3	3.3	00.0	00.0	00.0	3.3	3.3	10.0	13.3	10.0	10.0	3.3	3.3	00.0	16.7	20.0	00.0	100.	
17	00.0	3.3	00.0	00.0	00.0	3.3	3.3	10.0	20.0	10.0	00.0	6.7	3.3	00.0	16.7	23.3	00.0	100.	
18	3.3	00.0	00.0	00.0	3.3	6.7	3.3	13.3	13.3	10.0	00.0	6.7	00.0	3.3	10.0	26.7	00.0	100.	
19	00.0	00.0	3.3	3.3	00.0	00.0	10.0	13.3	13.3	10.0	00.0	00.0	6.7	6.7	10.0	23.3	00.0	100.	
20	00.0	00.0	00.0	00.0	3.3	3.3	10.0	10.0	16.7	6.7	3.3	00.0	3.3	10.0	10.0	23.3	00.0	100.	
21	3.3	00.0	00.0	00.0	3.3	00.0	10.0	6.7	20.0	6.7	3.3	3.3	3.3	6.7	13.3	20.0	00.0	100.	
22	3.3	00.0	00.0	00.0	00.0	3.3	6.7	10.0	13.3	10.0	10.0	00.0	00.0	3.3	20.0	20.0	00.0	100.	
23	6.7	00.0	00.0	00.0	00.0	3.3	3.3	10.0	16.7	3.3	16.7	00.0	00.0	3.3	16.7	20.0	00.0	100.	
24	00.0	00.0	00.0	00.0	00.0	6.7	3.3	10.0	20.0	00.0	6.7	00.0	6.7	6.7	20.0	20.0	00.0	100.	
ALL	2.1	1.3	.6	.6	.7	2.6	6.3	7.8	13.6	8.1	7.5	2.8	2.6	6.4	18.9	18.3	00.0	100.	

NUMBER OF OBS = 720

B62

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

DECEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.7	3.2	00.0	00.0	00.0	9.7	6.5	12.9	22.6	3.2	00.0	6.5	6.5	00.0	9.7	9.7	00.0	100.
2	9.7	3.2	00.0	00.0	00.0	12.9	3.2	12.9	22.6	3.2	00.0	6.5	6.5	00.0	3.2	16.1	00.0	100.
3	9.7	3.2	00.0	00.0	00.0	6.5	12.9	12.9	16.1	6.5	00.0	3.2	9.7	00.0	3.2	16.1	00.0	100.
4	16.1	00.0	00.0	00.0	00.0	9.7	6.5	22.6	9.7	00.0	3.2	3.2	9.7	6.5	00.0	12.9	00.0	100.
5	6.5	9.7	00.0	00.0	6.5	3.2	6.5	22.6	9.7	3.2	00.0	3.2	3.2	6.5	3.2	16.1	00.0	100.
6	3.2	12.9	00.0	00.0	3.2	6.5	9.7	16.1	12.9	3.2	00.0	3.2	6.5	3.2	3.2	16.1	00.0	100.
7	3.2	12.9	00.0	00.0	3.2	12.9	00.0	19.4	12.9	3.2	00.0	6.5	3.2	00.0	6.5	16.1	00.0	100.
8	9.7	12.9	00.0	00.0	3.2	9.7	6.5	16.1	16.1	00.0	3.2	3.2	00.0	3.2	6.5	9.7	00.0	100.
9	9.7	9.7	3.2	00.0	3.2	6.5	9.7	12.9	19.4	00.0	6.5	00.0	00.0	6.5	3.2	9.7	00.0	100.
10	6.7	13.3	00.0	3.3	3.3	6.7	10.0	13.3	16.7	00.0	6.7	00.0	00.0	3.3	10.0	6.7	00.0	100.
11	6.5	12.9	3.2	3.2	3.2	3.2	12.9	3.2	19.4	6.5	3.2	3.2	00.0	00.0	12.9	6.5	00.0	100.
12	3.2	12.9	6.5	3.2	3.2	3.2	6.5	9.7	19.4	9.7	00.0	3.2	00.0	00.0	12.9	6.5	00.0	100.
13	3.2	9.7	9.7	3.2	00.0	6.5	3.2	12.9	19.4	6.5	3.2	3.2	00.0	00.0	16.1	3.2	00.0	100.
14	00.0	6.5	12.9	3.2	3.2	3.2	3.2	6.5	19.4	9.7	6.5	3.2	00.0	6.5	9.7	6.5	00.0	100.
15	00.0	6.5	9.7	6.5	6.5	00.0	3.2	9.7	19.4	6.5	6.5	00.0	00.0	12.9	3.2	9.7	00.0	100.
16	00.0	6.5	6.5	12.9	00.0	3.2	3.2	9.7	22.6	3.2	3.2	3.2	6.5	6.5	6.5	6.5	00.0	100.
17	00.0	6.5	3.2	3.2	9.7	3.2	6.5	9.7	22.6	3.2	3.2	3.2	6.5	6.5	6.5	6.5	00.0	100.
18	3.2	6.5	00.0	6.5	3.2	9.7	9.7	12.9	12.9	6.5	00.0	6.5	3.2	6.5	6.5	6.5	00.0	100.
19	3.2	3.2	3.2	6.5	00.0	12.9	9.7	19.4	3.2	3.2	9.7	3.2	3.2	6.5	9.7	3.2	00.0	100.
20	00.0	6.5	3.2	00.0	6.5	9.7	16.1	12.9	6.5	6.5	3.2	6.5	00.0	9.7	6.5	6.5	00.0	100.
21	00.0	13.3	00.0	00.0	6.7	3.3	20.0	10.0	10.0	6.7	6.7	3.3	00.0	6.7	3.3	10.0	00.0	100.
22	10.0	3.3	00.0	00.0	6.7	6.7	10.0	16.7	13.3	6.7	00.0	6.7	00.0	3.3	10.0	6.7	00.0	100.
23	6.7	00.0	00.0	00.0	00.0	10.0	10.0	16.7	16.7	3.3	3.3	6.7	3.3	3.3	10.0	10.0	00.0	100.
24	6.3	00.0	00.0	00.0	3.1	6.3	3.1	15.6	25.0	3.1	3.1	3.1	9.4	3.1	3.1	15.6	00.0	100.
ALL	5.3	7.3	2.6	2.2	3.1	6.9	7.8	13.6	16.2	4.3	3.0	3.8	3.2	4.2	6.9	9.7	00.0	100.

NUMBER OF OBS = 741

B63

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCT-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	3.3	00.0	00.0	2.2	6.5	7.6	9.8	16.3	4.3	1.1	4.3	5.4	2.2	16.3	14.1	00.0	100.
2	6.5	4.3	00.0	00.0	2.2	7.6	5.4	10.9	15.2	3.3	5.4	2.2	5.4	3.3	13.0	15.2	00.0	100.
3	5.4	4.3	2.2	1.1	2.2	4.3	7.6	9.8	13.0	5.4	4.3	2.2	4.3	4.3	16.3	13.0	00.0	100.
4	8.7	3.3	00.0	1.1	2.2	4.3	8.7	10.9	10.9	5.4	5.4	1.1	4.3	12.0	7.6	14.1	00.0	100.
5	5.4	6.5	1.1	00.0	5.4	2.2	6.5	13.0	7.6	5.4	5.4	3.3	3.3	10.9	9.8	14.1	00.0	100.
6	5.4	7.6	2.2	00.0	2.2	4.3	7.6	9.8	8.7	6.5	4.3	2.2	3.3	13.0	8.7	14.1	00.0	100.
7	4.3	9.8	2.2	1.1	1.1	4.3	6.5	10.9	8.7	3.3	5.4	4.3	1.1	9.8	12.0	15.2	00.0	100.
8	8.7	8.7	1.1	2.2	2.2	4.3	6.5	9.8	13.0	4.3	2.2	3.3	1.1	8.7	13.0	10.9	00.0	100.
9	6.5	7.6	1.1	3.3	2.2	3.3	7.6	7.6	14.1	5.4	4.3	1.1	2.2	2.2	19.6	12.0	00.0	100.
10	5.5	6.6	2.2	2.2	5.5	2.2	6.6	8.8	9.9	7.7	3.3	3.3	1.1	3.3	15.4	16.5	00.0	100.
11	6.5	7.6	2.2	4.3	2.2	4.3	6.5	4.3	10.9	10.9	5.4	3.3	00.0	2.2	15.2	14.1	00.0	100.
12	3.3	7.6	3.3	3.3	2.2	4.3	5.4	6.5	8.7	10.9	5.4	3.3	2.2	3.3	16.3	14.1	00.0	100.
13	3.3	6.5	3.3	3.3	2.2	3.3	5.4	9.8	8.7	7.6	5.4	5.4	4.3	3.3	16.3	12.0	00.0	100.
14	3.3	4.3	4.3	3.3	3.3	4.3	4.3	6.5	13.0	7.6	4.3	3.3	4.3	6.5	12.0	15.2	00.0	100.
15	3.3	4.3	4.3	4.3	2.2	1.1	5.4	7.6	14.1	6.5	5.4	3.3	00.0	10.9	12.0	15.2	00.0	100.
16	3.3	5.4	3.3	6.5	00.0	2.2	4.3	9.8	14.1	5.4	4.3	3.3	4.3	7.6	9.8	16.3	00.0	100.
17	2.2	5.4	1.1	3.3	3.3	2.2	6.5	9.8	15.2	5.4	2.2	3.3	3.3	6.5	12.0	17.4	1.1	100.
18	2.2	5.4	1.1	3.3	4.3	5.4	8.7	10.9	9.8	5.4	3.3	4.3	1.1	6.5	8.7	19.6	00.0	100.
19	1.1	4.3	3.3	3.3	3.3	4.3	12.0	13.0	6.5	5.4	5.4	1.1	3.3	6.5	9.8	17.4	00.0	100.
20	2.2	5.4	2.2	00.0	5.4	6.5	13.0	9.8	8.7	5.4	3.3	2.2	2.2	6.5	8.7	18.5	00.0	100.
21	2.2	6.6	2.2	00.0	5.5	3.3	15.4	7.7	11.0	5.5	4.4	3.3	2.2	4.4	6.6	19.8	00.0	100.
22	6.6	1.1	3.3	1.1	4.4	5.5	8.8	9.9	12.1	6.6	5.5	3.3	1.1	2.2	12.1	16.5	00.0	100.
23	8.8	00.0	2.2	00.0	4.4	4.4	7.7	12.1	12.1	4.4	7.7	3.3	1.1	4.4	13.2	13.2	1.1	100.
24	5.4	2.2	00.0	00.0	4.3	7.5	3.2	11.8	15.1	6.5	4.3	1.1	6.5	4.3	12.9	15.1	00.0	100.
ALL	4.9	5.4	2.0	2.0	3.1	4.3	7.4	9.6	11.6	6.0	4.5	2.9	2.8	6.0	12.4	15.1	.1	100.

NUMBER OF OBS = 2205

B64

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	5.4	5.4	1.1	2.2	4.3	6.5	9.8	12.5	17.4	4.3	2.2	3.3	3.8	2.2	9.8	9.8	00.0	100.
2	6.0	6.5	2.7	.5	4.3	4.9	9.8	13.6	16.3	4.9	3.8	2.7	3.8	2.2	8.2	9.8	00.0	100.
3	6.0	6.5	2.7	1.6	3.3	6.5	7.6	12.5	14.1	4.3	6.0	1.6	3.8	4.3	9.2	9.8	00.0	100.
4	7.6	4.9	1.1	3.8	2.2	4.3	10.9	12.5	11.4	6.0	4.9	2.2	3.3	6.5	8.2	10.3	00.0	100.
5	5.4	4.9	1.6	3.3	3.8	3.3	8.2	15.2	10.3	6.5	3.8	2.2	4.9	8.2	7.1	11.4	00.0	100.
6	5.4	6.0	2.7	2.2	3.3	6.0	7.1	13.6	11.4	6.0	3.8	2.2	2.7	9.2	8.2	10.3	00.0	100.
7	4.3	7.1	1.6	1.6	3.8	5.4	6.5	16.8	10.9	3.3	4.3	3.8	2.2	6.0	10.3	12.0	00.0	100.
8	9.2	6.0	.5	1.6	2.7	5.4	8.7	14.1	13.6	4.9	3.3	3.3	1.1	6.5	10.3	8.7	00.0	100.
9	7.6	7.1	1.1	2.7	3.3	4.3	8.2	14.7	13.6	4.3	4.3	4.3	1.1	2.7	12.0	8.7	00.0	100.
10	4.9	6.6	2.2	1.6	3.8	6.6	6.6	12.6	13.1	7.1	3.8	3.8	2.7	2.7	9.8	12.0	00.0	100.
11	6.0	7.1	1.6	2.7	4.9	5.4	7.6	9.8	12.5	9.8	4.9	1.6	1.6	2.2	10.9	11.4	00.0	100.
12	4.9	6.5	2.7	4.3	2.7	7.6	6.0	10.9	13.0	8.2	4.9	1.6	1.6	2.2	10.3	12.5	00.0	100.
13	3.8	6.5	3.8	3.3	4.3	5.4	4.3	15.2	14.1	6.0	3.8	4.3	2.2	2.2	9.8	10.9	00.0	100.
14	3.8	4.3	3.8	2.7	4.3	8.2	4.3	15.8	15.2	4.9	2.7	3.3	2.2	4.3	8.7	11.4	00.0	100.
15	4.3	4.9	3.8	3.3	3.8	5.4	7.1	9.8	17.9	6.0	3.8	2.7	1.1	6.0	7.6	12.5	00.0	100.
16	5.4	7.1	2.7	4.3	2.2	5.4	4.9	15.8	14.1	4.9	2.7	3.3	2.7	5.4	7.6	11.4	00.0	100.
17	4.3	8.2	2.2	3.8	3.8	5.4	10.3	12.5	13.6	3.3	1.6	3.3	2.2	4.3	7.6	13.0	.5	100.
18	4.3	7.6	3.3	3.8	5.4	6.5	13.0	12.0	9.8	3.3	2.2	2.7	1.1	4.9	6.5	13.6	00.0	100.
19	4.3	7.1	3.8	4.9	5.4	8.2	11.4	15.8	7.1	2.7	3.3	1.1	1.6	4.3	6.5	12.5	00.0	100.
20	4.9	7.1	3.8	2.7	6.5	8.7	14.7	13.6	8.2	3.3	1.6	1.6	1.1	3.3	5.4	13.6	00.0	100.
21	4.4	7.7	3.8	3.3	6.0	6.0	16.4	13.1	8.7	3.3	2.7	1.6	1.6	2.7	6.0	12.6	00.0	100.
22	8.7	3.3	3.8	1.6	7.1	8.2	11.5	15.3	10.4	3.3	3.3	2.2	.5	2.7	8.2	9.8	00.0	100.
23	9.3	2.2	2.7	2.2	5.5	8.2	8.7	16.4	11.5	3.3	3.8	3.3	1.6	2.7	8.7	9.3	.5	100.
24	6.5	4.3	1.6	2.7	4.3	9.8	6.0	15.8	14.1	5.4	2.7	2.7	4.3	2.7	7.6	9.2	00.0	100.
ALL	5.7	6.0	2.5	2.8	4.2	6.3	8.7	13.7	12.6	5.0	3.5	2.7	2.3	4.2	8.5	11.1	.0	100.

NUMBER OF OBS = 4412

B65

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
 VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.3	6.0	2.7	1.6	5.8	6.6	8.8	12.1	14.2	6.3	2.7	3.0	2.5	3.0	8.8	9.6	00.0	100.
2	7.9	5.5	2.7	1.9	3.8	7.1	7.9	11.8	15.3	6.0	4.1	2.2	3.0	2.7	8.2	9.3	.3	100.
3	6.8	6.6	3.6	1.6	3.3	6.0	7.1	10.4	15.9	5.2	5.5	2.2	2.7	4.4	8.8	9.9	00.0	100.
4	8.5	4.9	1.9	3.0	3.0	3.6	9.6	10.1	14.2	6.6	4.9	3.0	2.7	6.3	7.7	9.9	00.0	100.
5	6.8	5.5	1.9	3.3	3.0	3.3	7.4	11.0	13.4	6.3	3.8	3.3	5.2	6.6	7.7	11.5	00.0	100.
6	7.7	6.6	2.2	3.0	2.5	4.9	7.1	10.1	13.4	6.0	4.1	2.2	3.0	8.8	8.8	9.6	00.0	100.
7	6.0	7.7	2.5	2.2	3.6	3.6	7.1	12.3	12.6	4.9	4.4	1.9	3.3	5.8	11.5	10.7	00.0	100.
8	9.0	7.9	1.1	2.2	2.5	4.4	7.9	12.6	13.2	4.1	3.8	3.6	1.9	6.6	10.7	8.5	00.0	100.
9	8.8	6.6	2.2	2.5	3.3	4.1	6.8	13.4	12.9	4.7	3.8	4.4	1.4	4.4	12.1	8.8	00.0	100.
10	7.1	6.3	3.3	2.2	3.0	5.8	4.9	11.3	13.7	7.4	2.5	5.2	1.6	3.8	11.0	10.7	00.0	100.
11	8.2	6.6	2.2	3.6	3.8	4.1	6.0	9.0	13.4	9.0	4.7	3.3	1.4	3.0	10.1	11.5	00.0	100.
12	6.3	6.3	2.7	5.2	2.5	5.5	5.2	9.9	13.4	7.7	4.1	3.3	1.6	3.8	9.9	12.6	00.0	100.
13	4.4	6.8	4.1	2.5	3.8	4.7	5.5	12.1	14.5	5.8	4.4	3.6	3.3	3.3	10.1	11.2	00.0	100.
14	5.5	4.7	3.8	3.0	3.3	6.0	5.5	12.9	14.2	6.0	4.4	3.8	2.5	4.9	8.5	11.0	00.0	100.
15	6.6	5.8	3.8	2.7	2.7	4.1	7.1	8.5	15.6	7.1	5.5	3.0	3.0	4.7	8.2	11.5	00.0	100.
16	5.8	6.8	3.3	3.3	2.5	4.1	5.2	13.2	13.7	6.0	3.3	4.4	3.6	6.0	7.9	11.0	00.0	100.
17	4.9	7.7	3.0	2.5	3.3	5.2	7.7	11.8	13.2	3.8	3.6	4.7	2.7	5.2	7.7	12.9	.3	100.
18	4.9	7.9	3.6	3.0	4.1	4.7	9.9	11.2	11.0	3.8	5.2	2.5	2.7	5.2	6.8	13.4	00.0	100.
19	4.9	6.6	5.2	3.6	4.1	5.2	9.0	13.4	9.9	4.1	3.3	2.7	3.0	4.4	7.1	13.4	00.0	100.
20	4.7	6.8	4.1	4.1	4.1	5.8	10.4	13.2	9.6	3.8	2.7	3.6	2.2	3.0	6.6	15.3	00.0	100.
21	5.5	6.3	5.5	4.4	3.8	5.5	11.5	12.9	10.4	2.7	2.7	3.0	2.2	3.0	6.9	13.5	00.0	100.
22	9.3	3.0	4.4	4.4	4.7	7.1	10.4	14.0	9.3	4.1	3.3	2.5	1.4	2.7	7.4	11.8	00.0	100.
23	8.0	3.8	4.4	3.3	5.5	6.9	9.1	13.5	11.8	4.1	3.6	2.5	2.5	3.0	6.6	11.3	.3	100.
24	6.3	4.4	2.7	4.9	4.9	8.8	6.6	12.3	13.2	6.6	3.6	1.6	3.3	3.8	6.6	10.4	00.0	100.
ALL	6.7	6.1	3.2	3.1	3.6	5.3	7.7	11.8	13.0	5.5	3.9	3.1	2.6	4.5	8.6	11.2	.0	100.

NUMBER OF OBS = 8756

B66

Precipitation

YR	MON	DAY	1AM	2PM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12M	TOTAL
14	1	1	.00	.03	.02	.01	.01	.00	.00	.00	.00	.00	.00	.00	.08
14	1	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	8	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	1	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014 RAIN VERSION PC-1.0

B68

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12M	TOTAL
14	1	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	1	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

MONTH OF JANUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 6
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - .09 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .03 INCHES
MAXIMUM DAILY PRECIPITATION - .08 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 14 - .03 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 13 - .08 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 13 - .08 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 13 - .08 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 13 - .08 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 478
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 6
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - .09 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .03 INCHES
MAXIMUM DAILY PRECIPITATION - .08 INCHES

MONTH OF JANUARY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	6	16	28	35	41
.02	2	8	14	16	16
.03	1	7	13	15	15
.04	0	7	13	15	15
.05	0	5	11	14	14
.07	0	4	10	14	14
.10	0	0	0	0	0
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B71

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12MIDNT	TOTAL
14	2	1	.03	.04	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.09
14	2	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
14	2	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	2	17	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05

B72

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	2	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .01	.00 .00	.00 .00	.00 .00	.01
14	2	20	.00 .02	.00 .12	.00 .40	.00 .03	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.02 .00	.11 .00	.01 .00	.71
14	2	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	2	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B73

MONTH OF FEBRUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 672
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 20
TOTAL DAYS WITH PRECIPITATION - 5
TOTAL AMOUNT OF PRECIPITATION - 1.00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .40 INCHES
MAXIMUM DAILY PRECIPITATION - .71 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 20 HOUR 15 - .40 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 20 HOUR 11 - .69 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 20 HOUR 10 - .71 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 20 HOUR 10 - .71 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 21 - .72 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 512
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 12
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .28 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .05 INCHES
MAXIMUM DAILY PRECIPITATION - .14 INCHES

MONTH OF FEBRUARY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	20	43	67	86	104
.02	14	32	50	68	86
.03	9	28	46	65	83
.04	5	27	45	63	81
.05	4	26	44	62	80
.07	3	17	29	41	53
.10	3	14	26	38	50
.15	1	8	14	21	27
.20	1	7	13	19	25
.25	1	7	13	19	25
.30	1	6	12	18	24
.35	1	6	12	18	24
.40	1	6	12	18	24
.45	0	5	11	17	23
.50	0	5	11	17	23
.60	0	2	8	14	20
.70	0	0	6	12	18
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B75

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	3	1	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	2	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	3	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	4	.00 .03	.00 .02	.00 .02	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.07
14	3	5	.00 .00	.00 .00	.00 .00	.00 .04	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.04
14	3	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	7	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	9	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	12	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	13	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	15	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	3	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B76

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12M	TOTAL
14	3	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	3	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.23

B77

MONTH OF MARCH

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 5
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .34 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .23 INCHES
MAXIMUM DAILY PRECIPITATION - .23 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 12 - .23 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 12 - .23 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 12 - .23 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 7 - .23 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 1 - .23 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 265
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 4
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - .11 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .04 INCHES
MAXIMUM DAILY PRECIPITATION - .07 INCHES

MONTH OF MARCH

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	5	20	38	51	63
.02	5	20	38	51	63
.03	3	19	37	50	62
.04	2	18	36	49	61
.05	1	11	23	30	36
.07	1	10	22	29	35
.10	1	6	12	13	13
.15	1	6	12	13	13
.20	1	6	12	13	13
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B79

JAN-MAR INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2160
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 31
 TOTAL DAYS WITH PRECIPITATION - 10
 TOTAL AMOUNT OF PRECIPITATION - 1.43 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .40 INCHES
 MAXIMUM DAILY PRECIPITATION - .71 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 20 HOUR 15 - .40 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 20 HOUR 11 - .69 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 20 HOUR 10 - .71 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 20 HOUR 10 - .71 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 19 HOUR 21 - .72 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 1255
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 22
 TOTAL DAYS WITH PRECIPITATION - 7
 TOTAL AMOUNT OF PRECIPITATION - .48 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .05 INCHES
 MAXIMUM DAILY PRECIPITATION - .14 INCHES

JAN-MAR

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	31	84	144	189	231
.02	21	65	113	152	188
.03	13	59	107	147	183
.04	7	56	104	143	179
.05	5	46	88	122	152
.07	4	35	71	100	124
.10	4	20	38	51	63
.15	2	14	26	34	40
.20	2	13	25	32	38
.25	1	7	13	19	25
.30	1	6	12	18	24
.35	1	6	12	18	24
.40	1	6	12	18	24
.45	0	5	11	17	23
.50	0	5	11	17	23
.60	0	2	8	14	20
.70	0	0	6	12	18
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

B81

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2PM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12MNDT	TOTAL
14	4	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	2	.00	.38	.00	.00	.00	.01	.00	.00	.00	.00	.00	.01	.40
14	4	3	.00	.01	.07	.05	.03	.00	.00	.00	.00	.00	.00	.02	.19
14	4	4	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	4	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	13	.00	.00	.00	.00	.00	.00	.00	.15	.00	.01	.01	.00	.31
14	4	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12MNT	TOTAL
14	4	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
14	4	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
14	4	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12
14	4	24	.00	.00	.00	.02	.00	.00	.15	.16	.00	.03	.00	.00	.36
14	4	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.88	.04	1.06
14	4	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	4	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

MONTH OF APRIL

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 37
TOTAL DAYS WITH PRECIPITATION - 10
TOTAL AMOUNT OF PRECIPITATION - 2.49 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .88 INCHES
MAXIMUM DAILY PRECIPITATION - 1.06 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 11 - .88 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 10 - 1.05 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 8 - 1.06 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 8 - 1.06 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 8 - 1.06 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 38
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF APRIL

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	37	107	158	199	229
.02	18	79	127	165	196
.03	15	66	110	145	176
.04	12	54	98	135	161
.05	10	52	89	119	144
.07	8	45	83	114	139
.10	6	38	78	109	138
.15	5	30	64	92	116
.20	2	17	40	65	90
.25	2	17	39	63	88
.30	2	17	35	57	81
.35	2	12	30	48	68
.40	1	6	14	26	44
.45	1	6	12	23	35
.50	1	6	12	22	34
.60	1	6	12	18	24
.70	1	6	12	18	24
.80	1	6	12	18	24
.90	0	6	12	18	24
1.00	0	4	10	16	22
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B85

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	5	1	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	2	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	3	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	4	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	5	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	7	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	9	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.03 .00	.00 .00	.04 .00	.50 .00	.00 .00	.00 .00	.00 .01	.58
14	5	12	.00 .00	.00 .00	.00 .00	.02 .00	.04 .00	.05 .00	.11 .00	.11 .00	.00 .00	.00 .00	.00 .00	.00 .00	.33
14	5	13	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	15	.00 .00	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01
14	5	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	5	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10AM	11AM	12MNT	TOTAL
14	5	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	22	.00	.00	.00	.00	.41	.09	.10	.03	.00	.00	.00	.00	.63
14	5	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.98
14	5	26	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
14	5	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	5	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

MONTH OF MAY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 21
TOTAL DAYS WITH PRECIPITATION - 6
TOTAL AMOUNT OF PRECIPITATION - 3.57 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .84 INCHES
MAXIMUM DAILY PRECIPITATION - 1.98 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 22 - .84 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 22 - 1.78 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 15 - 2.02 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 15 - 2.02 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 15 - 2.02 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF MAY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	21	54	84	111	135
.02	19	44	68	92	111
.03	18	44	68	92	111
.04	16	40	64	88	108
.05	13	39	63	87	107
.07	10	39	63	87	107
.10	9	37	61	85	106
.15	4	32	57	81	103
.20	4	30	55	79	101
.25	4	23	47	71	94
.30	4	22	46	70	93
.35	4	19	37	55	73
.40	4	19	37	55	73
.45	3	18	36	54	72
.50	3	18	36	54	72
.60	2	11	23	35	52
.70	2	7	13	19	27
.80	1	7	13	19	26
.90	0	7	13	19	25
1.00	0	5	12	18	24
1.10	0	5	11	17	23
1.20	0	5	11	17	23
1.30	0	5	11	17	23
1.40	0	5	11	17	23
1.50	0	5	11	17	23
1.60	0	5	11	17	23
1.70	0	4	11	17	23
1.80	0	0	6	12	18
1.90	0	0	3	9	15
2.00	0	0	2	8	14

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	6	1	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .25	.00 .21	.00 .19	.00 .25	.00 .09	.99
14	6	2	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	3	.00 .00	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .60	.00 .81	.00 .00	1.42
14	6	4	.59 .00	.15 .00	.02 .00	.09 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.85
14	6	5	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	7	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.04 .00	.18 .00	.25 .00	.24 .00	.08 .00	.01 .00	.01 .00	.81
14	6	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	9	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	12	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	13	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	15	.00 .00	.00 .00	.09 .00	.10 .00	.17 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.36
14	6	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B90

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	6	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	19	.00 .00	.00 .00	.00 .00	.00 .14	.00 .04	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.18
14	6	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	21	.00 .00	.00 .00	.33 .00	.07 .00	.03 .00	.06 .00	.03 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .00	.53
14	6	22	.00 .13	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.02 .00	.10 .00	.26
14	6	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	27	.00 .01	.00 .00	.13 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	1.14 .00	.12 .00	1.40
14	6	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01
14	6	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	6	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B91

MONTH OF JUNE

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 39
TOTAL DAYS WITH PRECIPITATION - 10
TOTAL AMOUNT OF PRECIPITATION - 6.81 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.14 INCHES
MAXIMUM DAILY PRECIPITATION - 1.42 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 11 - 1.14 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 3 HOUR 22 - 2.17 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 3 HOUR 22 - 2.26 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 3 HOUR 14 - 2.27 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 3 HOUR 14 - 2.27 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF JUNE

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	39	95	153	206	250
.02	32	79	129	178	222
.03	30	77	127	175	219
.04	28	77	127	175	219
.05	26	74	124	172	216
.07	25	74	124	172	216
.10	20	71	121	169	213
.15	14	57	105	153	197
.20	10	50	92	134	172
.25	8	47	89	131	169
.30	5	40	76	112	145
.35	4	37	73	109	142
.40	4	33	63	93	120
.45	4	31	61	91	118
.50	4	28	58	88	116
.60	3	24	48	72	94
.70	2	22	46	70	93
.80	2	18	42	66	89
.90	1	15	33	51	68
1.00	1	12	24	36	48
1.10	1	12	24	36	48
1.20	0	11	24	36	48
1.30	0	6	15	27	39
1.40	0	6	14	26	38
1.50	0	4	10	16	22
1.60	0	4	10	16	22
1.70	0	3	9	15	21
1.80	0	3	9	15	21
1.90	0	3	9	15	21
2.00	0	3	9	15	21

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B93

APR-JUN INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2184
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 97
TOTAL DAYS WITH PRECIPITATION - 26
TOTAL AMOUNT OF PRECIPITATION - 12.87 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.14 INCHES
MAXIMUM DAILY PRECIPITATION - 1.98 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 27 HOUR 11 - 1.14 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 22 - 2.17 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 22 - 2.26 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 14 - 2.27 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 14 - 2.27 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 38
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

APR-JUN INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	97	256	398	525	633
.02	69	202	324	435	533
.03	63	187	305	412	510
.04	56	171	289	398	492
.05	49	165	276	378	471
.07	43	158	270	373	466
.10	35	146	260	363	461
.15	23	119	226	326	420
.20	16	97	187	278	367
.25	14	87	175	265	355
.30	11	79	157	239	322
.35	10	68	140	212	286
.40	9	58	114	174	240
.45	8	55	109	168	228
.50	8	52	106	164	224
.60	6	41	83	125	172
.70	5	35	71	107	145
.80	4	31	67	103	140
.90	1	28	58	88	118
1.00	1	21	46	70	94
1.10	1	17	35	53	71
1.20	0	16	35	53	71
1.30	0	11	26	44	62
1.40	0	11	25	43	61
1.50	0	9	21	33	45
1.60	0	9	21	33	45
1.70	0	7	20	32	44
1.80	0	3	15	27	39
1.90	0	3	12	24	36
2.00	0	3	11	23	35

B95

JAN-JUN INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4344
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 128
 TOTAL DAYS WITH PRECIPITATION - 36
 TOTAL AMOUNT OF PRECIPITATION - 14.30 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 1.14 INCHES
 MAXIMUM DAILY PRECIPITATION - 1.98 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 27 HOUR 11 - 1.14 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 22 - 2.17 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 22 - 2.26 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 14 - 2.27 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 3 HOUR 14 - 2.27 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 1293
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 22
 TOTAL DAYS WITH PRECIPITATION - 7
 TOTAL AMOUNT OF PRECIPITATION - .48 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .05 INCHES
 MAXIMUM DAILY PRECIPITATION - .14 INCHES

JAN-JUN INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	128	340	542	719	875
.02	90	267	437	592	732
.03	76	246	412	564	704
.04	63	227	393	546	682
.05	54	211	364	505	634
.07	47	193	341	478	601
.10	39	166	298	419	535
.15	25	133	252	365	471
.20	18	110	212	315	416
.25	15	94	188	284	380
.30	12	85	169	257	346
.35	11	74	152	230	310
.40	10	64	126	192	264
.45	8	60	120	185	251
.50	8	57	117	181	247
.60	6	43	91	139	192
.70	5	35	77	119	163
.80	4	31	67	103	140
.90	1	28	58	88	118
1.00	1	21	46	70	94
1.10	1	17	35	53	71
1.20	0	16	35	53	71
1.30	0	11	26	44	62
1.40	0	11	25	43	61
1.50	0	9	21	33	45
1.60	0	9	21	33	45
1.70	0	7	20	32	44
1.80	0	3	15	27	39
1.90	0	3	12	24	36
2.00	0	3	11	23	35

B97

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	7	1	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	2	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	3	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	4	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	5	.00 .00	.00 .00	.00 .00	.00 .00	.10 .00	.26 .00	.01 .00	.11 .00	.03 .00	.00 .00	.00 .00	.00 .00	.51
14	7	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	7	.00 .00	.00 .00	.00 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .04	.00 .95	.00 .24	.00 .03	.00 .00	1.27
14	7	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	9	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.21 .00	.00 .00	.00 .00	.00 .00	.21
14	7	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01 .00	.01 .00	.00 .00	.00 .00	.00 .00	.02
14	7	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	12	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .34	.00 .00	.34
14	7	13	.32 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 1.14	1.46
14	7	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.08 .00	.01 .00	.05 .00	.00 .00	.00 .00	.00 .00	.14
14	7	15	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B98

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	7	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	7	31	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .08	.00 .00	.08

B99

MONTH OF JULY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 20
TOTAL DAYS WITH PRECIPITATION - 8
TOTAL AMOUNT OF PRECIPITATION - 4.03 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.14 INCHES
MAXIMUM DAILY PRECIPITATION - 1.46 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 24 - 1.14 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 7 HOUR 20 - 1.26 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 24 - 1.28 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 24 - 1.28 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 1 - 1.46 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF JULY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	20	62	105	145	179
.02	15	54	91	127	162
.03	15	49	80	110	139
.04	13	47	78	108	137
.05	12	46	77	108	137
.07	11	44	75	105	134
.10	9	40	73	103	132
.15	7	34	64	94	123
.20	7	33	63	93	122
.25	5	27	51	75	98
.30	4	26	50	74	97
.35	2	22	46	70	94
.40	2	20	44	68	92
.45	2	19	43	67	91
.50	2	18	42	66	90
.60	2	16	34	52	70
.70	2	12	24	36	48
.80	2	12	24	36	48
.90	2	12	24	36	48
1.00	1	11	23	36	48
1.10	1	11	23	35	47
1.20	0	5	16	28	41
1.30	0	0	0	0	1
1.40	0	0	0	0	1
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B101

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12MNT	TOTAL
14	8	1	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	8	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	3	.00	.00	.79	.08	.00	.00	.00	.00	.00	.00	.00	.00	.87
14	8	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	6	.00	.00	.00	.00	.00	.00	.06	1.57	.08	.00	.00	.00	1.71
14	8	7	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	8	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	9	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00	.03
14	8	10	.19	.05	.08	.04	.02	.00	.01	.00	.00	.00	.00	.00	.39
14	8	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	8	15	.00	.02	.00	.00	.00	.00	.00	.00	.00	.04	.00	.03	.24
14	8	16	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	8	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

B102

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	8	18	.01 .00	.14 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.15
14	8	19	.17 .00	.20 .00	.58 .00	.36 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	1.31
14	8	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	8	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	8	22	.00 .00	.00 .09	.00 .00	.00 .00	.00 .00	.19 .00	.00 .00	.00 .00	.00 .00	.02 .00	.14 .00	.09 .00	.53
14	8	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	8	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.04 .00	.00 .00	.00 .00	.00 .00	.04
14	8	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	8	26	.00 .00	.00 .00	.07 .00	.01 .01	.00 .00	.00 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.10
14	8	27	.00 .01	.00 .00	.01 .00	.53 .00	.00 .00	.00 .00	.00 .00	.00 .01	.00 .00	.00 .00	.06 .00	.03 .00	.65
14	8	28	.13 .00	.14 .00	.00 .00	.00 .00	.00 .00	.01 .00	.39 .00	.06 .00	.04 .00	.09 .00	.03 .00	.00 .00	.89
14	8	29	.00 .00	.00 .00	.00 .02	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.03 .00	.01 .00	.00 .00	.00 .00	.06
14	8	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	8	31	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .04	.00 .11	.00 .00	.00 .00	.00 .01	.00 .00	.16

B103

MONTH OF AUGUST

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 57
TOTAL DAYS WITH PRECIPITATION - 17
TOTAL AMOUNT OF PRECIPITATION - 7.16 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.57 INCHES
MAXIMUM DAILY PRECIPITATION - 1.71 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 20 - 1.57 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 19 - 1.71 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 19 - 1.71 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 19 - 1.71 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 19 - 1.72 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF AUGUST

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	57	166	248	320	380
.02	43	136	220	292	353
.03	38	130	209	283	348
.04	33	118	191	258	324
.05	28	105	173	234	294
.07	23	101	163	219	273
.10	15	86	146	201	254
.15	10	70	125	180	232
.20	7	51	99	148	195
.25	6	47	89	136	184
.30	6	40	84	131	172
.35	6	36	78	123	166
.40	4	30	66	102	138
.45	4	30	64	100	136
.50	4	29	64	100	136
.60	2	20	53	83	113
.70	2	18	42	66	94
.80	1	17	38	62	90
.90	1	12	24	39	60
1.00	1	10	22	34	46
1.10	1	10	22	34	46
1.20	1	9	21	33	45
1.30	1	9	21	33	45
1.40	1	6	12	18	24
1.50	1	6	12	18	24
1.60	0	6	12	18	24
1.70	0	4	10	16	22
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B105

YR	MON	DAY	1AM	2PM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12M	TOTAL
14	9	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	3	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.08
14	9	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	5	.00	.04	.00	.00	.00	.00	.00	.00	.00	.20	.09	.02	.39
14	9	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.95
14	9	10	.02	.06	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.47
14	9	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	12	.00	.00	.00	.01	.06	.02	.01	.00	.00	.00	.00	.01	.12
14	9	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	9	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	9	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01 .00	.41 .00	.00 .00	.42
14	9	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	23	.00 .00	.00 .01	.00 .04	.00 .18	.00 .19	.00 .02	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.44
14	9	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.02 .00	.06 .00	.01 .00	.01 .00	.00 .00	.10
14	9	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	9	30	.00 .00	.00 .00	.00 .16	.00 .08	.00 .01	.00 .00	.00 .24	.00 .01	.00 .04	.00 .06	.00 .48	.00 .00	1.08

B107

MONTH OF SEPTEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 44
TOTAL DAYS WITH PRECIPITATION - 9
TOTAL AMOUNT OF PRECIPITATION - 6.05 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.80 INCHES
MAXIMUM DAILY PRECIPITATION - 2.95 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 9 HOUR 18 - 1.80 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 9 HOUR 17 - 2.83 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 9 HOUR 17 - 3.04 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 9 HOUR 17 - 3.04 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 9 HOUR 17 - 3.04 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF SEPTEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	44	91	139	183	222
.02	30	81	129	173	213
.03	24	76	124	170	210
.04	24	75	123	169	209
.05	21	72	120	166	206
.07	17	71	119	165	205
.10	13	56	99	141	177
.15	12	48	78	108	138
.20	9	46	76	106	136
.25	7	41	71	102	132
.30	6	38	68	99	129
.35	5	37	67	97	127
.40	3	24	44	63	83
.45	2	14	22	30	44
.50	1	13	21	27	39
.60	1	11	18	24	30
.70	1	11	17	23	29
.80	1	10	17	23	29
.90	1	6	14	20	26
1.00	1	6	14	20	26
1.10	1	6	12	18	24
1.20	1	6	12	18	24
1.30	1	6	12	18	24
1.40	1	6	12	18	24
1.50	1	6	12	18	24
1.60	1	6	12	18	24
1.70	1	6	12	18	24
1.80	1	6	12	18	24
1.90	0	6	12	18	24
2.00	0	6	12	18	24

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B109

JUL-SEP INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 121
TOTAL DAYS WITH PRECIPITATION - 34
TOTAL AMOUNT OF PRECIPITATION - 17.24 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.80 INCHES
MAXIMUM DAILY PRECIPITATION - 2.95 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 18 - 1.80 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 2.83 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 1
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

JUL-SEP INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	121	328	513	681	826
.02	88	276	457	621	769
.03	77	260	430	592	738
.04	70	245	409	564	711
.05	61	228	387	537	678
.07	51	221	374	518	653
.10	37	183	325	458	582
.15	29	152	273	394	511
.20	23	130	238	347	453
.25	18	115	211	313	414
.30	16	104	202	304	398
.35	13	95	191	290	387
.40	9	74	154	233	313
.45	8	63	129	197	271
.50	7	60	127	193	265
.60	5	47	105	159	213
.70	5	41	83	125	171
.80	4	39	79	121	167
.90	4	30	62	95	134
1.00	3	27	59	90	120
1.10	3	27	57	87	117
1.20	2	20	49	79	110
1.30	2	15	33	51	70
1.40	2	12	24	36	49
1.50	2	12	24	36	48
1.60	1	12	24	36	48
1.70	1	10	22	34	46
1.80	1	6	12	18	24
1.90	0	6	12	18	24
2.00	0	6	12	18	24

B111

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	10	1	.03 .00	.02 .00	.11 .00	.09 .00	.03 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .15	.43
14	10	2	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.32 .00	.00 .00	.00 .00	.02 .00	.01 .00	.00 .00	.00 .00	.36
14	10	3	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	4	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	5	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .03	.00 .00	.00 .00	.00 .00	.00 .00	.03
14	10	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	7	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	9	.00 .00	.01 .00	.21 .00	.00 .00	.03 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.25
14	10	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	12	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .03	.00 .00	.00 .00	.00 .00	.00 .00	.03
14	10	13	.00 .08	.00 .08	.00 .06	.00 .03	.00 .03	.03 .02	.12 .02	.09 .01	.07 .00	.09 .00	.07 .00	.09 .01	.90
14	10	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	15	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	10	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B112

YR	MON	DAY	1AM	2PM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12MNT	TOTAL
14	10	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.00	.33
14	10	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.16
14	10	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	10	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

MONTH OF OCTOBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 34
TOTAL DAYS WITH PRECIPITATION - 8
TOTAL AMOUNT OF PRECIPITATION - 2.49 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .32 INCHES
MAXIMUM DAILY PRECIPITATION - .90 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 2 HOUR 6 - .32 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 7 - .53 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 6 - .84 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 6 - .89 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 20 - .91 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 3
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

B114

MONTH OF OCTOBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	34	82	122	158	189
.02	29	74	114	150	181
.03	25	72	112	148	179
.04	17	55	87	117	143
.05	17	52	83	113	139
.07	16	51	81	111	137
.10	8	50	80	110	136
.15	6	48	78	108	135
.20	2	32	56	80	105
.25	1	26	51	76	102
.30	1	21	39	57	78
.35	0	10	26	38	53
.40	0	7	20	32	46
.45	0	5	18	30	42
.50	0	1	12	26	38
.60	0	0	8	14	20
.70	0	0	6	12	18
.80	0	0	3	9	16
.90	0	0	0	0	7
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B115

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12M	TOTAL
14	11	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
14	11	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	11	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	11	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	23	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.01 .00	.01 .00	.00 .00	.00 .00	.01 .00	.01 .00	.00 .00	.05
14	11	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	26	.00 .00	.02 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.02
14	11	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	11	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B117

MONTH OF NOVEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 7
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .08 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .02 INCHES
MAXIMUM DAILY PRECIPITATION - .05 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 2 - .02 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 23 HOUR 6 - .04 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 23 HOUR 6 - .05 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 23 HOUR 6 - .05 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 23 HOUR 6 - .05 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 337
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

MONTH OF NOVEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	7	25	43	61	79
.02	1	16	28	40	52
.03	0	6	12	18	24
.04	0	1	8	14	20
.05	0	0	5	11	17
.07	0	0	0	0	0
.10	0	0	0	0	0
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B119

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	12	1	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	2	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	3	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	4	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	5	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01
14	12	6	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	7	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .01	.00 .00	.00 .00	.00 .00	.01
14	12	8	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	9	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	11	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	12	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	13	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	14	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .05	.00 .15	.00 .01	.00 .01	.00 .00	.22
14	12	15	.07 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .03	.00 .03	.12 .00	.04 .00	.00 .00	.15 .00	.06 .11	.61
14	12	16	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	17	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B120

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
14	12	18	.00 .04	.00 .01	.00 .01	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.02 .00	.08
14	12	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	22	.00 .06	.00 .08	.00 .06	.01 .00	.02 .01	.03 .02	.02 .00	.06 .00	.08 .00	.07 .00	.05 .00	.06 .00	.63
14	12	23	.00 .00	.00 .00	.00 .01	.00 .04	.00 .01	.00 .01	.00 .00	.00 .01	.00 .00	.00 .01	.00 .01	.00 .00	.10
14	12	24	.00 .00	.01 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.01
14	12	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
14	12	31	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

B121

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

MONTH OF DECEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 40
TOTAL DAYS WITH PRECIPITATION - 8
TOTAL AMOUNT OF PRECIPITATION - 1.67 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .15 INCHES
MAXIMUM DAILY PRECIPITATION - .63 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 15 HOUR 11 - .15 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 22 HOUR 9 - .40 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 22 HOUR 4 - .60 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 20 - .66 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 20 - .72 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 326
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 4
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .08 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .04 INCHES
MAXIMUM DAILY PRECIPITATION - .08 INCHES

B122

MONTH OF DECEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	40	91	128	164	197
.02	25	73	98	122	144
.03	21	69	94	118	141
.04	18	61	89	113	138
.05	15	59	87	111	135
.07	8	47	79	103	129
.10	4	33	62	80	98
.15	2	25	49	62	74
.20	0	22	42	55	67
.25	0	13	35	48	60
.30	0	9	23	39	51
.35	0	5	20	37	49
.40	0	1	13	35	47
.45	0	0	8	25	43
.50	0	0	6	18	39
.60	0	0	1	13	26
.70	0	0	0	0	1
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

B123

OCT-DEC INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 81
 TOTAL DAYS WITH PRECIPITATION - 19
 TOTAL AMOUNT OF PRECIPITATION - 4.24 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .32 INCHES
 MAXIMUM DAILY PRECIPITATION - .90 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 2 HOUR 6 - .32 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 13 HOUR 7 - .53 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 13 HOUR 6 - .84 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 13 HOUR 6 - .89 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 12 HOUR 20 - .91 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 666
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 4
 TOTAL DAYS WITH PRECIPITATION - 1
 TOTAL AMOUNT OF PRECIPITATION - .08 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .04 INCHES
 MAXIMUM DAILY PRECIPITATION - .08 INCHES

OCT-DEC INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	81	198	293	383	465
.02	55	163	240	312	377
.03	46	147	218	284	344
.04	35	117	184	244	301
.05	32	111	175	235	291
.07	24	98	160	214	266
.10	12	83	142	190	234
.15	8	73	127	170	209
.20	2	54	98	135	172
.25	1	39	86	124	162
.30	1	30	62	96	129
.35	0	15	46	75	102
.40	0	8	33	67	93
.45	0	5	26	55	85
.50	0	1	18	44	77
.60	0	0	9	27	46
.70	0	0	6	12	19
.80	0	0	3	9	16
.90	0	0	0	0	7
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

B125

JUL-DEC INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4416
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 202
 TOTAL DAYS WITH PRECIPITATION - 53
 TOTAL AMOUNT OF PRECIPITATION - 21.48 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 1.80 INCHES
 MAXIMUM DAILY PRECIPITATION - 2.95 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 18 - 1.80 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 2.83 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 9 DAY 9 HOUR 17 - 3.04 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 667
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 4
 TOTAL DAYS WITH PRECIPITATION - 1
 TOTAL AMOUNT OF PRECIPITATION - .08 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .04 INCHES
 MAXIMUM DAILY PRECIPITATION - .08 INCHES

JUL-DEC INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	202	531	817	1081	1314
.02	143	444	708	950	1169
.03	123	412	659	893	1105
.04	105	367	604	825	1035
.05	93	344	573	789	992
.07	75	324	545	749	942
.10	49	271	478	665	839
.15	37	230	411	581	743
.20	25	189	347	499	648
.25	19	159	308	454	599
.30	17	138	274	416	549
.35	13	114	247	381	511
.40	9	86	197	316	428
.45	8	72	165	268	378
.50	7	65	155	253	364
.60	5	51	124	202	281
.70	5	43	99	153	212
.80	4	39	91	145	204
.90	4	30	68	107	159
1.00	3	27	65	102	138
1.10	3	27	61	99	135
1.20	2	20	49	86	123
1.30	2	15	33	56	81
1.40	2	12	24	36	49
1.50	2	12	24	36	48
1.60	1	12	24	36	48
1.70	1	10	22	34	46
1.80	1	6	12	18	24
1.90	0	6	12	18	24
2.00	0	6	12	18	24

B127

JAN-DEC INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 8760
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 330
 TOTAL DAYS WITH PRECIPITATION - 89
 TOTAL AMOUNT OF PRECIPITATION - 35.78 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 1.80 INCHES
 MAXIMUM DAILY PRECIPITATION - 2.95 INCHES

1	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH	9	DAY	9	HOUR	18	-	1.80	INCHES
6	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH	9	DAY	9	HOUR	17	-	2.83	INCHES
12	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH	9	DAY	9	HOUR	17	-	3.04	INCHES
18	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH	9	DAY	9	HOUR	17	-	3.04	INCHES
24	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH	9	DAY	9	HOUR	17	-	3.04	INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 1960
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 26
 TOTAL DAYS WITH PRECIPITATION - 8
 TOTAL AMOUNT OF PRECIPITATION - .56 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - .05 INCHES
 MAXIMUM DAILY PRECIPITATION - .14 INCHES

JAN-DEC INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
.01	330	871	1359	1800	2189
.02	233	711	1145	1542	1901
.03	199	658	1071	1457	1809
.04	168	594	997	1371	1717
.05	147	555	937	1294	1626
.07	122	517	886	1227	1543
.10	88	437	776	1084	1374
.15	62	363	663	946	1214
.20	43	299	559	814	1064
.25	34	253	496	738	979
.30	29	223	443	673	895
.35	24	188	399	611	821
.40	19	150	323	508	692
.45	16	132	285	453	629
.50	15	122	272	434	611
.60	11	94	215	341	473
.70	10	78	176	272	375
.80	8	70	158	248	344
.90	5	58	126	195	277
1.00	4	48	111	172	232
1.10	4	44	96	152	206
1.20	2	36	84	139	194
1.30	2	26	59	100	143
1.40	2	23	49	79	110
1.50	2	21	45	69	93
1.60	1	21	45	69	93
1.70	1	17	42	66	90
1.80	1	9	27	45	63
1.90	0	9	24	42	60
2.00	0	9	23	41	59

B129

JOINT FREQUENCY DISTRIBUTION TABLES

The tables presented in this section are results obtained from processing of the hourly meteorological data collected at the Cooper Nuclear Station (CNS). The joint frequency distribution (JFD) tables represent the frequency of occurrence, in number of observations, that a particular wind speed, wind direction, and stability category occurred simultaneously. On a quarterly and semiannual basis, the JFDs were produced for wind speed and wind direction by atmospheric stability corresponding to the seven Pasquill stability classes, and for wind speed and wind direction for all stability categories combined. Atmospheric stability was classified per Regulatory Guide 1.23, using the 100-meter to 10-meter temperature difference (ΔT) for the 100-meter JFDs and the 60-meter to 10-meter ΔT for the 10-meter JFDs.

JFDs of 10-Meter Wind vs. Delta T

January-March 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
7.51-12.50	2	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	6
12.51-18.50	3	2	0	0	0	0	0	0	0	0	0	0	0	1	1	6	13
18.51-24.00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	10	1	1	0	0	1	0	0	13
TOTAL	5	3	2	0	1	0	0	0	12	1	2	0	0	2	2	6	36

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3.51- 7.50	0	2	0	0	1	0	2	0	1	1	1	0	0	0	0	0	8
7.51-12.50	2	5	0	1	0	0	0	0	1	1	1	0	0	0	2	1	14
12.51-18.50	1	0	0	0	0	0	0	1	2	1	1	0	0	1	4	3	14
18.51-24.00	0	1	0	0	0	0	0	2	1	1	0	0	0	1	2	2	10
>24.00	0	0	0	0	0	0	0	0	1	3	0	0	1	1	0	0	6
TOTAL	3	8	0	1	1	0	3	3	6	7	3	0	1	3	8	6	53

B132

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3.51- 7.50	3	4	3	1	0	1	2	0	2	0	0	0	1	0	1	1	19
7.51-12.50	11	2	1	0	1	0	2	5	2	3	0	1	3	0	4	7	42
12.51-18.50	10	0	0	0	0	0	0	5	5	2	2	3	0	4	8	6	45
18.51-24.00	0	1	0	0	0	0	0	1	1	1	2	0	0	0	2	1	9
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	3
TOTAL	24	8	4	1	1	1	4	11	11	6	4	4	4	5	15	16	119

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	6	2	4	2	3	0	0	4	0	4	0	2	2	3	1	0	33
3.51- 7.50	53	32	26	17	16	11	19	19	5	6	14	7	4	9	7	22	267
7.51-12.50	88	36	10	4	5	19	29	42	40	17	12	11	9	18	34	53	427
12.51-18.50	55	8	0	0	0	0	7	17	19	14	15	6	2	31	55	80	309
18.51-24.00	3	5	0	0	0	0	0	6	13	6	2	2	0	11	18	44	110
>24.00	0	0	0	0	0	0	0	0	11	1	0	0	0	2	11	15	40
TOTAL	205	83	40	23	24	30	55	88	88	48	43	28	17	74	126	214	1186

B133

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	9	4	6	4	3	0	1	3	7	3	2	3	3	2	9	5	64
3.51- 7.50	21	3	3	2	4	6	11	18	19	4	2	6	8	10	27	20	164
7.51-12.50	0	1	0	0	1	3	10	20	29	18	13	10	10	19	31	13	178
12.51-18.50	0	0	0	0	0	0	1	13	23	14	2	3	1	7	6	5	75
18.51-24.00	0	0	0	0	0	0	0	2	10	1	0	0	0	0	0	0	13
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	30	8	9	6	8	9	23	56	89	40	19	22	22	38	73	43	496

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	4	0	0	0	0	0	0	5	11	18	7	3	4	3	6	0	61
3.51- 7.50	1	0	0	0	1	0	2	5	20	5	7	5	1	2	0	0	49
7.51-12.50	0	0	0	0	0	0	0	1	12	2	0	7	5	9	2	1	39
12.51-18.50	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	0	0	0	1	0	2	11	46	25	14	15	10	15	8	1	154

B134

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	5
1.01- 3.50	5	3	0	3	0	1	3	16	22	12	5	2	4	5	5	5	91
3.51- 7.50	1	0	0	0	0	0	0	1	2	4	3	4	0	1	1	0	17
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	3	0	3	0	1	3	17	24	17	9	6	5	6	6	5	116

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	7
1.01- 3.50	24	10	10	9	6	1	5	28	40	37	14	10	13	13	21	10	251
3.51- 7.50	79	41	32	20	23	18	36	43	50	20	27	22	14	22	36	43	526
7.51-12.50	103	45	13	5	7	22	41	68	84	42	26	29	28	46	74	75	708
12.51-18.50	69	10	0	0	0	0	8	36	52	31	21	12	3	45	74	100	461
18.51-24.00	3	7	0	0	0	0	0	11	26	9	5	2	0	12	22	47	144
>24.00	0	0	0	0	0	0	0	0	24	5	1	0	1	5	11	16	63
TOTAL	278	113	55	34	36	41	90	186	276	144	94	75	59	143	238	291	2160

B135

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160

TOTAL NUMBER OF VALID OBSERVATIONS: 2160

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 10.3 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.67	2.45	5.51	54.91	22.96	7.13	5.37

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	5	3	2	0	1	0	0	0	12	1	2	0	0	2	2	6	0
B	3	8	0	1	1	0	3	3	6	7	3	0	1	3	8	6	0
C	24	8	4	1	1	1	4	11	11	6	4	4	4	5	15	16	0
D	205	83	40	23	24	30	55	88	88	48	43	28	17	74	126	214	0
E	30	8	9	6	8	9	23	56	89	40	19	22	22	38	73	43	1
F	5	0	0	0	1	0	2	11	46	25	14	15	10	15	8	1	1
G	6	3	0	3	0	1	3	17	24	17	9	6	5	6	6	5	5
TOTAL	278	113	55	34	36	41	90	186	276	144	94	75	59	143	238	291	7

B136

JFDs of 10-Meter Wind vs. Delta T

April-June 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7.51-12.50	0	3	2	0	0	0	4	8	1	0	0	1	0	1	0	0	20
12.51-18.50	3	3	1	0	0	0	2	7	5	3	0	0	0	0	0	11	35
18.51-24.00	4	0	0	0	0	0	0	0	18	3	0	0	0	0	0	4	29
>24.00	0	0	0	0	0	0	0	5	13	1	0	0	0	0	0	0	19
TOTAL	7	6	3	0	0	0	7	20	37	7	0	1	0	1	0	15	104

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3.51- 7.50	2	1	3	2	0	5	2	3	1	0	0	0	1	0	0	0	20
7.51-12.50	0	4	2	3	0	2	4	8	7	0	0	0	0	2	0	3	35
12.51-18.50	5	2	1	1	4	0	2	5	6	5	0	0	0	0	0	9	40
18.51-24.00	1	0	0	0	0	0	0	3	4	3	0	0	0	0	0	0	11
>24.00	0	0	0	0	0	0	0	3	6	1	0	0	0	0	0	0	10
TOTAL	8	7	6	6	4	7	8	22	24	9	1	0	1	2	0	12	117

B138

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	4
3.51- 7.50	6	8	2	2	6	8	5	3	2	3	3	0	1	3	1	2	55
7.51-12.50	1	4	6	4	2	4	12	4	6	0	1	2	5	1	1	2	55
12.51-18.50	4	2	0	0	3	0	2	8	6	2	2	3	4	0	1	7	44
18.51-24.00	0	0	0	0	0	0	0	8	5	0	0	0	0	0	0	0	13
>24.00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
TOTAL	11	14	8	6	11	15	19	23	21	6	6	5	11	4	3	11	174

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	3	2	3	2	5	10	3	7	3	1	2	1	0	2	0	0	44
3.51- 7.50	8	20	19	19	17	37	24	15	14	14	12	5	9	4	10	7	234
7.51-12.50	23	19	20	17	5	13	38	32	27	18	8	14	11	26	22	37	330
12.51-18.50	13	0	2	2	4	0	14	35	17	10	5	3	1	6	44	48	204
18.51-24.00	1	3	0	0	0	0	0	17	21	3	2	0	0	1	11	11	70
>24.00	7	1	0	0	0	0	0	6	13	0	0	0	0	0	1	6	34
TOTAL	55	45	44	40	31	60	79	112	95	46	29	23	21	39	88	109	917

B139

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	11	7	6	6	7	9	12	11	12	5	4	2	3	3	4	8	110
3.51- 7.50	13	10	11	12	9	13	13	29	37	15	4	9	11	5	6	15	212
7.51-12.50	25	4	3	8	3	4	16	56	39	9	4	3	2	2	9	12	199
12.51-18.50	2	0	0	0	0	0	9	22	18	2	1	0	1	0	1	3	59
18.51-24.00	1	0	0	0	0	0	0	6	5	0	0	0	0	0	0	0	12
>24.00	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
TOTAL	53	21	20	26	19	26	50	124	113	31	13	14	17	10	20	38	596

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	8
1.01- 3.50	12	6	3	1	1	1	1	5	16	8	8	5	5	6	15	15	108
3.51- 7.50	10	2	0	0	0	1	1	4	11	0	1	3	3	4	5	2	47
7.51-12.50	2	0	0	0	0	0	0	0	1	1	2	1	5	0	0	0	12
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	24	8	3	1	1	2	2	9	28	9	11	9	13	10	20	17	175

B140

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	8
1.01- 3.50	4	0	0	1	0	0	1	7	23	7	4	4	4	9	5	14	83
3.51- 7.50	1	0	0	0	0	0	0	1	1	2	0	0	1	0	2	1	9
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	0	0	1	0	0	1	8	24	10	4	4	5	9	7	15	101

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	18
1.01- 3.50	30	15	12	10	13	23	17	30	54	21	19	12	13	20	24	37	350
3.51- 7.50	40	41	35	35	32	64	46	55	66	34	20	17	26	16	24	27	578
7.51-12.50	51	34	33	32	10	23	74	108	81	29	15	21	23	32	32	54	652
12.51-18.50	27	7	4	3	11	0	29	77	52	22	8	6	6	6	46	78	382
18.51-24.00	7	3	0	0	0	0	0	34	53	9	2	0	0	1	11	15	135
>24.00	8	1	0	0	0	0	0	14	36	3	0	0	0	0	1	6	69
TOTAL	163	101	84	80	66	110	166	318	342	118	64	56	68	75	138	217	2184

B141

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2184

TOTAL NUMBER OF VALID OBSERVATIONS: 2184

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 9.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
4.76	5.36	7.97	41.99	27.29	8.01	4.62

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	7	6	3	0	0	0	7	20	37	7	0	1	0	1	0	15	0
B	8	7	6	6	4	7	8	22	24	9	1	0	1	2	0	12	0
C	11	14	8	6	11	15	19	23	21	6	6	5	11	4	3	11	0
D	55	45	44	40	31	60	79	112	95	46	29	23	21	39	88	109	1
E	53	21	20	26	19	26	50	124	113	31	13	14	17	10	20	38	1
F	24	8	3	1	1	2	2	9	28	9	11	9	13	10	20	17	8
G	5	0	0	1	0	0	1	8	24	10	4	4	5	9	7	15	8
TOTAL	163	101	84	80	66	110	166	318	342	118	64	56	68	75	138	217	18

B142

JFDs of 10-Meter Wind vs. Delta T

January-June 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
7.51-12.50	2	4	4	0	0	0	4	8	1	0	0	1	0	1	1	0	26
12.51-18.50	6	5	1	0	0	0	2	7	5	3	0	0	0	1	1	17	48
18.51-24.00	4	0	0	0	0	0	0	0	19	3	1	0	0	0	0	4	31
>24.00	0	0	0	0	0	0	0	5	23	2	1	0	0	1	0	0	32
TOTAL	12	9	5	0	1	0	7	20	49	8	2	1	0	3	2	21	140

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
3.51- 7.50	2	3	3	2	1	5	4	3	2	1	1	0	1	0	0	0	28
7.51-12.50	2	9	2	4	0	2	4	8	8	1	1	0	0	2	2	4	49
12.51-18.50	6	2	1	1	4	0	2	6	8	6	1	0	0	1	4	12	54
18.51-24.00	1	1	0	0	0	0	0	5	5	4	0	0	0	1	2	2	21
>24.00	0	0	0	0	0	0	0	3	7	4	0	0	1	1	0	0	16
TOTAL	11	15	6	7	5	7	11	25	30	16	4	0	2	5	8	18	170

B144

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	0	0	0	3	0	0	0	0	0	0	1	0	0	0	5
3.51- 7.50	9	12	5	3	6	9	7	3	4	3	3	0	2	3	2	3	74
7.51-12.50	12	6	7	4	3	4	14	9	8	3	1	3	8	1	5	9	97
12.51-18.50	14	2	0	0	3	0	2	13	11	4	4	6	4	4	9	13	89
18.51-24.00	0	1	0	0	0	0	0	9	6	1	2	0	0	0	2	1	22
>24.00	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	1	6
TOTAL	35	22	12	7	12	16	23	34	32	12	10	9	15	9	18	27	293

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	9	4	7	4	8	10	3	11	3	5	2	3	2	5	1	0	77
3.51- 7.50	61	52	45	36	33	48	43	34	19	20	26	12	13	13	17	29	501
7.51-12.50	111	55	30	21	10	32	67	74	67	35	20	25	20	44	56	90	757
12.51-18.50	68	8	2	2	4	0	21	52	36	24	20	9	3	37	99	128	513
18.51-24.00	4	8	0	0	0	0	0	23	34	9	4	2	0	12	29	55	180
>24.00	7	1	0	0	0	0	0	6	24	1	0	0	0	2	12	21	74
TOTAL	260	128	84	63	55	90	134	200	183	94	72	51	38	113	214	323	2103

B145

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	2
1.01- 3.50	20	11	12	10	10	9	13	14	19	8	6	5	6	5	13	13	174
3.51- 7.50	34	13	14	14	13	19	24	47	56	19	6	15	19	15	33	35	376
7.51-12.50	25	5	3	8	4	7	26	76	68	27	17	13	12	21	40	25	377
12.51-18.50	2	0	0	0	0	0	10	35	41	16	3	3	2	7	7	8	134
18.51-24.00	1	0	0	0	0	0	0	8	15	1	0	0	0	0	0	0	25
>24.00	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4
TOTAL	83	29	29	32	27	35	73	180	202	71	32	36	39	48	93	81	1092

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	9
1.01- 3.50	16	6	3	1	1	1	1	10	27	26	15	8	9	9	21	15	169
3.51- 7.50	11	2	0	0	1	1	3	9	31	5	8	8	4	6	5	2	96
7.51-12.50	2	0	0	0	0	0	0	1	13	3	2	8	10	9	2	1	51
12.51-18.50	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29	8	3	1	2	2	4	20	74	34	25	24	23	25	28	18	329

B146

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	13
1.01- 3.50	9	3	0	4	0	1	4	23	45	19	9	6	8	14	10	19	174
3.51- 7.50	2	0	0	0	0	0	0	2	3	6	3	4	1	1	3	1	26
7.51-12.50	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11	3	0	4	0	1	4	25	48	27	13	10	10	15	13	20	217

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	25
1.01- 3.50	54	25	22	19	19	24	22	58	94	58	33	22	26	33	45	47	601
3.51- 7.50	119	82	67	55	55	82	82	98	116	54	47	39	40	38	60	70	1104
7.51-12.50	154	79	46	37	17	45	115	176	165	71	41	50	51	78	106	129	1360
12.51-18.50	96	17	4	3	11	0	37	113	104	53	29	18	9	51	120	178	843
18.51-24.00	10	10	0	0	0	0	0	45	79	18	7	2	0	13	33	62	279
>24.00	8	1	0	0	0	0	0	14	60	8	1	0	1	5	12	22	132
TOTAL	441	214	139	114	102	151	256	504	618	262	158	131	127	218	376	508	4344

B147

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4344

TOTAL NUMBER OF VALID OBSERVATIONS: 4344

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 10.0 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
3.22	3.91	6.74	48.41	25.14	7.57	5.00

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	12	9	5	0	1	0	7	20	49	8	2	1	0	3	2	21	0
B	11	15	6	7	5	7	11	25	30	16	4	0	2	5	8	18	0
C	35	22	12	7	12	16	23	34	32	12	10	9	15	9	18	27	0
D	260	128	84	63	55	90	134	200	183	94	72	51	38	113	214	323	1
E	83	29	29	32	27	35	73	180	202	71	32	36	39	48	93	81	2
F	29	8	3	1	2	2	4	20	74	34	25	24	23	25	28	18	9
G	11	3	0	4	0	1	4	25	48	27	13	10	10	15	13	20	13
TOTAL	441	214	139	114	102	151	256	504	618	262	158	131	127	218	376	508	25

B148

Stability Classes by Hour of Day

10-Meter Wind vs. Delta T

January-June 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 10M DELTA T - JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14 4 1	D	D	D	E	D	D	E	E	D	D	D	C	B	B	B	C	C	C	D	D	D	D	D	D
14 4 2	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 4 3	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 4 4	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	E	F	G	G
14 4 5	F	F	E	E	E	F	F	E	D	C	B	A	A	A	B	A	B	D	D	E	E	E	E	E
14 4 6	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	F	G	F	F	F
14 4 7	F	F	F	F	F	F	F	F	E	D	B	C	B	A	B	C	D	D	D	E	E	E	E	E
14 4 8	E	E	E	E	D	E	E	D	D	B	A	A	A	A	A	A	B	D	E	E	G	G	G	G
14 4 9	G	G	G	G	G	G	G	E	D	B	A	A	A	A	A	B	D	D	E	F	F	F	E	E
14 4 10	E	E	E	E	E	D	D	D	D	C	B	A	C	B	A	B	C	D	E	F	G	G	G	G
14 4 11	G	G	G	G	G	G	G	G	F	D	C	B	B	B	A	B	B	C	D	E	E	F	F	F
14 4 12	F	F	F	E	E	E	E	E	D	C	B	A	A	A	A	B	D	D	D	E	D	E	E	E
14 4 13	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 4 14	D	D	D	D	D	D	D	D	D	D	D	D	C	B	C	B	D	D	D	E	E	E	E	E
14 4 15	E	F	G	F	F	F	F	F	D	D	D	C	B	A	B	A	B	D	D	D	D	D	D	D
14 4 16	E	E	E	E	E	E	E	D	D	C	A	A	A	B	C	D	D	D	D	D	D	D	D	D
14 4 17	D	D	D	D	D	D	D	D	D	C	B	B	B	B	B	C	D	D	D	F	F	G	G	G
14 4 18	G	G	G	G	G	G	G	G	F	D	B	A	A	A	A	A	A	C	D	E	E	E	E	E
14 4 19	E	E	E	E	E	E	E	E	D	D	A	A	A	A	A	A	B	D	D	E	E	E	E	E
14 4 20	E	E	E	E	E	E	E	E	D	C	C	B	B	A	A	A	D	D	D	D	E	F	E	E
14 4 21	E	E	E	E	E	F	F	F	E	D	D	D	C	A	A	A	A	C	D	E	E	E	F	F
14 4 22	E	E	E	E	E	E	F	D	C	B	B	B	C	C	C	C	C	D	D	D	E	E	E	E
14 4 23	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	D	D	D	E	E	E	E	E	E
14 4 24	E	E	E	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	F	G	G	G
14 4 25	G	G	F	F	G	G	G	G	D	D	D	D	C	C	B	D	D	D	E	F	F	E	E	E
14 4 26	E	E	E	F	F	F	F	E	D	D	C	B	A	A	A	B	D	D	D	D	D	E	D	D
14 4 27	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	C	D	D	D	D	D	D	D
14 4 28	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D
14 4 29	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 4 30	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 5 1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 5 2	E	E	F	F	F	F	F	E	D	D	C	C	C	C	C	C	D	D	D	E	E	E	E	E
14 5 3	F	E	E	E	F	F	F	E	D	D	D	C	C	B	C	B	C	D	E	G	G	E	E	E
14 5 4	E	E	E	E	E	E	E	D	D	C	B	B	C	B	B	B	C	D	D	D	E	E	E	E
14 5 5	E	E	E	E	E	E	E	D	D	C	B	B	B	A	B	A	B	C	D	D	E	E	E	E
14 5 6	E	E	E	E	E	E	E	D	D	C	B	B	A	A	A	B	B	C	D	D	E	E	E	E
14 5 7	E	E	E	E	E	E	E	D	D	C	A	A	A	A	A	A	B	D	D	D	E	D	D	D
14 5 8	D	E	D	D	E	D	D	D	D	D	D	D	B	B	D	D	D	D	D	D	D	D	D	D
14 5 9	D	D	D	D	E	E	E	D	D	C	C	B	B	A	A	C	C	C	D	D	F	G	G	F
14 5 10	E	E	E	E	E	E	D	D	D	B	A	A	B	B	B	C	D	D	E	G	G	F	G	G
14 5 11	G	F	F	F	E	E	E	E	E	D	F	E	D	D	D	D	D	D	D	E	E	E	E	E
14 5 12	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 5 13	D	D	D	D	D	D	D	D	D	C	B	B	C	B	C	C	D	D	D	E	F	F	F	F
14 5 14	G	G	G	G	G	F	F	F	E	D	C	C	C	C	C	C	D	D	D	D	E	F	F	F
14 5 15	E	E	E	D	E	E	E	D	D	B	A	A	A	B	B	C	D	D	D	E	E	E	E	F

B152

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 10M DELTA T - JAN-JUN 2014
SITE IDENTIFIER: NPPD
DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14
STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

		HOURLY STABILITIES																									
		HOURS																									
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
14	6	30	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	E	D	D	D	D	D	E	E	F	F

JFDs of 10-Meter Wind vs. Delta T

July-September 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
7.51-12.50	1	0	0	0	0	2	1	5	0	0	0	0	0	0	0	0	9
12.51-18.50	0	0	0	0	0	0	0	6	7	4	0	0	0	0	0	2	19
18.51-24.00	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	2	1	12	10	6	0	0	0	0	0	2	34

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
3.51- 7.50	0	1	0	0	0	3	5	4	3	0	0	0	0	0	0	0	16
7.51-12.50	4	0	0	0	0	2	3	6	3	0	0	0	0	0	0	3	21
12.51-18.50	1	0	0	0	0	0	0	10	6	1	0	0	0	0	0	1	19
18.51-24.00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	1	0	0	1	6	9	21	13	1	0	0	0	0	0	4	61

B156

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	3	0	1	3	0	2	0	0	0	0	0	10
3.51- 7.50	0	10	8	2	5	10	11	4	6	1	1	1	0	0	0	1	60
7.51-12.50	6	2	0	0	0	0	5	8	10	1	0	0	0	0	0	5	37
12.51-18.50	0	0	0	0	0	0	2	9	12	1	0	0	0	0	0	1	25
18.51-24.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	12	8	2	6	13	18	23	31	3	3	1	0	0	0	7	133

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	3	8	13	15	16	15	6	6	4	6	1	3	5	1	2	4	108
3.51- 7.50	46	43	22	27	48	63	44	33	17	5	5	8	9	6	11	15	402
7.51-12.50	41	9	1	1	2	6	37	60	41	10	7	6	4	5	11	33	274
12.51-18.50	5	2	0	0	0	0	4	20	18	2	0	0	0	4	17	29	101
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	95	62	36	43	66	84	91	119	80	23	13	17	18	16	41	81	885

B157

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	7
1.01- 3.50	13	9	10	10	14	17	16	17	22	6	4	1	4	2	9	8	162
3.51- 7.50	29	6	7	1	12	21	35	64	51	18	6	3	2	10	7	25	297
7.51-12.50	14	5	0	1	0	0	15	52	26	9	6	3	1	6	5	7	150
12.51-18.50	4	0	0	0	0	0	0	3	3	1	0	0	1	0	2	2	16
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	60	20	17	12	26	38	66	136	102	34	16	7	8	18	23	42	632

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	29
1.01- 3.50	11	5	0	1	1	4	5	7	22	17	9	6	11	20	24	23	166
3.51- 7.50	3	0	0	0	0	1	1	5	17	0	2	0	5	6	7	5	52
7.51-12.50	0	0	0	0	0	0	0	1	2	1	0	0	1	0	0	2	7
12.51-18.50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	3
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	14	5	0	1	1	5	6	13	42	18	11	6	17	26	33	30	257

B158

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	34
1.01- 3.50	4	0	0	1	0	1	1	1	11	16	8	8	10	13	28	20	122
3.51- 7.50	0	0	0	0	0	0	0	0	2	0	1	0	4	3	6	0	16
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	4
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	0	0	1	0	1	1	1	13	16	10	8	16	17	34	20	176

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	70
1.01- 3.50	31	22	23	27	33	41	29	32	62	45	24	18	30	36	63	55	571
3.51- 7.50	78	60	37	30	65	98	96	111	97	24	15	12	20	25	31	46	845
7.51-12.50	66	16	1	2	2	10	61	132	82	21	14	9	8	12	16	50	502
12.51-18.50	10	2	0	0	0	0	6	48	47	9	0	0	1	4	21	35	183
18.51-24.00	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	7
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	185	100	61	59	100	149	192	325	291	101	53	39	59	77	131	186	2178

B159

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2207

TOTAL NUMBER OF VALID OBSERVATIONS: 2178

TOTAL NUMBER OF MISSING OBSERVATIONS: 29

PERCENT DATA RECOVERY FOR THIS PERIOD: 98.7 %

MEAN WIND SPEED FOR THIS PERIOD: 6.2 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.56	2.80	6.11	40.63	29.02	11.80	8.08

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	1	0	0	0	0	2	1	12	10	6	0	0	0	0	0	2	0
B	5	1	0	0	1	6	9	21	13	1	0	0	0	0	0	4	0
C	6	12	8	2	6	13	18	23	31	3	3	1	0	0	0	7	0
D	95	62	36	43	66	84	91	119	80	23	13	17	18	16	41	81	0
E	60	20	17	12	26	38	66	136	102	34	16	7	8	18	23	42	7
F	14	5	0	1	1	5	6	13	42	18	11	6	17	26	33	30	29
G	4	0	0	1	0	1	1	1	13	16	10	8	16	17	34	20	34
TOTAL	185	100	61	59	100	149	192	325	291	101	53	39	59	77	131	186	70

B160

JFDs of 10-Meter Wind vs. Delta T

October-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	5
7.51-12.50	7	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	11
12.51-18.50	0	0	0	0	0	0	0	6	1	2	0	0	0	4	3	10	26
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
>24.00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
TOTAL	7	0	0	0	0	1	2	9	6	3	0	0	0	5	4	11	48

B162

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	2	1	1	2	1	0	0	0	0	1	1	0	0	1	10
3.51- 7.50	3	0	2	1	2	3	2	1	0	1	1	0	0	1	2	1	20
7.51-12.50	2	4	1	0	0	1	2	0	1	1	0	0	0	1	2	13	28
12.51-18.50	0	0	0	0	0	0	2	4	0	3	2	0	0	7	14	11	43
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL	5	4	5	2	3	6	7	5	4	5	3	1	1	9	18	27	105

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	7	5	6	12	4	3	3	3	7	0	4	3	1	1	2	2	63
3.51- 7.50	47	26	18	25	31	26	57	36	26	16	14	6	8	13	15	14	378
7.51-12.50	33	11	6	4	1	8	46	59	40	28	17	13	18	42	69	57	452
12.51-18.50	9	0	0	0	0	0	1	35	18	8	5	1	2	13	84	82	258
18.51-24.00	0	0	0	0	0	0	0	2	4	4	0	0	0	0	24	28	62
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL	96	42	30	41	36	37	107	135	97	56	40	23	29	69	194	183	1215

B163

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	4
1.01- 3.50	14	7	8	8	6	8	9	9	11	4	2	0	2	10	4	8	110
3.51- 7.50	12	2	5	3	12	9	21	31	22	8	7	4	11	19	11	7	184
7.51-12.50	1	0	1	0	0	6	12	46	19	11	20	7	7	24	32	5	191
12.51-18.50	1	0	0	0	0	0	1	9	11	4	1	0	0	0	5	6	38
18.51-24.00	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	1	6
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	28	11	14	11	18	23	43	95	65	28	30	11	20	53	52	27	533

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	6
1.01- 3.50	3	3	2	0	0	3	2	10	15	8	5	7	0	4	8	17	87
3.51- 7.50	1	1	3	1	0	1	2	7	7	1	2	6	5	5	10	4	56
7.51-12.50	0	0	0	0	0	0	0	1	10	0	1	7	4	5	5	1	34
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	4	5	1	0	4	4	18	32	9	8	20	9	14	23	22	183

B164

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	21
1.01- 3.50	4	4	1	1	2	0	0	9	26	15	2	2	7	4	9	11	97
3.51- 7.50	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	4
7.51-12.50	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	5	1	1	2	0	0	10	27	15	2	3	7	4	11	11	124

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	31
1.01- 3.50	28	19	19	22	13	16	15	31	59	27	13	13	11	19	23	39	367
3.51- 7.50	63	29	28	30	45	40	84	78	56	26	24	16	24	38	40	26	647
7.51-12.50	43	16	8	4	1	15	60	107	70	41	38	28	29	73	108	77	718
12.51-18.50	10	0	0	0	0	0	4	54	30	17	8	1	2	24	106	110	366
18.51-24.00	0	2	0	0	0	0	0	2	8	5	0	0	0	0	25	30	72
>24.00	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TOTAL	144	66	55	56	59	71	163	272	231	116	83	58	66	154	302	282	2209

B16S

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2209

TOTAL NUMBER OF VALID OBSERVATIONS: 2209

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 8.4 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.05	2.17	4.75	55.00	24.13	8.28	5.61

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
B	7	0	0	0	0	1	2	9	6	3	0	0	0	5	4	11	0
C	5	4	5	2	3	6	7	5	4	5	3	1	1	9	18	27	0
D	96	42	30	41	36	37	107	135	97	56	40	23	29	69	194	183	0
E	28	11	14	11	18	23	43	95	65	28	30	11	20	53	52	27	4
F	4	4	5	1	0	4	4	18	32	9	8	20	9	14	23	22	6
G	4	5	1	1	2	0	0	10	27	15	2	3	7	4	11	11	21
TOTAL	144	66	55	56	59	71	163	272	231	116	83	58	66	154	302	282	31

B166

JFDs of 10-Meter Wind vs. Delta T

July-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
7.51-12.50	1	0	0	0	0	2	1	5	0	0	0	0	0	0	0	0	9
12.51-18.50	0	0	0	0	0	0	0	6	7	4	0	0	0	0	0	3	20
18.51-24.00	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	2	1	12	10	6	0	0	0	0	0	3	35

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
3.51- 7.50	0	1	0	0	0	4	7	6	3	0	0	0	0	0	0	0	21
7.51-12.50	11	0	0	0	0	2	3	7	3	1	0	0	0	1	0	4	32
12.51-18.50	1	0	0	0	0	0	0	16	7	3	0	0	0	4	3	11	45
18.51-24.00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	4
>24.00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
TOTAL	12	1	0	0	1	7	11	30	19	4	0	0	0	5	4	15	109

B168

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	2	1	2	5	1	1	3	0	2	1	1	0	0	1	20
3.51- 7.50	3	10	10	3	7	13	13	5	6	2	2	1	0	1	2	2	80
7.51-12.50	8	6	1	0	0	1	7	8	11	2	0	0	0	1	2	18	65
12.51-18.50	0	0	0	0	0	0	4	13	12	4	2	0	0	7	14	12	68
18.51-24.00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	3
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL	11	16	13	4	9	19	25	28	35	8	6	2	1	9	18	34	238

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	10	13	19	27	20	18	9	9	11	6	5	6	6	2	4	6	171
3.51- 7.50	93	69	40	52	79	89	101	69	43	21	19	14	17	19	26	29	780
7.51-12.50	74	20	7	5	3	14	83	119	81	38	24	19	22	47	80	90	726
12.51-18.50	14	2	0	0	0	0	5	55	36	10	5	1	2	17	101	111	359
18.51-24.00	0	0	0	0	0	0	0	2	4	4	0	0	0	0	24	28	62
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL	191	104	66	84	102	121	198	254	177	79	53	40	47	85	235	264	2100

B169

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	11
1.01- 3.50	27	16	18	18	20	25	25	26	33	10	6	1	6	12	13	16	272
3.51- 7.50	41	8	12	4	24	30	56	95	73	26	13	7	13	29	18	32	481
7.51-12.50	15	5	1	1	0	6	27	98	45	20	26	10	8	30	37	12	341
12.51-18.50	5	0	0	0	0	0	1	12	14	5	1	0	1	0	7	8	54
18.51-24.00	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	1	6
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	88	31	31	23	44	61	109	231	167	62	46	18	28	71	75	69	1165

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	35
1.01- 3.50	14	8	2	1	1	7	7	17	37	25	14	13	11	24	32	40	253
3.51- 7.50	4	1	3	1	0	2	3	12	24	1	4	6	10	11	17	9	108
7.51-12.50	0	0	0	0	0	0	0	2	12	1	1	7	5	5	5	3	41
12.51-18.50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	3
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	18	9	5	2	1	9	10	31	74	27	19	26	26	40	56	52	440

B170

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	55
1.01- 3.50	8	4	1	2	2	1	1	10	37	31	10	10	17	17	37	31	219
3.51- 7.50	0	0	0	0	0	0	0	1	3	0	1	0	4	3	8	0	20
7.51-12.50	0	1	0	0	0	0	0	0	0	0	1	1	2	1	0	0	6
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	5	1	2	2	1	1	11	40	31	12	11	23	21	45	31	300

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	101
1.01- 3.50	59	41	42	49	46	57	44	63	121	72	37	31	41	55	86	94	938
3.51- 7.50	141	89	65	60	110	138	180	189	153	50	39	28	44	63	71	72	1492
7.51-12.50	109	32	9	6	3	25	121	239	152	62	52	37	37	85	124	127	1220
12.51-18.50	20	2	0	0	0	0	10	102	77	26	8	1	3	28	127	145	549
18.51-24.00	0	2	0	0	0	0	0	4	11	7	0	0	0	0	25	30	79
>24.00	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TOTAL	329	166	116	115	159	220	355	597	522	217	136	97	125	231	433	468	4387

B171

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4416

TOTAL NUMBER OF VALID OBSERVATIONS: 4387

TOTAL NUMBER OF MISSING OBSERVATIONS: 29

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.3 %

MEAN WIND SPEED FOR THIS PERIOD: 7.3 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.80	2.48	5.43	47.87	26.56	10.03	6.84

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	1	0	0	0	0	2	1	12	10	6	0	0	0	0	0	3	0
B	12	1	0	0	1	7	11	30	19	4	0	0	0	5	4	15	0
C	11	16	13	4	9	19	25	28	35	8	6	2	1	9	18	34	0
D	191	104	66	84	102	121	198	254	177	79	53	40	47	85	235	264	0
E	88	31	31	23	44	61	109	231	167	62	46	18	28	71	75	69	11
F	18	9	5	2	1	9	10	31	74	27	19	26	26	40	56	52	35
G	8	5	1	2	2	1	1	11	40	31	12	11	23	21	45	31	55
TOTAL	329	166	116	115	159	220	355	597	522	217	136	97	125	231	433	468	101

B172

Stability Classes by Hour of Day

10-Meter Wind vs. Delta T

July-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14 7 1	G	E	F	E	E	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 7 2	F	F	G	F	F	F	E	D	D	D	D	D	D	D	C	D	D	D	D	D	F	G	G	G
14 7 3	G	G	F	F	E	E	G	E	D	D	D	D	B	B	C	C	C	C	D	D	E	F	F	F
14 7 4	F	F	F	F	F	F	F	E	D	D	D	C	C	B	B	C	C	D	D	D	D	E	E	E
14 7 5	E	E	E	E	E	E	E	E	D	D	D	D	D	D	B	C	D	D	D	D	D	D	E	E
14 7 6	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	G	F
14 7 7	E	E	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 7 8	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	G
14 7 9	G	G	F	F	F	F	E	D	D	D	D	D	D	C	D	D	D	D	D	D	E	F	E	E
14 7 10	E	E	F	E	E	E	D	D	D	D	C	C	C	C	C	D	D	D	D	D	D	E	E	E
14 7 11	E	E	E	E	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	E	E	E	E	
14 7 12	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F
14 7 13	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	G	G	F	G
14 7 14	F	G	G	F	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F
14 7 15	F	F	E	E	E	D	E	D	D	C	B	B	C	C	C	D	D	D	D	D	F	F	F	F
14 7 16	F	G	F	F	G	G	F	E	D	D	D	C	C	D	C	D	D	D	D	D	E	F	G	G
14 7 17	G	G	G	G	G	F	F	E	D	D	C	D	C	D	D	D	D	D	D	E	E	E	F	F
14 7 18	F	E	F	F	F	F	F	D	D	D	C	C	C	D	D	D	D	D	D	D	E	E	E	E
14 7 19	F	F	E	F	F	F	E	D	D	D	C	C	B	B	C	D	D	D	D	D	E	E	E	E
14 7 20	E	E	E	E	E	E	D	D	D	D	B	B	B	B	C	D	D	D	D	D	E	E	E	E
14 7 21	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 7 22	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 7 23	E	E	E	E	E	E	D	D	D	C	C	C	C	C	D	D	D	D	D	D	E	F	E	E
14 7 24	E	E	E	E	E	E	E	D	D	C	C	C	B	A	B	C	C	D	D	D	E	E	E	E
14 7 25	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	F	G	G	G	
14 7 26	F	E	E	E	E	E	E	D	D	D	D	C	C	D	C	C	D	D	D	D	E	E	E	E
14 7 27	E	E	E	E	E	E	E	D	D	D	D	D	D	D	C	D	D	D	D	D	E	E	F	F
14 7 28	E	E	E	E	E	E	E	D	C	B	B	D	D	C	C	D	D	D	D	D	E	F	G	G
14 7 29	G	G	G	G	G	F	E	D	D	C	D	C	D	D	D	D	D	D	D	D	E	F	F	G
14 7 30	G	F	F	G	G	F	E	D	D	D	C	C	C	C	C	D	D	D	D	D	E	G	G	G
14 7 31	G	G	G	G	G	G	E	D	D	C	D	C	C	C	D	D	D	D	D	D	E	E	E	E
14 8 1	E	E	E	E	E	E	D	D	D	C	C	D	C	C	D	D	D	D	D	D	F	F	F	E
14 8 2	F	G	G	F	G	F	F	E	D	D	D	C	B	C	D	D	D	D	D	D	E	F	F	F
14 8 3	E	E	D	E	E	E	D	D	D	D	C	B	C	C	D	D	D	D	D	D	E	E	E	E
14 8 4	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	E	F
14 8 5	E	E	F	E	F	E	E	D	D	C	D	D	D	D	D	D	D	D	D	D	E	E	E	E
14 8 6	E	E	E	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	E	D	D	E
14 8 7	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	E
14 8 8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	E
14 8 9	D	E	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	E	E	D	E
14 8 10	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F	F	G	F
14 8 11	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	G	G
14 8 12	F	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	G	G
14 8 13	G	G	G	G	G	G	E	D	D	D	D	C	D	D	C	D	D	D	D	D	E	F	G	G

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
14 8 14	G	G	G	G	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	F	F	E	E	G			
14 8 15	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E		
14 8 16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	D		
14 8 17	F	F	G	G	F	F	F	E	D	D	C	C	C	D	D	D	D	D	D	E	E	F	F	G			
14 8 18	E	E	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	G	G	G	E			
14 8 19	F	F	E	F	F	F	F	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	G			
14 8 20	E	E	F	F	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E			
14 8 21	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	E		
14 8 22	F	F	G	F	E	E	F	F	E	E	E	D	D	E	E	D	D	D	D	E	E	E	E	F			
14 8 23	E	E	E	D	E	E	E	D	D	D	C	C	C	D	D	D	D	D	D	E	E	F	F	F	E		
14 8 24	F	E	E	E	E	E	E	E	E	D	C	C	D	D	D	D	D	D	D	E	E	E	F	F	E	F	
14 8 25	G	G	F	G	G	F	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	F		
14 8 26	E	E	D	E	E	E	E	D	D	D	D	C	C	D	D	D	D	D	D	E	E	E	E	E	D		
14 8 27	E	E	E	E	E	D	E	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	E	E		
14 8 28	D	E	E	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	D	
14 8 29	F	E	F	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	E	F	E	E	F	
14 8 30	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	E	
14 8 31	F	E	E	E	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	E	E	D	F
14 9 1	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	E	F	G	G	G	G	D	
14 9 2	F	F	G	E	E	F	E	D	D	D	C	D	D	D	D	D	D	D	D	F	F	E	F	E	G		
14 9 3	E	E	F	E	E	E	E	E	D	B	A	A	B	A	A	A	C	D	E	E	E	E	E	E	E	E	
14 9 4	E	E	E	E	E	F	E	D	C	A	A	A	A	A	B	D	D	D	D	E	F	E	E	E	E	E	
14 9 5	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	
14 9 6	E	E	E	E	E	F	F	E	D	D	C	C	B	C	C	D	D	D	D	E	F	G	G	G	G	E	
14 9 7	G	G	G	G	G	G	G	F	D	D	C	B	C	C	C	D	D	D	D	E	F	F	F	F	F	G	
14 9 8	E	F	F	F	E	E	E	D	D	A	A	A	A	B	B	B	D	D	D	E	E	E	E	E	F		
14 9 9	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	E	E	E	
14 9 10	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14 9 11	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	
14 9 12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	G	G	G	D	
14 9 13	G	G	F	F	F	F	F	E	E	E	C	B	B	A	A	A	C	D	F	F	F	E	E	F	F	E	
14 9 14	E	E	E	E	E	F	F	D	C	C	B	B	C	B	B	C	D	D	D	E	E	E	E	E	E	E	
14 9 15	D	D	E	D	E	E	D	D	D	D	D	B	A	B	C	D	D	D	D	E	E	F	F	F	F	E	
14 9 16	G	G	G	G	F	F	E	E	D	C	B	C	B	B	C	D	D	D	D	E	E	E	E	E	D	G	
14 9 17	D	E	E	E	E	E	E	D	D	D	D	C	B	B	C	D	D	D	D	F	F	F	F	F	F	D	
14 9 18	E	E	D	D	D	D	D	D	D	C	B	A	A	A	B	B	D	D	D	D	E	E	E	E	E	E	
14 9 19	E	E	D	D	D	D	D	D	D	D	C	B	A	A	A	C	D	D	D	E	E	E	E	E	E	E	
14 9 20	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	G	G	G	F	E	
14 9 21	E	F	G	G	G	G	F	E	D	D	B	A	A	B	B	C	D	E	F	F	F	F	G	G	E	E	
14 9 22	G	G	G	G	F	G	G	F	E	D	C	B	B	B	B	D	D	D	D	E	G	G	G	F	F	G	
14 9 23	E	E	E	E	E	E	E	D	D	D	C	C	D	E	E	E	E	E	E	E	E	E	E	E	E	F	
14 9 24	E	E	E	E	E	E	D	D	D	D	D	C	B	B	D	D	D	D	D	E	E	E	D	E	E	E	
14 9 25	G	G	F	E	E	F	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	F	
14 9 26	-	-	-	-	-	-	-	-	-	-	-	-	B	A	C	C	D	E	F	F	F	E	E	F	-	-	
14 9 27	E	E	F	F	F	F	F	E	D	C	B	A	A	A	B	C	D	E	F	F	F	F	F	G	E	E	

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PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
14 9 28	G	G	G	G	G	F	F	F	D	D	B	B	B	A	C	D	D	E	G	G	G	G	G	G		
14 9 29	G	G	G	G	G	G	G	F	D	C	D	D	A	C	B	B	D	F	G	F	F	F	F	G	G	
14 9 30	G	F	F	E	F	E	E	E	D	C	C	C	D	D	D	D	D	D	D	E	E	E	E	E	G	
14 10 1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	E	F	F	E	E	E	
14 10 2	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	E
14 10 3	F	E	E	D	D	D	D	D	D	D	C	B	C	C	C	D	D	D	E	E	E	E	E	E	F	
14 10 4	E	E	E	E	E	E	D	D	C	B	B	C	B	B	B	C	D	D	G	G	G	G	F	E	E	
14 10 5	F	F	F	E	E	E	F	E	D	C	C	C	C	D	D	D	D	E	E	E	E	F	E	F	F	
14 10 6	F	E	E	E	E	E	E	E	D	D	C	D	D	D	D	D	D	E	F	G	G	G	G	G	E	
14 10 7	F	F	F	G	G	F	E	E	D	D	C	B	C	C	D	D	D	E	F	F	F	F	F	F	F	
14 10 8	G	G	G	G	G	G	F	F	D	D	D	D	D	C	C	D	D	E	F	F	E	E	E	E	G	
14 10 9	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	D	D	D	D	E	
14 10 10	D	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	F	D	
14 10 11	G	G	F	F	G	G	G	G	E	C	B	B	B	B	B	C	D	E	G	G	G	G	G	F	F	
14 10 12	F	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F	
14 10 13	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	
14 10 14	D	D	D	D	E	E	E	D	D	D	D	D	C	C	D	D	D	E	E	E	F	F	F	D	D	
14 10 15	F	F	F	G	G	G	F	E	D	D	C	D	C	D	D	D	D	G	G	G	G	G	G	F	F	
14 10 16	G	G	G	G	G	G	G	F	D	D	D	D	D	D	D	D	D	E	G	E	F	F	F	F	G	
14 10 17	E	E	F	E	E	F	E	E	D	D	C	B	B	C	D	D	D	E	E	E	E	E	E	E	F	
14 10 18	E	E	E	E	E	E	E	E	D	C	D	D	D	C	C	D	D	F	G	G	F	F	F	E	E	
14 10 19	F	F	E	F	F	F	E	F	D	D	C	B	B	C	D	D	D	E	F	G	F	F	E	F	F	
14 10 20	F	F	F	F	F	F	E	F	D	D	D	D	C	C	C	D	D	D	G	G	G	G	G	G	F	
14 10 21	G	G	G	G	G	G	G	G	D	C	C	D	C	C	C	D	D	E	F	F	F	F	E	G	F	
14 10 22	D	E	E	E	E	E	E	D	D	C	B	C	B	B	C	D	D	E	E	E	E	E	E	E	E	
14 10 23	E	E	D	E	D	D	D	D	D	D	D	D	C	D	C	D	D	E	G	G	G	G	F	E	E	
14 10 24	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	F	G	G	G	G	E	E	
14 10 25	G	G	G	G	G	G	G	F	E	D	D	C	C	D	D	D	D	F	G	G	F	E	E	G	F	
14 10 26	E	E	E	E	E	E	E	D	D	D	C	C	C	D	D	D	D	E	E	E	E	E	E	E	E	
14 10 27	E	E	E	E	E	F	F	F	E	D	D	C	D	D	D	D	D	E	D	D	D	D	D	F	F	
14 10 28	E	E	E	E	E	E	E	E	D	D	C	C	C	D	D	D	D	D	E	E	F	F	F	F	D	
14 10 29	F	G	G	E	E	E	F	F	D	D	D	D	C	D	D	D	D	F	F	F	F	F	E	F	F	
14 10 30	E	E	E	E	E	E	F	E	D	D	D	C	C	C	D	D	D	D	E	D	D	D	D	E	E	
14 10 31	D	D	D	D	D	D	D	D	D	B	B	B	B	C	D	D	D	E	F	F	F	F	E	D	D	
14 11 1	E	E	E	E	E	E	E	E	D	C	B	B	B	B	C	D	D	E	E	E	E	E	E	E	E	
14 11 2	E	E	E	E	E	E	E	D	D	D	C	B	B	B	C	D	D	E	E	E	E	E	E	E	E	
14 11 3	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	D	D	E	E	
14 11 4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D	
14 11 5	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E	
14 11 6	E	E	D	D	D	D	D	D	D	D	C	C	C	D	D	D	D	F	G	G	G	G	G	E	E	
14 11 7	G	G	G	G	F	E	E	E	D	D	B	B	C	D	D	D	D	E	E	E	E	E	E	E	G	
14 11 8	D	D	D	D	D	E	D	D	C	C	C	C	C	D	D	D	D	E	F	G	G	G	F	D	D	
14 11 9	E	E	F	F	E	E	E	E	D	D	D	D	D	D	D	D	D	F	G	G	F	F	F	F	F	
14 11 10	E	E	E	E	E	E	E	E	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	E	E	
14 11 11	D	D	D	D	D	D	D	D	D	C	C	B	B	A	C	D	D	D	D	D	D	D	D	D	D	

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PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
14 11 12	D	D	D	D	D	D	D	D	D	C	C	B	B	C	C	D	D	D	D	E	E	D	D	D	
14 11 13	D	D	D	D	D	D	D	D	D	D	C	B	B	C	C	D	D	D	E	F	E	F	F	D	
14 11 14	E	E	E	F	F	G	G	F	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	F	
14 11 15	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	
14 11 16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	E	E	E	D	
14 11 17	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	
14 11 18	F	E	E	F	F	F	F	F	E	D	D	D	D	D	D	D	E	F	F	F	E	E	E	F	
14 11 19	F	E	E	D	D	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	G	E	
14 11 20	E	E	E	F	F	G	G	G	F	D	D	D	D	D	D	D	D	E	E	E	E	E	E	F	
14 11 21	E	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	D	D	D	D	E	E	E	
14 11 22	E	F	E	E	D	D	E	E	D	D	D	D	D	D	D	E	E	E	D	D	E	E	D	E	
14 11 23	E	E	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14 11 24	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	
14 11 25	E	E	E	E	E	E	F	F	E	D	D	C	D	C	D	D	E	E	E	E	E	E	E	D	
14 11 26	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14 11 27	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D	D	E	
14 11 28	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	F	F	F	F	F	E	E	E	
14 11 29	E	E	E	E	E	E	E	F	F	F	F	D	D	D	D	D	F	F	F	F	F	G	G	E	
14 11 30	F	D	D	D	D	D	D	D	D	D	B	B	B	B	B	D	D	D	D	D	D	D	D	G	
14 12 1	D	D	D	D	D	D	D	D	D	D	C	C	C	C	D	C	D	E	E	F	E	E	E	D	
14 12 2	E	E	E	E	E	E	E	E	D	D	B	B	C	D	D	D	E	F	G	G	G	G	F	E	
14 12 3	F	G	G	G	G	G	G	F	E	D	C	C	G	D	D	E	E	F	E	E	E	E	E	F	
14 12 4	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	
14 12 5	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	
14 12 6	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 7	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 8	D	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	F	F	E	D	E	E	
14 12 9	D	E	E	E	E	D	D	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	
14 12 10	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14 12 11	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	D	
14 12 13	D	E	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 14	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D	D	D	
14 12 15	E	E	E	E	E	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 17	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 18	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 20	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D
14 12 21	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14 12 22	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 23	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
14 12 24	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D
14 12 25	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E	E
14 12 26	F	F	G	F	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F	

B177

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

YR MN DY	HOURLY STABILITIES																							
	HOURS																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14 12 27	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	D
14 12 28	F	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	F	F	F	F	E	F
14 12 29	E	E	E	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D	F
14 12 30	D	D	D	D	D	D	D	D	D	C	C	B	B	C	C	C	D	D	D	D	D	D	D	D
14 12 31	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D	D	D

JFDs of 10-Meter Wind vs. Delta T

January-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	5
7.51-12.50	3	4	4	0	0	2	5	13	1	0	0	1	0	1	1	0	35
12.51-18.50	6	5	1	0	0	0	2	13	12	7	0	0	0	1	1	20	68
18.51-24.00	4	0	0	0	0	0	0	0	21	5	1	0	0	0	0	4	35
>24.00	0	0	0	0	0	0	0	5	23	2	1	0	0	1	0	0	32
TOTAL	13	9	5	0	1	2	8	32	59	14	2	1	0	3	2	24	175

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	1	2	0	0	0	1	0	0	0	0	0	5
3.51- 7.50	2	4	3	2	1	9	11	9	5	1	1	0	1	0	0	0	49
7.51-12.50	13	9	2	4	0	4	7	15	11	2	1	0	0	3	2	8	81
12.51-18.50	7	2	1	1	4	0	2	22	15	9	1	0	0	5	7	23	99
18.51-24.00	1	1	0	0	0	0	0	6	7	4	0	0	0	1	3	2	25
>24.00	0	0	0	0	0	0	0	3	11	4	0	0	1	1	0	0	20
TOTAL	23	16	6	7	6	14	22	55	49	20	4	0	2	10	12	33	279

B180

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	2	1	2	8	1	1	3	0	2	1	2	0	0	1	25
3.51- 7.50	12	22	15	6	13	22	20	8	10	5	5	1	2	4	4	5	154
7.51-12.50	20	12	8	4	3	5	21	17	19	5	1	3	8	2	7	27	162
12.51-18.50	14	2	0	0	3	0	6	26	23	8	6	6	4	11	23	25	157
18.51-24.00	0	1	0	0	0	0	0	10	7	1	2	0	0	0	2	2	25
>24.00	0	0	0	0	0	0	0	0	5	1	0	0	0	1	0	1	8
TOTAL	46	38	25	11	21	35	48	62	67	20	16	11	16	18	36	61	531

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	19	17	26	31	28	28	12	20	14	11	7	9	8	7	5	6	248
3.51- 7.50	154	121	85	88	112	137	144	103	62	41	45	26	30	32	43	58	1281
7.51-12.50	185	75	37	26	13	46	150	193	148	73	44	44	42	91	136	180	1483
12.51-18.50	82	10	2	2	4	0	26	107	72	34	25	10	5	54	200	239	872
18.51-24.00	4	8	0	0	0	0	0	25	38	13	4	2	0	12	53	83	242
>24.00	7	1	0	0	0	0	0	6	26	1	0	0	0	2	12	21	76
TOTAL	451	232	150	147	157	211	332	454	360	173	125	91	85	198	449	587	4203

B181

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	13
1.01- 3.50	47	27	30	28	30	34	38	40	52	18	12	6	12	17	26	29	446
3.51- 7.50	75	21	26	18	37	49	80	142	129	45	19	22	32	44	51	67	857
7.51-12.50	40	10	4	9	4	13	53	174	113	47	43	23	20	51	77	37	718
12.51-18.50	7	0	0	0	0	0	11	47	55	21	4	3	3	7	14	16	188
18.51-24.00	1	2	0	0	0	0	0	8	17	2	0	0	0	0	0	1	31
>24.00	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4
TOTAL	171	60	60	55	71	96	182	411	369	133	78	54	67	119	168	150	2257

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	44
1.01- 3.50	30	14	5	2	2	8	8	27	64	51	29	21	20	33	53	55	422
3.51- 7.50	15	3	3	1	1	3	6	21	55	6	12	14	14	17	22	11	204
7.51-12.50	2	0	0	0	0	0	0	3	25	4	3	15	15	14	7	4	92
12.51-18.50	0	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	7
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	47	17	8	3	3	11	14	51	148	61	44	50	49	65	84	70	769

B182

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	68
1.01- 3.50	17	7	1	6	2	2	5	33	82	50	19	16	25	31	47	50	393
3.51- 7.50	2	0	0	0	0	0	0	3	6	6	4	4	5	4	11	1	46
7.51-12.50	0	1	0	0	0	0	0	0	0	2	1	1	3	1	0	0	9
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	19	8	1	6	2	2	5	36	88	58	25	21	33	36	58	51	517

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	126
1.01- 3.50	113	66	64	68	65	81	66	121	215	130	70	53	67	88	131	141	1539
3.51- 7.50	260	171	132	115	165	220	262	287	269	104	86	67	84	101	131	142	2596
7.51-12.50	263	111	55	43	20	70	236	415	317	133	93	87	88	163	230	256	2580
12.51-18.50	116	19	4	3	11	0	47	215	181	79	37	19	12	79	247	323	1392
18.51-24.00	10	12	0	0	0	0	0	49	90	25	7	2	0	13	58	92	358
>24.00	8	1	0	0	0	0	0	14	68	8	1	0	1	5	12	22	140
TOTAL	770	380	255	229	261	371	611	1101	1140	479	294	228	252	449	809	976	8731

B183

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
 WIND MEASURED AT: 10.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 8760

TOTAL NUMBER OF VALID OBSERVATIONS: 8731

TOTAL NUMBER OF MISSING OBSERVATIONS: 29

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.7 %

MEAN WIND SPEED FOR THIS PERIOD: 8.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
2.00	3.20	6.08	48.14	25.85	8.81	5.92

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	13	9	5	0	1	2	8	32	59	14	2	1	0	3	2	24	0
B	23	16	6	7	6	14	22	55	49	20	4	0	2	10	12	33	0
C	46	38	25	11	21	35	48	62	67	20	16	11	16	18	36	61	0
D	451	232	150	147	157	211	332	454	360	173	125	91	85	198	449	587	1
E	171	60	60	55	71	96	182	411	369	133	78	54	67	119	168	150	13
F	47	17	8	3	3	11	14	51	148	61	44	50	49	65	84	70	44
G	19	8	1	6	2	2	5	36	88	58	25	21	33	36	58	51	68
TOTAL	770	380	255	229	261	371	611	1101	1140	479	294	228	252	449	809	976	126

B184

JFDs of 100-Meter Wind vs. Delta T

January-March 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12.51-18.50	3	1	1	0	0	0	0	0	1	0	0	0	0	0	0	2	8
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
>24.00	0	0	0	0	0	0	0	0	4	0	2	0	0	1	0	0	7
TOTAL	4	1	1	0	0	0	0	0	5	0	2	0	0	1	1	2	17

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3.51- 7.50	0	1	0	1	1	0	1	0	0	2	1	0	0	0	0	0	7
7.51-12.50	1	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0	5
12.51-18.50	2	4	0	0	0	0	0	1	0	0	1	0	0	3	3	3	17
18.51-24.00	0	1	0	0	0	0	0	0	4	1	0	0	0	0	1	3	10
>24.00	0	1	0	0	0	0	0	1	5	1	1	0	1	2	1	0	13
TOTAL	3	7	1	2	1	0	2	2	10	4	3	0	1	5	6	6	53

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	1	3	1	0	1	2	3	0	1	1	1	0	1	3	19
3.51- 7.50	32	19	15	9	4	7	12	11	9	4	6	10	5	6	6	9	164
7.51-12.50	82	47	21	20	13	13	16	32	33	13	10	16	13	14	22	54	419
12.51-18.50	55	54	9	5	5	8	24	31	32	13	14	8	3	22	47	93	423
18.51-24.00	4	14	2	0	0	1	2	12	11	11	10	10	1	14	41	36	169
>24.00	0	12	0	0	0	0	0	2	31	12	6	1	1	23	36	27	151
TOTAL	174	146	48	37	23	29	55	90	119	53	47	46	24	79	153	222	1345

B187

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	1	4	1	0	1	1	1	1	1	2	0	0	0	0	0	14
3.51- 7.50	26	11	2	3	4	4	1	2	2	5	1	0	1	0	1	10	73
7.51-12.50	4	5	2	5	9	13	6	7	13	15	3	6	3	5	11	15	122
12.51-18.50	0	0	1	1	2	4	13	11	21	13	6	3	3	10	14	19	121
18.51-24.00	0	0	0	0	0	2	4	8	35	14	21	8	4	11	16	4	127
>24.00	0	0	0	0	0	0	1	1	6	5	5	3	5	9	6	2	43
TOTAL	31	17	9	10	15	24	26	30	78	53	38	20	16	35	48	50	500

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	2	1	0	2	0	0	0	0	0	0	0	0	0	0	1	2	8
3.51- 7.50	1	0	1	1	1	2	4	4	1	0	2	3	4	1	1	0	26
7.51-12.50	1	0	1	2	1	0	3	4	6	4	8	14	5	2	1	1	53
12.51-18.50	0	0	0	0	0	0	5	3	6	6	3	3	5	1	1	0	33
18.51-24.00	0	0	0	0	0	0	0	0	3	5	2	1	2	4	7	1	25
>24.00	0	0	0	0	0	0	0	0	0	1	0	1	5	1	3	0	11
TOTAL	4	1	2	5	2	2	12	11	16	16	15	22	21	9	14	4	156

B188

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	4
3.51- 7.50	3	0	0	0	1	0	0	1	0	3	1	0	2	0	2	2	15
7.51-12.50	0	0	2	0	0	0	2	2	7	7	1	3	1	0	2	2	29
12.51-18.50	0	0	0	0	0	0	3	2	10	4	5	2	0	0	2	0	28
18.51-24.00	0	0	0	0	0	0	0	0	0	1	5	4	0	0	0	0	10
>24.00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
TOTAL	3	0	2	0	1	0	5	5	18	15	13	12	3	1	6	4	88

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	4	2	5	6	1	1	3	3	5	1	4	3	1	0	2	5	46
3.51- 7.50	62	31	18	14	11	13	18	18	12	14	11	13	12	7	10	21	285
7.51-12.50	89	52	27	28	23	26	27	45	60	39	22	39	22	21	37	72	629
12.51-18.50	60	59	11	6	7	12	45	48	70	36	29	16	11	36	67	117	630
18.51-24.00	4	15	2	0	0	3	6	20	53	32	38	23	7	29	66	44	342
>24.00	0	13	0	0	0	0	1	4	47	19	14	6	12	37	46	29	228
TOTAL	219	172	63	54	42	55	100	138	247	141	118	100	65	130	228	288	2160

B189

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-MAR 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 3/31/14

*** JAN-MAR 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160

TOTAL NUMBER OF VALID OBSERVATIONS: 2160

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 14.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.05	.79	2.45	62.27	23.15	7.22	4.07

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
B	4	1	1	0	0	0	0	0	5	0	2	0	0	1	1	2	0
C	3	7	1	2	1	0	2	2	10	4	3	0	1	5	6	6	0
D	174	146	48	37	23	29	55	90	119	53	47	46	24	79	153	222	0
E	31	17	9	10	15	24	26	30	78	53	38	20	16	35	48	50	0
F	4	1	2	5	2	2	12	11	16	16	15	22	21	9	14	4	0
G	3	0	2	0	1	0	5	5	18	15	13	12	3	1	6	4	0
TOTAL	219	172	63	54	42	55	100	138	247	141	118	100	65	130	228	288	0

B190

JFDs of 100-Meter Wind vs. Delta T

April-June 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
12.51-18.50	3	3	1	0	0	0	3	5	0	0	0	0	0	0	1	7	23
18.51-24.00	0	1	1	1	0	0	0	2	7	0	0	0	0	0	1	0	13
>24.00	0	0	0	0	0	0	0	4	11	2	0	0	0	0	0	0	17
TOTAL	3	4	2	1	0	0	4	13	18	2	0	0	0	0	2	7	56

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3.51- 7.50	1	0	2	1	1	2	1	2	0	0	0	0	0	0	0	0	10
7.51-12.50	0	3	5	1	0	3	7	8	8	0	0	1	2	2	0	5	45
12.51-18.50	1	5	4	0	0	2	3	11	8	5	2	0	1	0	1	15	58
18.51-24.00	0	2	0	1	3	0	1	4	11	6	0	0	0	0	1	4	33
>24.00	0	0	0	0	1	0	0	5	10	4	0	0	0	0	0	0	20
TOTAL	3	10	11	3	5	7	12	30	37	15	2	1	3	3	2	24	168

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	3	2	1	2	3	4	1	3	2	2	1	1	1	2	0	3	31
3.51- 7.50	22	11	9	13	12	15	9	10	2	11	13	6	3	4	8	5	153
7.51-12.50	19	21	19	14	15	30	26	19	35	14	9	12	14	5	10	37	299
12.51-18.50	11	16	16	20	3	18	25	37	30	17	12	12	12	23	34	49	335
18.51-24.00	4	1	6	7	6	5	16	32	33	12	3	3	2	11	41	21	203
>24.00	1	4	0	0	2	8	5	31	34	0	4	0	0	1	16	9	115
TOTAL	60	55	51	56	41	80	82	132	136	56	42	34	32	46	109	124	1137

B193

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	4	1	0	1	0	0	1	3	1	0	1	0	1	1	0	1	15
3.51- 7.50	9	4	3	2	2	3	7	8	3	4	0	2	0	2	7	4	60
7.51-12.50	15	8	13	5	16	20	26	20	19	6	4	3	0	5	5	20	185
12.51-18.50	2	11	13	15	9	7	16	33	70	16	7	4	6	12	4	7	232
18.51-24.00	0	0	0	0	3	2	11	21	15	2	1	2	2	1	4	2	66
>24.00	1	0	0	0	0	3	11	5	9	2	0	1	1	0	0	0	33
TOTAL	31	24	29	23	30	35	72	90	117	30	13	12	10	21	20	34	591

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	1	1	3	1	1	1	0	2	1	0	0	1	0	0	1	14
3.51- 7.50	9	7	6	4	9	1	4	6	6	0	0	1	1	1	1	3	59
7.51-12.50	1	2	3	3	2	1	6	8	7	4	2	1	3	4	5	8	60
12.51-18.50	0	0	0	0	0	0	2	5	5	4	4	1	2	4	3	0	30
18.51-24.00	0	0	0	0	0	0	1	0	0	0	1	0	5	1	0	0	8
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
TOTAL	11	10	10	10	12	3	14	19	20	9	7	3	14	10	9	12	173

B194

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	4
3.51- 7.50	0	2	0	2	1	1	0	3	3	1	2	2	3	1	3	2	26
7.51-12.50	0	0	2	0	0	0	0	0	6	4	2	2	0	0	0	1	17
12.51-18.50	0	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	9
18.51-24.00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL	1	2	3	2	1	1	0	4	10	10	8	6	4	1	3	3	59

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	10	4	3	6	4	5	3	7	6	3	2	1	3	4	0	5	66
3.51- 7.50	41	24	20	22	25	22	21	29	14	16	15	11	7	8	19	14	308
7.51-12.50	35	34	42	23	33	54	66	57	75	28	17	19	19	16	20	71	609
12.51-18.50	17	35	34	35	12	27	49	91	113	46	28	18	22	39	43	78	687
18.51-24.00	4	4	7	9	12	7	29	59	66	21	5	6	9	13	47	27	325
>24.00	2	4	0	0	3	11	16	45	64	8	5	1	3	1	16	9	188
TOTAL	109	105	106	95	89	126	184	288	338	122	72	56	63	81	145	204	2184

B195

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T APR-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 4/ 1/14 - 6/30/14

*** APR-JUN 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2184

TOTAL NUMBER OF VALID OBSERVATIONS: 2184

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 14.1 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.00	2.56	7.69	52.06	27.06	7.92	2.70

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	3	4	2	1	0	0	4	13	18	2	0	0	0	0	2	7	0
C	3	10	11	3	5	7	12	30	37	15	2	1	3	3	2	24	0
D	60	55	51	56	41	80	82	132	136	56	42	34	32	46	109	124	1
E	31	24	29	23	30	35	72	90	117	30	13	12	10	21	20	34	0
F	11	10	10	10	12	3	14	19	20	9	7	3	14	10	9	12	0
G	1	2	3	2	1	1	0	4	10	10	8	6	4	1	3	3	0
TOTAL	109	105	106	95	89	126	184	288	338	122	72	56	63	81	145	204	1

JFDs of 100-Meter Wind vs. Delta T

January-June 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	4
12.51-18.50	6	4	2	0	0	0	3	5	1	0	0	0	0	0	1	9	31
18.51-24.00	0	1	1	1	0	0	0	2	7	0	0	0	0	0	2	0	14
>24.00	0	0	0	0	0	0	0	4	15	2	2	0	0	1	0	0	24
TOTAL	7	5	3	1	0	0	4	13	23	2	2	0	0	1	3	9	73

B198

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
3.51- 7.50	1	1	2	2	2	2	2	2	0	2	1	0	0	0	0	0	17
7.51-12.50	1	3	6	2	0	3	7	8	9	0	0	1	2	2	1	5	50
12.51-18.50	3	9	4	0	0	2	3	12	8	5	3	0	1	3	4	18	75
18.51-24.00	0	3	0	1	3	0	1	4	15	7	0	0	0	0	2	7	43
>24.00	0	1	0	0	1	0	0	6	15	5	1	0	1	2	1	0	33
TOTAL	6	17	12	5	6	7	14	32	47	19	5	1	4	8	8	30	221

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	4	2	2	5	4	4	2	5	5	2	2	2	2	2	1	6	50
3.51- 7.50	54	30	24	22	16	22	21	21	11	15	19	16	8	10	14	14	317
7.51-12.50	101	68	40	34	28	43	42	51	68	27	19	28	27	19	32	91	718
12.51-18.50	66	70	25	25	8	26	49	68	62	30	26	20	15	45	81	142	758
18.51-24.00	8	15	8	7	6	6	18	44	44	23	13	13	3	25	82	57	372
>24.00	1	16	0	0	2	8	5	33	65	12	10	1	1	24	52	36	266
TOTAL	234	201	99	93	64	109	137	222	255	109	89	80	56	125	262	346	2482

B199

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	5	2	4	2	0	1	2	4	2	1	3	0	1	1	0	1	29
3.51- 7.50	35	15	5	5	6	7	8	10	5	9	1	2	1	2	8	14	133
7.51-12.50	19	13	15	10	25	33	32	27	32	21	7	9	3	10	16	35	307
12.51-18.50	2	11	14	16	11	11	29	44	91	29	13	7	9	22	18	26	353
18.51-24.00	0	0	0	0	3	4	15	29	50	16	22	10	6	12	20	6	193
>24.00	1	0	0	0	0	3	12	6	15	7	5	4	6	9	6	2	76
TOTAL	62	41	38	33	45	59	98	120	195	83	51	32	26	56	68	84	1091

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	3	2	1	5	1	1	1	0	2	1	0	0	1	0	1	3	22
3.51- 7.50	10	7	7	5	10	3	8	10	7	0	2	4	5	2	2	3	85
7.51-12.50	2	2	4	5	3	1	9	12	13	8	10	15	8	6	6	9	113
12.51-18.50	0	0	0	0	0	0	7	8	11	10	7	4	7	5	4	0	63
18.51-24.00	0	0	0	0	0	0	1	0	3	5	3	1	7	5	7	1	33
>24.00	0	0	0	0	0	0	0	0	0	1	0	1	7	1	3	0	13
TOTAL	15	11	12	15	14	5	26	30	36	25	22	25	35	19	23	16	329

B200

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	1	0	0	0	0	1	2	0	1	2	0	0	0	0	8
3.51- 7.50	3	2	0	2	2	1	0	4	3	4	3	2	5	1	5	4	41
7.51-12.50	0	0	4	0	0	0	2	2	13	11	3	5	1	0	2	3	46
12.51-18.50	0	0	0	0	0	0	3	2	10	8	8	3	1	0	2	0	37
18.51-24.00	0	0	0	0	0	0	0	0	0	2	5	5	0	0	0	0	12
>24.00	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
TOTAL	4	2	5	2	2	1	5	9	28	25	21	18	7	2	9	7	147

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	14	6	8	12	5	6	6	10	11	4	6	4	4	4	2	10	112
3.51- 7.50	103	55	38	36	36	35	39	47	26	30	26	24	19	15	29	35	593
7.51-12.50	124	86	69	51	56	80	93	102	135	67	39	58	41	37	57	143	1238
12.51-18.50	77	94	45	41	19	39	94	139	183	82	57	34	33	75	110	195	1317
18.51-24.00	8	19	9	9	12	10	35	79	119	53	43	29	16	42	113	71	667
>24.00	2	17	0	0	3	11	17	49	111	27	19	7	15	38	62	38	416
TOTAL	328	277	169	149	131	181	284	426	585	263	190	156	128	211	373	492	4344

B201

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14

*** JAN-JUN 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4344

TOTAL NUMBER OF VALID OBSERVATIONS: 4344

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 14.3 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.02	1.68	5.09	57.14	25.12	7.57	3.38

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
B	7	5	3	1	0	0	4	13	23	2	2	0	0	1	3	9	0
C	6	17	12	5	6	7	14	32	47	19	5	1	4	8	8	30	0
D	234	201	99	93	64	109	137	222	255	109	89	80	56	125	262	346	1
E	62	41	38	33	45	59	98	120	195	83	51	32	26	56	68	84	0
F	15	11	12	15	14	5	26	30	36	25	22	25	35	19	23	16	0
G	4	2	5	2	2	1	5	9	28	25	21	18	7	2	9	7	0
TOTAL	328	277	169	149	131	181	284	426	585	263	190	156	128	211	373	492	1

B202

Stability Classes by Hour of Day

100-Meter Wind vs. Delta T

January-June 2014

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-JUN 2014
SITE IDENTIFIER: NPPD
DATA PERIOD EXAMINED: 1/ 1/14 - 6/30/14
STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

		HOURLY STABILITIES																									
		HOURS																									
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
14	6	30	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	E	D	D	D	D	D	E	E	F	F

JFDs of 100-Meter Wind vs. Delta T

July-September 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	6
TOTAL	0	0	0	0	0	1	0	1	5	2	0	0	0	0	0	0	9

B210

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3.51- 7.50	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	6
7.51-12.50	0	1	0	0	0	2	3	7	2	0	0	0	0	0	0	3	18
12.51-18.50	3	0	0	0	0	0	1	7	7	0	0	0	0	0	0	5	23
18.51-24.00	0	0	0	0	0	0	0	6	4	0	0	0	0	0	0	0	10
>24.00	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	0	7
TOTAL	3	1	0	0	1	2	7	24	19	1	0	0	0	0	0	8	66

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	5	4	4	5	4	2	5	3	3	1	7	6	2	1	2	2	56
3.51- 7.50	38	31	20	26	36	48	32	30	12	7	11	9	8	4	8	11	331
7.51-12.50	29	39	8	8	25	40	33	42	31	7	2	2	2	4	8	35	315
12.51-18.50	10	18	0	1	2	14	21	64	55	15	6	6	0	5	24	30	271
18.51-24.00	5	0	0	0	0	0	5	11	17	4	1	0	1	2	12	9	67
>24.00	3	0	0	0	0	0	0	3	6	2	0	0	0	0	0	0	14
TOTAL	90	92	32	40	67	104	96	153	124	36	27	23	13	16	54	87	1054

B211

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	0	0	3	1	3	0	0	0	2	2	0	1	0	0	13
3.51- 7.50	21	12	3	3	7	12	6	10	2	3	2	2	1	4	3	3	94
7.51-12.50	13	11	6	16	18	27	45	44	31	10	3	3	3	6	12	24	272
12.51-18.50	6	9	4	1	6	16	27	73	54	16	7	4	4	5	8	7	247
18.51-24.00	0	1	0	0	2	1	5	12	17	5	3	1	1	1	6	1	56
>24.00	0	1	1	0	1	0	0	2	2	0	0	0	0	0	0	0	7
TOTAL	40	35	14	20	37	57	86	141	106	34	17	12	9	17	29	35	689

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	5	1	1	3	1	4	2	1	3	1	1	3	1	3	1	1	32
3.51- 7.50	5	12	11	6	2	5	7	8	4	5	3	6	7	1	6	8	96
7.51-12.50	0	3	2	3	2	6	14	41	19	2	2	2	2	0	6	4	108
12.51-18.50	0	0	0	0	0	2	1	9	9	2	2	2	2	3	5	8	45
18.51-24.00	0	0	0	0	0	0	0	0	2	0	1	0	1	2	1	0	7
>24.00	0	0	0	0	0	0	0	1	3	0	0	0	0	0	1	1	6
TOTAL	10	16	14	12	5	17	24	60	40	10	9	13	13	9	20	22	294

B212

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	2	2	1	2	1	1	1	0	2	0	0	0	0	0	12
3.51- 7.50	2	4	6	6	5	2	9	6	0	1	1	5	1	2	1	2	53
7.51-12.50	0	1	0	0	0	0	1	7	5	4	0	0	1	0	0	0	19
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	1	8
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	5	8	8	6	4	11	14	6	5	3	5	5	8	2	3	95

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	10	6	7	10	10	9	12	5	7	2	12	11	3	5	3	3	115
3.51- 7.50	66	59	40	41	50	67	56	58	18	16	17	22	17	11	18	24	580
7.51-12.50	42	55	16	27	45	76	96	141	88	23	7	7	8	10	26	66	733
12.51-18.50	19	27	4	2	8	32	50	153	125	33	15	12	7	18	38	51	594
18.51-24.00	5	1	0	0	2	1	10	29	42	9	5	1	5	6	19	10	145
>24.00	3	1	1	0	1	0	0	7	20	5	0	0	0	0	1	1	40
TOTAL	145	149	68	80	116	185	224	393	300	88	56	53	40	50	105	155	2207

B213

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-SEP 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 9/30/14

*** JUL-SEP 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2207

TOTAL NUMBER OF VALID OBSERVATIONS: 2207

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 10.9 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.00	.41	2.99	47.76	31.22	13.32	4.30

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	1	0	1	5	2	0	0	0	0	0	0	0
C	3	1	0	0	1	2	7	24	19	1	0	0	0	0	0	8	0
D	90	92	32	40	67	104	96	153	124	36	27	23	13	16	54	87	0
E	40	35	14	20	37	57	86	141	106	34	17	12	9	17	29	35	0
F	10	16	14	12	5	17	24	60	40	10	9	13	13	9	20	22	0
G	2	5	8	8	6	4	11	14	6	5	3	5	5	8	2	3	0
TOTAL	145	149	68	80	116	185	224	393	300	88	56	53	40	50	105	155	0

B214

JFDs of 100-Meter Wind vs. Delta T

October-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B216

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7.51-12.50	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12.51-18.50	1	0	0	0	0	0	0	3	0	0	0	0	0	2	3	4	13
18.51-24.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	1	6
>24.00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	4
TOTAL	3	1	0	0	0	0	0	4	4	0	0	0	0	2	8	5	27

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	2	3	2	9	5	4	1	2	2	0	2	2	1	0	1	2	38
3.51- 7.50	16	16	15	15	24	23	24	23	7	16	7	3	2	4	4	4	203
7.51-12.50	42	40	8	5	5	19	46	47	44	20	17	17	10	16	23	42	401
12.51-18.50	15	23	6	6	5	2	14	38	47	22	14	13	16	30	79	76	406
18.51-24.00	1	2	1	0	0	0	4	19	29	12	3	4	2	8	62	86	233
>24.00	0	0	0	0	0	0	0	0	15	8	0	0	0	1	25	34	83
TOTAL	76	84	32	35	39	48	89	129	144	78	43	39	31	59	194	244	1364

B217

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	0	2	0	0	1	0	1	0	0	0	1	0	0	1	0	0	6
3.51- 7.50	8	3	2	1	0	6	6	5	3	3	0	0	1	1	1	3	43
7.51-12.50	9	8	2	4	13	21	23	22	7	7	3	4	0	9	1	10	143
12.51-18.50	0	4	1	1	8	12	23	13	38	12	8	6	5	9	16	19	175
18.51-24.00	0	0	0	0	0	0	3	15	32	6	23	4	10	23	28	7	151
>24.00	0	0	0	0	0	0	0	0	3	1	1	0	3	2	3	5	18
TOTAL	17	17	5	6	22	39	56	55	83	29	36	14	19	45	49	44	537

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	2	1	0	0	1	1	1	0	1	2	1	0	0	1	0	11
3.51- 7.50	4	1	4	1	0	2	2	1	1	2	2	0	1	0	1	1	23
7.51-12.50	2	6	2	1	1	0	5	7	2	2	2	4	1	7	4	13	59
12.51-18.50	0	0	0	0	4	1	7	7	8	9	3	3	0	2	6	6	56
18.51-24.00	0	0	0	0	0	0	2	0	2	3	0	3	6	13	5	5	39
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6
TOTAL	6	9	7	2	5	4	17	16	13	17	9	11	8	26	19	25	194

B218

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	0	2	1	0	1	0	1	0	1	1	2	0	0	0	1	3	13
3.51- 7.50	6	3	0	0	0	1	0	1	3	3	2	1	1	1	0	3	25
7.51-12.50	0	2	0	0	0	0	1	3	3	2	3	0	0	1	1	9	25
12.51-18.50	0	0	0	0	0	0	1	1	7	4	3	1	0	0	0	1	18
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	7	1	0	1	1	3	5	14	10	10	2	2	2	2	16	83

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	2
1.01- 3.50	2	9	4	9	7	5	4	3	3	2	7	3	1	1	3	5	68
3.51- 7.50	34	23	21	17	24	32	32	30	15	24	11	4	5	6	6	11	295
7.51-12.50	55	57	12	10	19	40	75	79	56	31	25	25	11	33	29	74	631
12.51-18.50	16	27	7	7	17	15	45	62	100	47	28	23	21	43	104	106	668
18.51-24.00	1	2	1	0	0	0	9	35	63	21	26	11	19	44	99	99	430
>24.00	0	0	0	0	0	0	0	0	21	9	1	0	3	7	31	39	111
TOTAL	108	118	45	43	67	92	165	209	258	134	98	66	60	134	272	334	2205

B219

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T OCT-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 10/ 1/14 - 12/31/14

*** OCT-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2209

TOTAL NUMBER OF VALID OBSERVATIONS: 2205

TOTAL NUMBER OF MISSING OBSERVATIONS: 4

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.8 %

MEAN WIND SPEED FOR THIS PERIOD: 13.9 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.00	.00	1.22	61.86	24.35	8.80	3.76

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	3	1	0	0	0	0	0	4	4	0	0	0	0	2	8	5	0
D	76	84	32	35	39	48	89	129	144	78	43	39	31	59	194	244	0
E	17	17	5	6	22	39	56	55	83	29	36	14	19	45	49	44	1
F	6	9	7	2	5	4	17	16	13	17	9	11	8	26	19	25	0
G	6	7	1	0	1	1	3	5	14	10	10	2	2	2	2	16	1
TOTAL	108	118	45	43	67	92	165	209	258	134	98	66	60	134	272	334	2

B220

JFDs of 100-Meter Wind vs. Delta T

July-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	6
TOTAL	0	0	0	0	0	1	0	1	5	2	0	0	0	0	0	0	9

B222

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3.51- 7.50	0	0	0	0	0	0	2	4	1	0	0	0	0	0	0	0	7
7.51-12.50	2	2	0	0	0	2	3	7	2	0	0	0	0	0	0	3	21
12.51-18.50	4	0	0	0	0	0	1	10	7	0	0	0	0	2	3	9	36
18.51-24.00	0	0	0	0	0	0	0	7	4	0	0	0	0	0	4	1	16
>24.00	0	0	0	0	0	0	0	0	9	1	0	0	0	0	1	0	11
TOTAL	6	2	0	0	1	2	7	28	23	1	0	0	0	2	8	13	93

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	7	7	6	14	9	6	6	5	5	1	9	8	3	1	3	4	94
3.51- 7.50	54	47	35	41	60	71	56	53	19	23	18	12	10	8	12	15	534
7.51-12.50	71	79	16	13	30	59	79	89	75	27	19	19	12	20	31	77	716
12.51-18.50	25	41	6	7	7	16	35	102	102	37	20	19	16	35	103	106	677
18.51-24.00	6	2	1	0	0	0	9	30	46	16	4	4	3	10	74	95	300
>24.00	3	0	0	0	0	0	0	3	21	10	0	0	0	1	25	34	97
TOTAL	166	176	64	75	106	152	185	282	268	114	70	62	44	75	248	331	2418

B223

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	0	3	0	0	4	1	4	0	0	0	3	2	0	2	0	0	19
3.51- 7.50	29	15	5	4	7	18	12	15	5	6	2	2	2	5	4	6	137
7.51-12.50	22	19	8	20	31	48	68	66	38	17	6	7	3	15	13	34	415
12.51-18.50	6	13	5	2	14	28	50	86	92	28	15	10	9	14	24	26	422
18.51-24.00	0	1	0	0	2	1	8	27	49	11	26	5	11	24	34	8	207
>24.00	0	1	1	0	1	0	0	2	5	1	1	0	3	2	3	5	25
TOTAL	57	52	19	26	59	96	142	196	189	63	53	26	28	62	78	79	1226

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	5	3	2	3	1	5	3	2	3	2	3	4	1	3	2	1	43
3.51- 7.50	9	13	15	7	2	7	9	9	5	7	5	6	8	1	7	9	119
7.51-12.50	2	9	4	4	3	6	19	48	21	4	4	6	3	7	10	17	167
12.51-18.50	0	0	0	0	4	3	8	16	17	11	5	5	2	5	11	14	101
18.51-24.00	0	0	0	0	0	0	2	0	4	3	1	3	7	15	6	5	46
>24.00	0	0	0	0	0	0	0	1	3	0	0	0	0	4	3	1	12
TOTAL	16	25	21	14	10	21	41	76	53	27	18	24	21	35	39	47	488

B224

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	0	2	3	2	2	2	2	1	2	1	4	0	0	0	1	3	25
3.51- 7.50	8	7	6	6	5	3	9	7	3	4	3	6	2	3	1	5	78
7.51-12.50	0	3	0	0	0	0	2	10	8	6	3	0	1	1	1	9	44
12.51-18.50	0	0	0	0	0	0	1	1	7	4	3	1	1	5	1	2	26
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	12	9	8	7	5	14	19	20	15	13	7	7	10	4	19	178

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	2
1.01- 3.50	12	15	11	19	17	14	16	8	10	4	19	14	4	6	6	8	183
3.51- 7.50	100	82	61	58	74	99	88	88	33	40	28	26	22	17	24	35	875
7.51-12.50	97	112	28	37	64	116	171	220	144	54	32	32	19	43	55	140	1364
12.51-18.50	35	54	11	9	25	47	95	215	225	80	43	35	28	61	142	157	1262
18.51-24.00	6	3	1	0	2	1	19	64	105	30	31	12	24	50	118	109	575
>24.00	3	1	1	0	1	0	0	7	41	14	1	0	3	7	32	40	151
TOTAL	253	267	113	123	183	277	389	602	558	222	154	119	100	184	377	489	4412

B225

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14

*** JUL-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4416

TOTAL NUMBER OF VALID OBSERVATIONS: 4412

TOTAL NUMBER OF MISSING OBSERVATIONS: 4

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.9 %

MEAN WIND SPEED FOR THIS PERIOD: 12.4 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.00	.20	2.11	54.81	27.79	11.06	4.03

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	1	0	1	5	2	0	0	0	0	0	0	0
C	6	2	0	0	1	2	7	28	23	1	0	0	0	2	8	13	0
D	166	176	64	75	106	152	185	282	268	114	70	62	44	75	248	331	0
E	57	52	19	26	59	96	142	196	189	63	53	26	28	62	78	79	1
F	16	25	21	14	10	21	41	76	53	27	18	24	21	35	39	47	0
G	8	12	9	8	7	5	14	19	20	15	13	7	7	10	4	19	1
TOTAL	253	267	113	123	183	277	389	602	558	222	154	119	100	184	377	489	2

B226

Stability Classes by Hour of Day

100-Meter Wind vs. Delta T

July-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
14	7	1	F	E	F	E	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E							
14	7	2	E	F	F	F	F	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F						
14	7	3	G	G	G	F	E	E	F	E	D	D	D	D	C	C	D	D	D	D	D	D	D	E	F	F	F						
14	7	4	F	F	F	F	F	F	F	E	D	D	D	D	C	C	D	D	D	D	D	D	D	E	E	E	E						
14	7	5	E	E	E	E	E	E	E	E	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	E	E	E					
14	7	6	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	E						
14	7	7	E	E	F	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E						
14	7	8	E	E	E	E	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	G						
14	7	9	G	G	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	-					
14	7	10	E	E	E	E	E	E	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	E	E	E	E	E					
14	7	11	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	E					
14	7	12	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	D	E				
14	7	13	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	F	E					
14	7	14	F	G	G	F	E	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F					
14	7	15	F	F	F	E	E	E	E	D	D	D	C	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F					
14	7	16	F	F	F	F	F	G	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	E					
14	7	17	G	G	G	G	G	G	F	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	F					
14	7	18	F	E	F	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F					
14	7	19	E	E	E	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E					
14	7	20	E	E	E	E	E	E	D	D	D	C	C	C	C	D	D	D	D	D	D	D	D	E	E	E	E	E					
14	7	21	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D					
14	7	22	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E					
14	7	23	E	E	E	E	E	E	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	E	F	E	E	E					
14	7	24	E	E	E	E	E	E	E	D	D	D	D	D	C	C	C	D	D	D	D	D	D	E	E	E	E	E					
14	7	25	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	F	F	E			
14	7	26	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F	F			
14	7	27	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	E	E			
14	7	28	E	E	E	E	E	E	E	D	D	C	C	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F			
14	7	29	G	G	G	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	G	F	G			
14	7	30	F	F	F	F	F	G	F	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	G	G	F	F			
14	7	31	G	G	G	G	G	G	G	F	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	G	G	G		
14	8	1	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F			
14	8	2	F	F	F	F	F	F	F	F	D	D	D	D	C	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F			
14	8	3	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F	F	F		
14	8	4	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E		
14	8	5	E	E	F	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E		
14	8	6	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	E	E	E		
14	8	7	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
14	8	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	E	E	E	
14	8	9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	D	E	E	E	E	
14	8	10	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	D	F	F	F	D
14	8	11	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	F	F	
14	8	12	F	F	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	G	G	F	G	F	F	
14	8	13	G	G	G	G	G	G	G	F	D	D	D	D	D	D	D	D	D	D	D	D	D	F	F	G	G	G	G	G	G	G	

B228

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14	8	14	G	G	G	G	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	G
14	8	15	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	8	16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F
14	8	17	F	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F
14	8	18	E	E	F	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	E
14	8	19	F	F	E	F	F	E	F	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F
14	8	20	E	E	F	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
14	8	21	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F	E
14	8	22	F	F	F	F	E	F	F	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	F
14	8	23	E	E	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	E
14	8	24	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	F	F	E
14	8	25	F	F	F	G	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	F
14	8	26	E	E	D	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D
14	8	27	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	E	E
14	8	28	D	E	E	D	D	E	E	D	E	D	D	D	D	D	D	D	D	E	E	F	F	F	F	E
14	8	29	F	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F
14	8	30	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	E	F	F	E
14	8	31	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	E	E	F
14	9	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	D
14	9	2	F	E	F	F	F	E	F	E	D	D	D	D	D	D	D	D	D	D	D	E	F	E	E	F
14	9	3	E	E	E	E	E	E	D	D	D	C	B	B	C	B	B	C	D	D	E	E	E	E	E	E
14	9	4	E	E	E	E	E	E	D	D	B	B	B	C	C	C	D	D	D	D	E	E	E	E	E	E
14	9	5	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D
14	9	6	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	F	F	F	G	G	E
14	9	7	G	G	G	G	G	G	G	F	E	D	D	D	D	D	D	D	D	D	E	F	F	F	F	G
14	9	8	E	E	E	E	E	E	E	D	D	D	C	C	B	D	C	D	D	D	E	E	E	E	E	E
14	9	9	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
14	9	10	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	9	11	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14	9	12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	D
14	9	13	F	F	F	F	F	F	G	F	E	D	D	C	C	C	C	C	D	D	E	F	F	E	E	F
14	9	14	E	E	E	E	E	E	E	D	D	D	C	D	D	C	D	D	D	D	E	E	E	E	E	E
14	9	15	D	D	E	D	E	E	D	D	D	D	C	C	C	C	D	D	D	D	E	E	F	F	F	E
14	9	16	F	G	G	G	G	G	G	F	E	D	D	C	D	D	D	D	D	D	D	E	E	E	E	D
14	9	17	D	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	E	E
14	9	18	E	E	D	D	D	D	D	D	D	D	C	C	B	C	C	D	D	D	D	E	E	E	E	E
14	9	19	E	E	E	D	D	D	D	D	D	D	C	C	C	C	C	D	D	D	E	E	E	E	E	E
14	9	20	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	G	G	G	F
14	9	21	E	E	F	G	G	G	F	E	D	D	C	C	C	C	C	D	D	E	E	F	F	F	G	E
14	9	22	G	G	G	G	G	G	G	F	E	D	D	C	C	D	C	D	D	E	F	G	F	F	F	G
14	9	23	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F
14	9	24	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
14	9	25	F	F	F	F	E	E	F	E	D	D	D	C	C	D	G	D	E	F	F	F	F	F	F	F
14	9	26	E	F	F	F	F	E	E	E	D	D	D	C	C	C	D	D	D	E	F	E	E	E	E	F
14	9	27	E	E	F	F	F	F	F	E	D	D	D	C	C	C	D	D	D	E	F	F	F	F	G	E

B229

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14	9	28	F	F	F	F	F	F	F	F	D	D	C	D	D	C	D	D	D	E	F	G	G	G	G	F
14	9	29	G	G	G	G	G	G	G	F	E	D	D	D	D	C	C	D	D	E	F	F	F	F	F	G
14	9	30	F	F	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	F
14	10	1	E	D	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	F	E	E	E	E
14	10	2	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	10	3	F	F	E	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	E	E	E	E	E	F
14	10	4	E	E	E	E	E	E	D	D	D	C	C	D	C	C	D	D	D	D	F	F	G	G	G	E
14	10	5	F	F	F	E	E	E	F	E	D	D	D	D	C	D	D	D	D	E	E	E	E	E	F	F
14	10	6	F	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	G	F	F	F
14	10	7	F	F	F	G	G	F	E	E	D	D	D	D	C	D	D	D	D	E	F	F	F	F	F	F
14	10	8	F	F	G	G	G	F	E	E	D	D	D	D	D	D	D	D	D	E	F	F	E	E	E	F
14	10	9	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14	10	10	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	F	D
14	10	11	G	G	F	F	F	F	F	F	D	D	D	D	D	C	D	D	D	E	F	G	G	G	F	F
14	10	12	F	E	F	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F
14	10	13	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14	10	14	D	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	F	D
14	10	15	F	F	F	G	F	G	F	E	D	D	D	D	D	D	D	D	D	F	G	G	G	G	G	F
14	10	16	G	G	G	G	G	G	G	E	D	D	D	D	D	D	D	D	D	E	F	E	E	F	F	G
14	10	17	E	E	F	E	E	F	E	E	D	D	D	D	C	C	D	D	D	E	E	E	E	E	E	F
14	10	18	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	E
14	10	19	F	E	E	F	F	F	F	F	E	D	D	D	D	D	D	D	D	E	F	G	F	F	F	F
14	10	20	E	E	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	F	G	G	G	G	G	E
14	10	21	G	G	G	G	G	G	G	G	F	D	D	D	D	D	D	D	D	E	F	F	F	F	F	G
14	10	22	D	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	D	E	E	E
14	10	23	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	G	F	E
14	10	24	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	G	F	G	G	E
14	10	25	G	G	G	G	G	G	G	G	F	E	D	D	D	D	D	D	D	E	F	F	F	E	E	G
14	10	26	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
14	10	27	E	E	E	E	E	F	F	F	E	D	D	D	D	D	D	D	D	E	D	D	D	D	D	F
14	10	28	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	D	E	E	E	E	F	F	D
14	10	29	E	G	F	F	E	F	F	F	E	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F
14	10	30	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	F
14	10	31	D	D	D	D	D	D	D	D	D	C	C	C	C	C	D	D	D	D	E	E	E	E	F	D
14	11	1	E	E	E	E	E	E	E	E	D	D	C	C	C	C	D	D	D	D	E	E	E	D	D	E
14	11	2	E	E	E	E	D	D	D	D	D	D	D	C	C	C	D	D	D	D	E	E	E	E	E	E
14	11	3	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	11	4	D	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D
14	11	5	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	F	F	E	E	E	E
14	11	6	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	G	G	G	G	E
14	11	7	G	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	G
14	11	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	G	G	F	D
14	11	9	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	F	F	F	F	F	E	E
14	11	10	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	11	11	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D

B230

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

HOURLY STABILITIES
 HOURS

YR MN DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14 11 12	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	E	E	D	D	D
14 11 13	D	D	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	F	F	D
14 11 14	F	E	E	E	E	F	F	F	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	F
14 11 15	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D
14 11 16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	E	D
14 11 17	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	D
14 11 18	E	E	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	E	F	F	E	E	E	E
14 11 19	F	E	E	D	D	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	G	E
14 11 20	F	F	F	F	G	F	G	F	G	F	E	D	D	D	D	D	D	D	E	E	E	E	E	F
14 11 21	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E
14 11 22	E	E	E	E	D	D	E	D	D	D	D	D	D	D	D	D	E	E	E	D	D	D	D	E
14 11 23	D	D	D	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 11 24	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D
14 11 25	E	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D
14 11 26	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 11 27	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14 11 28	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	F	F	E	E	E
14 11 29	E	E	E	E	E	E	E	F	F	E	D	D	D	D	D	D	D	E	E	F	F	F	G	G
14 11 30	E	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D	D	D	G
14 12 1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D
14 12 2	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	F	F	G	G	G	F
14 12 3	F	G	G	G	G	G	G	F	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F
14 12 4	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
14 12 5	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14 12 6	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 7	D	D	D	D	D	D	D	D	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 8	D	D	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	D	D	E
14 12 9	D	D	E	E	D	D	D	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D
14 12 10	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14 12 11	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D
14 12 13	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 14	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	E	D	D
14 12 15	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 16	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 17	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 18	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 20	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	-	-	-	D
14 12 21	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14 12 22	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 23	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14 12 24	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D
14 12 25	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
14 12 26	F	F	F	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E

B231

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JUL-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 7/ 1/14 - 12/31/14
 STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS

		HOURLY STABILITIES																								
		HOURS																								
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
14	12	27	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	D
14	12	28	F	F	E	F	E	E	E	E	E	D	D	D	D	D	D	D	E	E	F	F	F	E	E	F
14	12	29	E	E	E	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
14	12	30	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
14	12	31	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	D

JFDs of 100-Meter Wind vs. Delta T

January-December 2014

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	1	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	5
12.51-18.50	6	4	2	0	0	0	3	5	1	0	0	0	0	0	1	9	31
18.51-24.00	0	1	1	1	0	0	0	2	9	0	0	0	0	0	2	0	16
>24.00	0	0	0	0	0	0	0	5	18	4	2	0	0	1	0	0	30
TOTAL	7	5	3	1	0	1	4	14	28	4	2	0	0	1	3	9	82

B234

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	0	0	1	0	2	0	0	0	0	0	0	1	0	0	5
3.51- 7.50	1	1	2	2	2	2	4	6	1	2	1	0	0	0	0	0	24
7.51-12.50	3	5	6	2	0	5	10	15	11	0	0	1	2	2	1	8	71
12.51-18.50	7	9	4	0	0	2	4	22	15	5	3	0	1	5	7	27	111
18.51-24.00	0	3	0	1	3	0	1	11	19	7	0	0	0	0	6	8	59
>24.00	0	1	0	0	1	0	0	6	24	6	1	0	1	2	2	0	44
TOTAL	12	19	12	5	7	9	21	60	70	20	5	1	4	10	16	43	314

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	11	9	8	19	13	10	8	10	10	3	11	10	5	3	4	10	144
3.51- 7.50	108	77	59	63	76	93	77	74	30	38	37	28	18	18	26	29	851
7.51-12.50	172	147	56	47	58	102	121	140	143	54	38	47	39	39	63	168	1434
12.51-18.50	91	111	31	32	15	42	84	170	164	67	46	39	31	80	184	248	1435
18.51-24.00	14	17	9	7	6	6	27	74	90	39	17	17	6	35	156	152	672
>24.00	4	16	0	0	2	8	5	36	86	22	10	1	1	25	77	70	363
TOTAL	400	377	163	168	170	261	322	504	523	223	159	142	100	200	510	677	4900

B235

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	5	5	4	2	4	2	6	4	2	1	6	2	1	3	0	1	48
3.51- 7.50	64	30	10	9	13	25	20	25	10	15	3	4	3	7	12	20	270
7.51-12.50	41	32	23	30	56	81	100	93	70	38	13	16	6	25	29	69	722
12.51-18.50	8	24	19	18	25	39	79	130	183	57	28	17	18	36	42	52	775
18.51-24.00	0	1	0	0	5	5	23	56	99	27	48	15	17	36	54	14	400
>24.00	1	1	1	0	1	3	12	8	20	8	6	4	9	11	9	7	101
TOTAL	119	93	57	59	104	155	240	316	384	146	104	58	54	118	146	163	2317

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	8	5	3	8	2	6	4	2	5	3	3	4	2	3	3	4	65
3.51- 7.50	19	20	22	12	12	10	17	19	12	7	7	10	13	3	9	12	204
7.51-12.50	4	11	8	9	6	7	28	60	34	12	14	21	11	13	16	26	280
12.51-18.50	0	0	0	0	4	3	15	24	28	21	12	9	9	10	15	14	164
18.51-24.00	0	0	0	0	0	0	3	0	7	8	4	4	14	20	13	6	79
>24.00	0	0	0	0	0	0	0	1	3	1	0	1	7	5	6	1	25
TOTAL	31	36	33	29	24	26	67	106	89	52	40	49	56	54	62	63	817

B236

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	1	2	4	2	2	2	2	2	4	1	5	2	0	0	1	3	33
3.51- 7.50	11	9	6	8	7	4	9	11	6	8	6	8	7	4	6	9	119
7.51-12.50	0	3	4	0	0	0	4	12	21	17	6	5	2	1	3	12	90
12.51-18.50	0	0	0	0	0	0	4	3	17	12	11	4	2	5	3	2	63
18.51-24.00	0	0	0	0	0	0	0	0	0	2	5	5	3	1	0	0	16
>24.00	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
TOTAL	12	14	14	10	9	6	19	28	48	40	34	25	14	12	13	26	325

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH
 JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	3
1.01- 3.50	26	21	19	31	22	20	22	18	21	8	25	18	8	10	8	18	295
3.51- 7.50	203	137	99	94	110	134	127	135	59	70	54	50	41	32	53	70	1468
7.51-12.50	221	198	97	88	120	196	264	322	279	121	71	90	60	80	112	283	2602
12.51-18.50	112	148	56	50	44	86	189	354	408	162	100	69	61	136	252	352	2579
18.51-24.00	14	22	10	9	14	11	54	143	224	83	74	41	40	92	231	180	1242
>24.00	5	18	1	0	4	11	17	56	152	41	20	7	18	45	94	78	567
TOTAL	581	544	282	272	314	458	673	1028	1143	485	344	275	228	395	750	981	8756

B237

PROGRAM: JFD VERSION: PC-1.2
 NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 10M DELTA T JAN-DEC 2014
 SITE IDENTIFIER: NPPD
 DATA PERIOD EXAMINED: 1/ 1/14 - 12/31/14

*** JAN-DEC 2014 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
 WIND MEASURED AT: 100.0 METERS
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 8760

TOTAL NUMBER OF VALID OBSERVATIONS: 8756

TOTAL NUMBER OF MISSING OBSERVATIONS: 4

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 13.3 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.01	.94	3.59	55.96	26.46	9.33	3.71

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
B	7	5	3	1	0	1	4	14	28	4	2	0	0	1	3	9	0
C	12	19	12	5	7	9	21	60	70	20	5	1	4	10	16	43	0
D	400	377	163	168	170	261	322	504	523	223	159	142	100	200	510	677	1
E	119	93	57	59	104	155	240	316	384	146	104	58	54	118	146	163	1
F	31	36	33	29	24	26	67	106	89	52	40	49	56	54	62	63	0
G	12	14	14	10	9	6	19	28	48	40	34	25	14	12	13	26	1
TOTAL	581	544	282	272	314	458	673	1028	1143	485	344	275	228	395	750	981	3

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ATMOSPHERIC DIFFUSION ESTIMATES

The tables of atmospheric diffusion estimates in this section were generated using the latest version of the computer code XOQDOQ included as part of NRC Dose 2.3.20 (ORNL 2015). Data are given for 22 distances and 16 compass points (directions from site) centered on the Cooper Nuclear Station (CNS). Tables are presented for the ground-level (vent) and elevated (stack) release options separately, and for the following time periods in 2014: January-March, April-June, July-September, October-December, July-December, and January-December.

The most recent 5-year average X/Q, depleted X/Q, and D/Q values for CNS have been calculated and compared to the 2014 annual values provided herein. The differences in both peak directions and magnitudes were small and were likely the result of minor year-to-year climatological fluctuations. The most recent 5-year average X/Q, depleted X/Q, and D/Q values are representative of conditions around CNS and are available for use in dose calculations as necessary.

Atmospheric Diffusion Estimates

Ground Level Releases

January-March 2014

VENTS GROUND LEVEL RELEASES - JAN-MAR 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.432E-05	1.528E-05	8.107E-06	4.021E-06	1.584E-06	8.459E-07	5.304E-07	3.669E-07	2.712E-07	2.102E-07	1.687E-07
SSW	1.858E-05	6.356E-06	3.313E-06	1.626E-06	6.376E-07	3.395E-07	2.124E-07	1.468E-07	1.084E-07	8.390E-08	6.732E-08
SW	1.083E-05	3.959E-06	2.141E-06	1.063E-06	4.093E-07	2.149E-07	1.329E-07	9.091E-08	6.654E-08	5.112E-08	4.072E-08
WSW	1.113E-05	3.721E-06	1.932E-06	9.521E-07	3.842E-07	2.088E-07	1.327E-07	9.285E-08	6.929E-08	5.414E-08	4.379E-08
W	7.172E-06	2.601E-06	1.411E-06	7.029E-07	2.721E-07	1.434E-07	8.894E-08	6.099E-08	4.473E-08	3.442E-08	2.746E-08
WNW	6.625E-06	2.313E-06	1.222E-06	6.038E-07	2.380E-07	1.271E-07	7.973E-08	5.517E-08	4.079E-08	3.161E-08	2.538E-08
NW	1.588E-05	5.374E-06	2.821E-06	1.394E-06	5.548E-07	2.986E-07	1.884E-07	1.311E-07	9.734E-08	7.574E-08	6.103E-08
NNW	4.957E-05	1.577E-05	8.132E-06	4.028E-06	1.664E-06	9.186E-07	5.908E-07	4.173E-07	3.139E-07	2.469E-07	2.009E-07
N	7.290E-05	2.263E-05	1.178E-05	5.894E-06	2.458E-06	1.366E-06	8.823E-07	6.254E-07	4.717E-07	3.720E-07	3.032E-07
NNE	4.870E-05	1.496E-05	7.843E-06	3.947E-06	1.647E-06	9.144E-07	5.906E-07	4.185E-07	3.156E-07	2.488E-07	2.027E-07
NE	2.500E-05	7.826E-06	4.119E-06	2.070E-06	8.552E-07	4.718E-07	3.033E-07	2.141E-07	1.609E-07	1.265E-07	1.029E-07
ENE	1.796E-05	5.806E-06	3.102E-06	1.563E-06	6.383E-07	3.494E-07	2.233E-07	1.569E-07	1.175E-07	9.204E-08	7.462E-08
E	1.794E-05	5.740E-06	3.038E-06	1.525E-06	6.266E-07	3.446E-07	2.210E-07	1.557E-07	1.169E-07	9.177E-08	7.454E-08
ESE	2.541E-05	8.327E-06	4.405E-06	2.202E-06	8.945E-07	4.880E-07	3.111E-07	2.181E-07	1.631E-07	1.276E-07	1.033E-07
SE	3.729E-05	1.262E-05	6.773E-06	3.390E-06	1.360E-06	7.353E-07	4.657E-07	3.249E-07	2.418E-07	1.885E-07	1.522E-07
SSE	3.250E-05	1.126E-05	5.945E-06	2.938E-06	1.160E-06	6.202E-07	3.894E-07	2.697E-07	1.996E-07	1.548E-07	1.244E-07

SECTOR	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.392E-07	7.069E-08	4.544E-08	2.579E-08	1.735E-08	1.279E-08	9.982E-09	8.104E-09	6.771E-09	5.781E-09	5.021E-09
SSW	5.553E-08	2.820E-08	1.814E-08	1.031E-08	6.955E-09	5.138E-09	4.018E-09	3.268E-09	2.735E-09	2.339E-09	2.034E-09
SW	3.336E-08	1.645E-08	1.035E-08	5.687E-09	3.736E-09	2.701E-09	2.074E-09	1.660E-09	1.370E-09	1.156E-09	9.942E-10
WSW	3.637E-08	1.895E-08	1.241E-08	7.225E-09	4.946E-09	3.695E-09	2.916E-09	2.390E-09	2.013E-09	1.731E-09	1.513E-09
W	2.254E-08	1.119E-08	7.075E-09	3.913E-09	2.579E-09	1.870E-09	1.439E-09	1.154E-09	9.536E-10	8.063E-10	6.942E-10
WNW	2.094E-08	1.064E-08	6.838E-09	3.880E-09	2.609E-09	1.922E-09	1.500E-09	1.217E-09	1.017E-09	8.678E-10	7.537E-10
NW	5.055E-08	2.605E-08	1.693E-08	9.757E-09	6.634E-09	4.930E-09	3.874E-09	3.163E-09	2.656E-09	2.278E-09	1.986E-09
NNW	1.677E-07	8.906E-08	5.907E-08	3.501E-08	2.426E-08	1.829E-08	1.454E-08	1.198E-08	1.014E-08	8.760E-09	7.687E-09
N	2.536E-07	1.356E-07	9.031E-08	5.381E-08	3.740E-08	2.826E-08	2.250E-08	1.858E-08	1.574E-08	1.361E-08	1.195E-08
NNE	1.695E-07	9.053E-08	6.026E-08	3.587E-08	2.491E-08	1.881E-08	1.497E-08	1.235E-08	1.046E-08	9.036E-09	7.932E-09
NE	8.584E-08	4.551E-08	3.014E-08	1.782E-08	1.232E-08	9.270E-09	7.357E-09	6.056E-09	5.120E-09	4.417E-09	3.872E-09
ENE	6.210E-08	3.259E-08	2.143E-08	1.255E-08	8.617E-09	6.451E-09	5.098E-09	4.182E-09	3.525E-09	3.033E-09	2.652E-09
E	6.214E-08	3.282E-08	2.168E-08	1.278E-08	8.816E-09	6.624E-09	5.251E-09	4.318E-09	3.647E-09	3.144E-09	2.754E-09
ESE	8.593E-08	4.494E-08	2.949E-08	1.722E-08	1.180E-08	8.823E-09	6.966E-09	5.710E-09	4.810E-09	4.137E-09	3.616E-09
SE	1.262E-07	6.529E-08	4.253E-08	2.457E-08	1.673E-08	1.244E-08	9.778E-09	7.984E-09	6.704E-09	5.748E-09	5.012E-09
SSE	1.027E-07	5.234E-08	3.373E-08	1.921E-08	1.295E-08	9.566E-09	7.478E-09	6.079E-09	5.085E-09	4.346E-09	3.779E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.886E-06	1.798E-06	5.491E-07	2.753E-07	1.701E-07	7.469E-08	2.640E-08	1.288E-08	8.133E-09	5.793E-09
SSW	3.239E-06	7.247E-07	2.200E-07	1.100E-07	6.787E-08	2.980E-08	1.056E-08	5.175E-09	3.279E-09	2.343E-09
SW	2.066E-06	4.682E-07	1.380E-07	6.763E-08	4.107E-08	1.750E-08	5.856E-09	2.726E-09	1.668E-09	1.159E-09
WSW	1.894E-06	4.324E-07	1.370E-07	7.025E-08	4.411E-08	1.991E-08	7.364E-09	3.717E-09	2.397E-09	1.734E-09
W	1.361E-06	3.106E-07	9.227E-08	4.545E-08	2.770E-08	1.188E-08	4.023E-09	1.886E-09	1.159E-09	8.084E-10
WNW	1.190E-06	2.700E-07	8.255E-08	4.140E-08	2.558E-08	1.124E-08	3.972E-09	1.936E-09	1.221E-09	8.696E-10
NW	2.754E-06	6.274E-07	1.949E-07	9.875E-08	6.151E-08	2.744E-08	9.963E-09	4.962E-09	3.173E-09	2.282E-09
NNW	8.005E-06	1.858E-06	6.088E-07	3.179E-07	2.022E-07	9.320E-08	3.558E-08	1.838E-08	1.201E-08	8.772E-09
N	1.158E-05	2.736E-06	9.084E-07	4.776E-07	3.052E-07	1.417E-07	5.463E-08	2.840E-08	1.862E-08	1.363E-08
NNE	7.694E-06	1.832E-06	6.081E-07	3.195E-07	2.041E-07	9.463E-08	3.642E-08	1.890E-08	1.237E-08	9.048E-09
NE	4.032E-06	9.549E-07	3.126E-07	1.630E-07	1.036E-07	4.764E-08	1.811E-08	9.317E-09	6.071E-09	4.424E-09
ENE	3.019E-06	7.154E-07	2.303E-07	1.190E-07	7.515E-08	3.419E-08	1.277E-08	6.487E-09	4.194E-09	3.038E-09
E	2.966E-06	7.009E-07	2.278E-07	1.184E-07	7.505E-08	3.439E-08	1.300E-08	6.660E-09	4.329E-09	3.149E-09
ESE	4.297E-06	1.004E-06	3.211E-07	1.653E-07	1.041E-07	4.718E-08	1.754E-08	8.874E-09	5.726E-09	4.144E-09
SE	6.569E-06	1.533E-06	4.813E-07	2.452E-07	1.533E-07	6.870E-08	2.507E-08	1.252E-08	8.009E-09	5.759E-09
SSE	5.790E-06	1.315E-06	4.031E-07	2.026E-07	1.254E-07	5.526E-08	1.965E-08	9.634E-09	6.100E-09	4.355E-09

VENTS GROUND LEVEL RELEASES - JAN-MAR 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.427E-05	1.525E-05	8.083E-06	4.005E-06	1.574E-06	8.388E-07	5.247E-07	3.621E-07	2.670E-07	2.064E-07	1.653E-07
SSW	1.855E-05	6.342E-06	3.302E-06	1.619E-06	6.334E-07	3.364E-07	2.100E-07	1.447E-07	1.066E-07	8.231E-08	6.586E-08
SW	1.081E-05	3.951E-06	2.134E-06	1.059E-06	4.067E-07	2.131E-07	1.315E-07	8.976E-08	6.555E-08	5.025E-08	3.994E-08
WSW	1.111E-05	3.710E-06	1.923E-06	9.464E-07	3.807E-07	2.062E-07	1.306E-07	9.108E-08	6.774E-08	5.275E-08	4.251E-08
W	7.166E-06	2.596E-06	1.407E-06	7.002E-07	2.705E-07	1.423E-07	8.808E-08	6.027E-08	4.412E-08	3.389E-08	2.698E-08
WNW	6.618E-06	2.309E-06	1.219E-06	6.019E-07	2.368E-07	1.263E-07	7.903E-08	5.458E-08	4.027E-08	3.114E-08	2.496E-08
NW	1.587E-05	5.363E-06	2.813E-06	1.389E-06	5.516E-07	2.962E-07	1.865E-07	1.294E-07	9.588E-08	7.443E-08	5.984E-08
NNW	4.949E-05	1.572E-05	8.096E-06	4.005E-06	1.649E-06	9.075E-07	5.818E-07	4.096E-07	3.070E-07	2.407E-07	1.952E-07
N	7.278E-05	2.256E-05	1.173E-05	5.860E-06	2.437E-06	1.349E-06	8.691E-07	6.141E-07	4.617E-07	3.629E-07	2.949E-07
NNE	4.862E-05	1.492E-05	7.806E-06	3.922E-06	1.631E-06	9.027E-07	5.811E-07	4.104E-07	3.084E-07	2.423E-07	1.968E-07
NE	2.497E-05	7.805E-06	4.102E-06	2.059E-06	8.483E-07	4.667E-07	2.991E-07	2.105E-07	1.578E-07	1.237E-07	1.003E-07
ENE	1.794E-05	5.793E-06	3.092E-06	1.556E-06	6.341E-07	3.463E-07	2.208E-07	1.548E-07	1.156E-07	9.040E-08	7.312E-08
E	1.791E-05	5.723E-06	3.025E-06	1.517E-06	6.213E-07	3.406E-07	2.178E-07	1.530E-07	1.145E-07	8.960E-08	7.255E-08
ESE	2.538E-05	8.308E-06	4.390E-06	2.192E-06	8.884E-07	4.835E-07	3.074E-07	2.150E-07	1.603E-07	1.252E-07	1.011E-07
SE	3.724E-05	1.259E-05	6.751E-06	3.376E-06	1.351E-06	7.287E-07	4.604E-07	3.204E-07	2.379E-07	1.850E-07	1.490E-07
SSE	3.247E-05	1.124E-05	5.930E-06	2.928E-06	1.153E-06	6.157E-07	3.858E-07	2.666E-07	1.969E-07	1.524E-07	1.222E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.361E-07	6.827E-08	4.334E-08	2.399E-08	1.575E-08	1.132E-08	8.626E-09	6.837E-09	5.578E-09	4.652E-09	3.948E-09
SSW	5.419E-08	2.715E-08	1.723E-08	9.530E-09	6.255E-09	4.497E-09	3.425E-09	2.713E-09	2.212E-09	1.844E-09	1.564E-09
SW	3.265E-08	1.593E-08	9.910E-09	5.327E-09	3.424E-09	2.423E-09	1.821E-09	1.427E-09	1.153E-09	9.529E-10	8.024E-10
WSW	3.519E-08	1.802E-08	1.160E-08	6.521E-09	4.314E-09	3.116E-09	2.378E-09	1.886E-09	1.538E-09	1.282E-09	1.086E-09
W	2.210E-08	1.087E-08	6.802E-09	3.689E-09	2.385E-09	1.696E-09	1.281E-09	1.008E-09	8.174E-10	6.785E-10	5.735E-10
WNW	2.055E-08	1.033E-08	6.567E-09	3.646E-09	2.398E-09	1.728E-09	1.320E-09	1.048E-09	8.572E-10	7.166E-10	6.096E-10
NW	4.943E-08	2.517E-08	1.616E-08	9.083E-09	6.025E-09	4.369E-09	3.352E-09	2.672E-09	2.192E-09	1.837E-09	1.566E-09
NNW	1.624E-07	8.482E-08	5.533E-08	3.172E-08	2.127E-08	1.553E-08	1.196E-08	9.563E-09	7.855E-09	6.587E-09	5.614E-09
N	2.458E-07	1.293E-07	8.478E-08	4.894E-08	3.298E-08	2.417E-08	1.869E-08	1.498E-08	1.234E-08	1.037E-08	8.864E-09
NNE	1.640E-07	8.613E-08	5.639E-08	3.247E-08	2.183E-08	1.597E-08	1.232E-08	9.859E-09	8.105E-09	6.802E-09	5.801E-09
NE	8.343E-08	4.358E-08	2.844E-08	1.633E-08	1.097E-08	8.028E-09	6.198E-09	4.966E-09	4.089E-09	3.437E-09	2.937E-09
ENE	6.072E-08	3.149E-08	2.048E-08	1.172E-08	7.868E-09	5.762E-09	4.457E-09	3.579E-09	2.955E-09	2.491E-09	2.135E-09
E	6.030E-08	3.136E-08	2.040E-08	1.166E-08	7.806E-09	5.695E-09	4.385E-09	3.505E-09	2.880E-09	2.415E-09	2.060E-09
ESE	8.383E-08	4.327E-08	2.802E-08	1.594E-08	1.064E-08	7.758E-09	5.974E-09	4.778E-09	3.929E-09	3.300E-09	2.818E-09
SE	1.232E-07	6.295E-08	4.048E-08	2.280E-08	1.514E-08	1.098E-08	8.423E-09	6.714E-09	5.505E-09	4.612E-09	3.930E-09
SSE	1.007E-07	5.072E-08	3.231E-08	1.798E-08	1.185E-08	8.554E-09	6.538E-09	5.198E-09	4.254E-09	3.558E-09	3.028E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.864E-06	1.788E-06	5.434E-07	2.711E-07	1.667E-07	7.226E-08	2.463E-08	1.142E-08	6.868E-09	4.666E-09
SSW	3.230E-06	7.204E-07	2.176E-07	1.082E-07	6.641E-08	2.875E-08	9.785E-09	4.537E-09	2.725E-09	1.849E-09
SW	2.060E-06	4.655E-07	1.366E-07	6.664E-08	4.029E-08	1.697E-08	5.500E-09	2.449E-09	1.435E-09	9.563E-10
WSW	1.886E-06	4.289E-07	1.350E-07	6.870E-08	4.283E-08	1.898E-08	6.668E-09	3.140E-09	1.894E-09	1.285E-09
W	1.357E-06	3.090E-07	9.141E-08	4.484E-08	2.722E-08	1.056E-08	3.801E-09	1.713E-09	1.013E-09	6.808E-10
WNW	1.187E-06	2.688E-07	8.184E-08	4.088E-08	2.516E-08	1.093E-08	3.740E-09	1.743E-09	1.053E-09	7.186E-10
NW	2.747E-06	6.241E-07	1.929E-07	9.729E-08	6.031E-08	2.656E-08	9.296E-09	4.404E-09	2.683E-09	1.842E-09
NNW	7.973E-06	1.843E-06	5.998E-07	3.111E-07	1.965E-07	8.896E-08	3.232E-08	1.563E-08	9.598E-09	6.602E-09
N	1.153E-05	2.714E-06	8.951E-07	4.676E-07	2.969E-07	1.354E-07	4.981E-08	2.433E-08	1.503E-08	1.040E-08
NNE	7.660E-06	1.816E-06	5.986E-07	3.124E-07	1.981E-07	9.022E-08	3.306E-08	1.607E-08	9.894E-09	6.817E-09
NE	4.017E-06	9.478E-07	3.084E-07	1.599E-07	1.010E-07	4.571E-08	1.664E-08	8.081E-09	4.984E-09	3.445E-09
ENE	3.010E-06	7.111E-07	2.279E-07	1.172E-07	7.364E-08	3.309E-08	1.195E-08	5.802E-09	3.592E-09	2.496E-09
E	2.954E-06	6.955E-07	2.246E-07	1.160E-07	7.307E-08	3.292E-08	1.189E-08	5.734E-09	3.518E-09	2.421E-09
ESE	4.284E-06	9.982E-07	3.174E-07	1.626E-07	1.018E-07	4.551E-08	1.627E-08	7.814E-09	4.796E-09	3.308E-09
SE	6.549E-06	1.524E-06	4.759E-07	2.413E-07	1.501E-07	6.635E-08	2.332E-08	1.107E-08	6.742E-09	4.624E-09
SSE	5.776E-06	1.309E-06	3.994E-07	1.999E-07	1.232E-07	5.364E-08	1.844E-08	8.627E-09	5.221E-09	3.568E-09

VENTS GROUND LEVEL RELEASES - JAN-MAR 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES FROM THE SITE									
SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.193E-05	1.395E-05	7.218E-06	3.516E-06	1.343E-06	6.988E-07	4.283E-07	2.904E-07	2.107E-07	1.605E-07	1.268E-07
SSW	1.757E-05	5.800E-06	2.949E-06	1.422E-06	5.404E-07	2.804E-07	1.715E-07	1.161E-07	8.416E-08	6.406E-08	5.058E-08
SW	1.024E-05	3.613E-06	1.906E-06	9.294E-07	3.470E-07	1.775E-07	1.073E-07	7.195E-08	5.170E-08	3.905E-08	3.062E-08
WSW	1.053E-05	3.395E-06	1.719E-06	8.320E-07	3.255E-07	1.723E-07	1.070E-07	7.335E-08	5.372E-08	4.125E-08	3.283E-08
W	6.786E-06	2.374E-06	1.256E-06	6.146E-07	2.307E-07	1.185E-07	7.185E-08	4.828E-08	3.477E-08	2.631E-08	2.066E-08
WNW	6.268E-06	2.111E-06	1.088E-06	5.280E-07	2.018E-07	1.051E-07	6.442E-08	4.369E-08	3.171E-08	2.416E-08	1.910E-08
NW	1.503E-05	4.905E-06	2.512E-06	1.219E-06	4.704E-07	2.467E-07	1.522E-07	1.037E-07	7.563E-08	5.786E-08	4.589E-08
NNW	4.689E-05	1.439E-05	7.238E-06	3.521E-06	1.410E-06	7.580E-07	4.765E-07	3.297E-07	2.434E-07	1.882E-07	1.506E-07
N	6.896E-05	2.065E-05	1.049E-05	5.151E-06	2.083E-06	1.127E-06	7.116E-07	4.942E-07	3.658E-07	2.835E-07	2.274E-07
NNE	4.607E-05	1.365E-05	6.980E-06	3.449E-06	1.395E-06	7.544E-07	4.762E-07	3.306E-07	2.446E-07	1.895E-07	1.520E-07
NE	2.365E-05	7.141E-06	3.666E-06	1.810E-06	7.247E-07	3.895E-07	2.447E-07	1.692E-07	1.249E-07	9.649E-08	7.721E-08
ENE	1.699E-05	5.299E-06	2.762E-06	1.366E-06	5.410E-07	2.886E-07	1.803E-07	1.241E-07	9.124E-08	7.029E-08	5.609E-08
E	1.697E-05	5.237E-06	2.704E-06	1.333E-06	5.309E-07	2.844E-07	1.783E-07	1.231E-07	9.065E-08	6.997E-08	5.592E-08
ESE	2.404E-05	7.600E-06	3.922E-06	1.925E-06	7.582E-07	4.030E-07	2.511E-07	1.726E-07	1.266E-07	9.742E-08	7.765E-08
SE	3.528E-05	1.152E-05	6.030E-06	2.964E-06	1.152E-06	6.073E-07	3.760E-07	2.570E-07	1.878E-07	1.440E-07	1.144E-07
SSE	3.075E-05	1.028E-05	5.294E-06	2.569E-06	9.834E-07	5.125E-07	3.146E-07	2.135E-07	1.551E-07	1.183E-07	9.356E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES FROM THE SITE									
SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.031E-07	4.934E-08	3.011E-08	1.570E-08	9.847E-09	6.825E-09	5.039E-09	3.887E-09	3.095E-09	2.525E-09	2.101E-09
SSW	4.110E-08	1.967E-08	1.201E-08	6.266E-09	3.937E-09	2.732E-09	2.020E-09	1.559E-09	1.242E-09	1.014E-09	8.444E-10
SW	2.471E-08	1.149E-08	6.867E-09	3.471E-09	2.128E-09	1.448E-09	1.053E-09	8.019E-10	6.314E-10	5.101E-10	4.205E-10
WSW	2.686E-08	1.317E-08	8.174E-09	4.360E-09	2.774E-09	1.943E-09	1.447E-09	1.123E-09	8.992E-10	7.369E-10	6.152E-10
W	1.671E-08	7.825E-09	4.700E-09	2.392E-09	1.473E-09	1.006E-09	7.337E-10	5.601E-10	4.421E-10	3.579E-10	2.957E-10
WNW	1.553E-08	7.435E-09	4.541E-09	2.369E-09	1.486E-09	1.030E-09	7.608E-10	5.870E-10	4.676E-10	3.817E-10	3.177E-10
NW	3.744E-08	1.819E-08	1.122E-08	5.941E-09	3.765E-09	2.631E-09	1.955E-09	1.517E-09	1.214E-09	9.944E-10	8.303E-10
NNW	1.239E-07	6.191E-08	3.894E-08	2.115E-08	1.363E-08	9.636E-09	7.228E-09	5.647E-09	4.546E-09	3.743E-09	3.139E-09
N	1.874E-07	9.429E-08	5.957E-08	3.254E-08	2.104E-08	1.492E-08	1.122E-08	8.782E-09	7.081E-09	5.840E-09	4.903E-09
NNE	1.252E-07	6.292E-08	3.972E-08	2.166E-08	1.399E-08	9.913E-09	7.446E-09	5.824E-09	4.692E-09	3.867E-09	3.245E-09
NE	6.347E-08	3.169E-08	1.991E-08	1.080E-08	6.953E-09	4.914E-09	3.685E-09	2.879E-09	2.318E-09	1.909E-09	1.601E-09
ENE	4.600E-08	2.275E-08	1.421E-08	7.648E-09	4.900E-09	3.452E-09	2.583E-09	2.015E-09	1.620E-09	1.334E-09	1.118E-09
E	4.593E-08	2.284E-08	1.431E-08	7.735E-09	4.967E-09	3.504E-09	2.624E-09	2.047E-09	1.645E-09	1.354E-09	1.134E-09
ESE	6.360E-08	3.134E-08	1.952E-08	1.047E-08	6.684E-09	4.697E-09	3.507E-09	2.730E-09	2.191E-09	1.800E-09	1.507E-09
SE	9.342E-08	4.555E-08	2.817E-08	1.495E-08	9.485E-09	6.632E-09	4.931E-09	3.825E-09	3.061E-09	2.508E-09	2.094E-09
SSE	7.613E-08	3.656E-08	2.238E-08	1.172E-08	7.368E-09	5.118E-09	3.786E-09	2.925E-09	2.333E-09	1.906E-09	1.588E-09

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CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.068E-06	1.540E-06	4.453E-07	2.143E-07	1.280E-07	5.274E-08	1.630E-08	6.917E-09	3.914E-09	2.537E-09
SSW	2.904E-06	6.207E-07	1.784E-07	8.563E-08	5.106E-08	2.103E-08	6.506E-09	2.768E-09	1.570E-09	1.019E-09
SW	1.851E-06	4.011E-07	1.119E-07	5.267E-08	3.093E-08	1.238E-08	3.629E-09	1.471E-09	8.087E-10	5.128E-10
WSW	1.697E-06	3.699E-07	1.109E-07	5.458E-08	3.311E-08	1.399E-08	4.503E-09	1.966E-09	1.130E-09	7.399E-10
W	1.219E-06	2.661E-07	7.485E-08	3.541E-08	2.087E-08	8.410E-09	2.497E-09	1.021E-09	5.647E-10	3.598E-10
WNW	1.066E-06	2.313E-07	6.697E-08	3.226E-08	1.928E-08	7.947E-09	2.459E-09	1.044E-09	5.912E-10	3.835E-10
NW	2.469E-06	5.373E-07	1.580E-07	7.689E-08	4.630E-08	1.937E-08	6.147E-09	2.663E-09	1.526E-09	9.986E-10
NNW	7.174E-06	1.589E-06	4.929E-07	2.470E-07	1.518E-07	6.547E-08	2.176E-08	9.737E-09	5.679E-09	3.757E-09
N	1.037E-05	2.340E-06	7.354E-07	3.712E-07	2.292E-07	9.955E-08	3.344E-08	1.507E-08	8.831E-09	5.861E-09
NNE	6.893E-06	1.567E-06	4.921E-07	2.482E-07	1.532E-07	6.644E-08	2.227E-08	1.001E-08	5.856E-09	3.881E-09
NE	3.613E-06	8.168E-07	2.531E-07	1.267E-07	7.783E-08	3.352E-08	1.112E-08	4.966E-09	2.896E-09	1.916E-09
ENE	2.705E-06	6.123E-07	1.867E-07	9.266E-08	5.656E-08	2.412E-08	7.885E-09	3.491E-09	2.027E-09	1.339E-09
E	2.658E-06	5.995E-07	1.845E-07	9.203E-08	5.638E-08	2.418E-08	7.967E-09	3.542E-09	2.059E-09	1.359E-09
ESE	3.852E-06	8.596E-07	2.602E-07	1.286E-07	7.830E-08	3.326E-08	1.080E-08	4.751E-09	2.747E-09	1.808E-09
SE	5.887E-06	1.313E-06	3.901E-07	1.909E-07	1.154E-07	4.846E-08	1.546E-08	6.712E-09	3.850E-09	2.519E-09
SSE	5.191E-06	1.127E-06	3.269E-07	1.578E-07	9.444E-08	3.905E-08	1.215E-08	5.185E-09	2.945E-09	1.915E-09

VENTS GROUND LEVEL RELEASES - JAN-MAR 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****												
DIRECTION FROM SITE	DISTANCES IN MILES											
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	
S	2.986E-07	1.010E-07	5.184E-08	2.465E-08	8.853E-09	4.391E-09	2.585E-09	1.693E-09	1.191E-09	8.828E-10	6.803E-10	
SSW	1.214E-07	4.105E-08	2.108E-08	1.002E-08	3.600E-09	1.785E-09	1.051E-09	6.883E-10	4.843E-10	3.589E-10	2.766E-10	
SW	5.907E-08	1.998E-08	1.026E-08	4.876E-09	1.752E-09	8.686E-10	5.115E-10	3.349E-10	2.357E-10	1.746E-10	1.346E-10	
WSW	3.670E-08	1.241E-08	6.372E-09	3.029E-09	1.088E-09	5.396E-10	3.177E-10	2.081E-10	1.464E-10	1.085E-10	8.361E-11	
W	3.865E-08	1.307E-08	6.711E-09	3.190E-09	1.146E-09	5.683E-10	3.346E-10	2.191E-10	1.542E-10	1.143E-10	8.805E-11	
WNW	4.402E-08	1.489E-08	7.643E-09	3.634E-09	1.305E-09	6.473E-10	3.811E-10	2.496E-10	1.756E-10	1.301E-10	1.003E-10	
NW	9.670E-08	3.270E-08	1.679E-08	7.982E-09	2.867E-09	1.422E-09	8.372E-10	5.482E-10	3.857E-10	2.859E-10	2.203E-10	
NNW	2.005E-07	6.781E-08	3.481E-08	1.655E-08	5.945E-09	2.948E-09	1.736E-09	1.137E-09	7.999E-10	5.928E-10	4.568E-10	
N	2.975E-07	1.006E-07	5.166E-08	2.456E-08	8.822E-09	4.375E-09	2.576E-09	1.687E-09	1.187E-09	8.796E-10	6.779E-10	
NNE	1.555E-07	5.258E-08	2.699E-08	1.283E-08	4.610E-09	2.286E-09	1.346E-09	8.814E-10	6.202E-10	4.596E-10	3.542E-10	
NE	1.012E-07	3.424E-08	1.758E-08	8.357E-09	3.002E-09	1.489E-09	8.766E-10	5.740E-10	4.039E-10	2.993E-10	2.306E-10	
ENE	8.064E-08	2.727E-08	1.400E-08	6.656E-09	2.391E-09	1.186E-09	6.982E-10	4.572E-10	3.217E-10	2.384E-10	1.837E-10	
E	6.362E-08	2.151E-08	1.105E-08	5.251E-09	1.886E-09	9.355E-10	5.508E-10	3.607E-10	2.538E-10	1.881E-10	1.449E-10	
ESE	1.537E-07	5.198E-08	2.669E-08	1.269E-08	4.558E-09	2.260E-09	1.331E-09	8.714E-10	6.132E-10	4.544E-10	3.502E-10	
SE	2.557E-07	8.648E-08	4.440E-08	2.111E-08	7.583E-09	3.760E-09	2.214E-09	1.450E-09	1.020E-09	7.561E-10	5.826E-10	
SSE	3.124E-07	1.056E-07	5.424E-08	2.579E-08	9.263E-09	4.594E-09	2.705E-09	1.771E-09	1.246E-09	9.236E-10	7.117E-10	
DIRECTION FROM SITE	DISTANCES IN MILES											
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	
S	5.404E-10	2.401E-10	1.454E-10	7.351E-11	4.449E-11	2.983E-11	2.137E-11	1.605E-11	1.248E-11	9.968E-12	8.136E-12	
SSW	2.197E-10	9.761E-11	5.913E-11	2.989E-11	1.809E-11	1.213E-11	8.691E-12	6.526E-12	5.074E-12	4.053E-12	3.308E-12	
SW	1.069E-10	4.750E-11	2.877E-11	1.454E-11	8.802E-12	5.901E-12	4.229E-12	3.175E-12	2.469E-12	1.972E-12	1.610E-12	
WSW	6.642E-11	2.951E-11	1.787E-11	9.035E-12	5.468E-12	3.666E-12	2.627E-12	1.973E-12	1.534E-12	1.225E-12	1.000E-12	
W	6.995E-11	3.108E-11	1.882E-11	9.515E-12	5.759E-12	3.861E-12	2.767E-12	2.078E-12	1.615E-12	1.290E-12	1.053E-12	
WNW	7.967E-11	3.539E-11	2.144E-11	1.084E-11	6.559E-12	4.398E-12	3.151E-12	2.366E-12	1.840E-12	1.470E-12	1.200E-12	
NW	1.750E-10	7.774E-11	4.709E-11	2.380E-11	1.441E-11	9.660E-12	6.922E-12	5.197E-12	4.041E-12	3.228E-12	2.635E-12	
NNW	3.629E-10	1.612E-10	9.766E-11	4.936E-11	2.988E-11	2.003E-11	1.435E-11	1.078E-11	8.380E-12	6.694E-12	5.464E-12	
N	5.385E-10	2.392E-10	1.449E-10	7.325E-11	4.433E-11	2.972E-11	2.130E-11	1.599E-11	1.244E-11	9.933E-12	8.108E-12	
NNE	2.814E-10	1.250E-10	7.572E-11	3.827E-11	2.317E-11	1.553E-11	1.113E-11	8.357E-12	6.498E-12	5.190E-12	4.237E-12	
NE	1.832E-10	8.140E-11	4.931E-11	2.492E-11	1.508E-11	1.011E-11	7.247E-12	5.442E-12	4.231E-12	3.380E-12	2.759E-12	
ENE	1.459E-10	6.484E-11	3.927E-11	1.985E-11	1.201E-11	8.056E-12	5.772E-12	4.334E-12	3.370E-12	2.692E-12	2.197E-12	
E	1.151E-10	5.115E-11	3.098E-11	1.566E-11	9.479E-12	6.355E-12	4.554E-12	3.420E-12	2.659E-12	2.124E-12	1.734E-12	
ESE	2.782E-10	1.236E-10	7.486E-11	3.784E-11	2.290E-11	1.536E-11	1.100E-11	8.262E-12	6.424E-12	5.132E-12	4.188E-12	
SE	4.629E-10	2.056E-10	1.246E-10	6.296E-11	3.810E-11	2.555E-11	1.831E-11	1.375E-11	1.069E-11	8.538E-12	6.969E-12	
SSE	5.654E-10	2.512E-10	1.522E-10	7.690E-11	4.655E-11	3.121E-11	2.236E-11	1.679E-11	1.306E-11	1.043E-11	8.513E-12	

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***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES										
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	5.067E-08	1.038E-08	2.710E-09	1.217E-09	6.885E-10	2.648E-10	7.659E-11	3.036E-11	1.621E-11	1.003E-11	
SSW	2.060E-08	4.220E-09	1.102E-09	4.948E-10	2.799E-10	1.076E-10	3.114E-11	1.234E-11	6.591E-12	4.080E-12	
SW	1.003E-08	2.053E-09	5.361E-10	2.408E-10	1.362E-10	5.238E-11	1.515E-11	6.006E-12	3.207E-12	1.985E-12	
WSW	6.228E-09	1.276E-09	3.330E-10	1.496E-10	8.462E-11	3.254E-11	9.414E-12	3.731E-12	1.992E-12	1.233E-12	
W	6.559E-09	1.344E-09	3.507E-10	1.575E-10	8.912E-11	3.427E-11	9.914E-12	3.929E-12	2.098E-12	1.299E-12	
WNW	7.471E-09	1.530E-09	3.995E-10	1.794E-10	1.015E-10	3.903E-11	1.129E-11	4.475E-12	2.390E-12	1.479E-12	
NW	1.641E-08	3.361E-09	8.775E-10	3.941E-10	2.229E-10	8.574E-11	2.480E-11	9.830E-12	5.250E-12	3.249E-12	
NNW	3.403E-08	6.970E-09	1.820E-09	8.172E-10	4.623E-10	1.778E-10	5.143E-11	2.039E-11	1.089E-11	6.738E-12	
N	5.050E-08	1.034E-08	2.700E-09	1.213E-09	6.860E-10	2.638E-10	7.632E-11	3.025E-11	1.615E-11	9.998E-12	
NNE	2.639E-08	5.405E-09	1.411E-09	6.337E-10	3.585E-10	1.379E-10	3.988E-11	1.581E-11	8.441E-12	5.224E-12	
NE	1.718E-08	3.519E-09	9.187E-10	4.126E-10	2.334E-10	8.977E-11	2.597E-11	1.029E-11	5.496E-12	3.402E-12	
ENE	1.369E-08	2.803E-09	7.318E-10	3.287E-10	1.859E-10	7.150E-11	2.068E-11	8.198E-12	4.378E-12	2.710E-12	
E	1.080E-08	2.211E-09	5.773E-10	2.593E-10	1.467E-10	5.641E-11	1.632E-11	6.468E-12	3.454E-12	2.138E-12	
ESE	2.609E-08	5.343E-09	1.395E-09	6.265E-10	3.544E-10	1.363E-10	3.943E-11	1.563E-11	8.345E-12	5.165E-12	
SE	4.340E-08	8.890E-09	2.321E-09	1.042E-09	5.897E-10	2.268E-10	6.560E-11	2.600E-11	1.388E-11	8.594E-12	
SSE	5.302E-08	1.086E-08	2.835E-09	1.273E-09	7.203E-10	2.770E-10	8.013E-11	3.176E-11	1.696E-11	1.050E-11	

VENTS GROUND LEVEL RELEASES - JAN-MAR 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION FROM SITE (MI)	DIST. (MI)	X/Q NO DEPLETION (SEC/M3)	X/Q 2.26 DAY DEPLETION (SEC/M3)	X/Q 8.0 DAY DEPLETION (SEC/M3)	D/Q (PER SQ.METER)
A	Site Boundary	S	.80	7.0E-06	6.9E-06	6.2E-06	4.4E-08
A	Site Boundary	SSW	.82	2.6E-06	2.6E-06	2.3E-06	1.7E-08
A	Site Boundary	SW	.97	1.1E-06	1.1E-06	9.9E-07	5.2E-09
A	Site Boundary	WSW	.93	1.1E-06	1.1E-06	1.0E-06	3.7E-09
A	Site Boundary	W	.91	8.8E-07	8.7E-07	7.7E-07	4.0E-09
A	Site Boundary	WNW	.94	7.1E-07	7.0E-07	6.2E-07	4.3E-09
A	Site Boundary	NW	.81	2.3E-06	2.3E-06	2.1E-06	1.4E-08
A	Site Boundary	NNW	.69	9.3E-06	9.3E-06	8.4E-06	4.0E-08
A	Site Boundary	N	.67	1.4E-05	1.4E-05	1.2E-05	6.2E-08
A	Site Boundary	NNE	.60	1.1E-05	1.1E-05	1.0E-05	3.9E-08
A	Site Boundary	NE	.62	5.5E-06	5.4E-06	4.9E-06	2.4E-08
A	Site Boundary	ENE	.59	4.5E-06	4.5E-06	4.1E-06	2.1E-08
A	Site Boundary	E	.53	5.3E-06	5.3E-06	4.8E-06	2.0E-08
A	Site Boundary	ESE	.54	7.4E-06	7.4E-06	6.7E-06	4.6E-08
A	Site Boundary	SE	.65	8.4E-06	8.4E-06	7.6E-06	5.6E-08
A	Site Boundary	SSE	.81	4.9E-06	4.9E-06	4.3E-06	4.4E-08
A	Nearest Res	SSW	3.00	1.5E-07	1.4E-07	1.2E-07	6.9E-10
A	Nearest Res	SW	1.30	5.7E-07	5.7E-07	4.9E-07	2.5E-09
A	Nearest Res	WSW	1.90	2.3E-07	2.3E-07	1.9E-07	6.1E-10
A	Nearest Res	W	1.00	7.0E-07	7.0E-07	6.1E-07	3.2E-09
A	Nearest Res	WNW	1.70	1.8E-07	1.8E-07	1.5E-07	9.6E-10
A	Nearest Res	NW	.90	1.8E-06	1.8E-06	1.6E-06	1.0E-08
A	Nearest Res	NNW	1.90	1.0E-06	1.0E-06	8.5E-07	3.3E-09
A	Nearest Res	N	2.50	8.8E-07	8.7E-07	7.1E-07	2.6E-09
A	Nearest Res	NNE	1.70	1.3E-06	1.3E-06	1.1E-06	3.4E-09
A	Nearest Res	ENE	1.70	4.9E-07	4.9E-07	4.1E-07	1.8E-09
A	Nearest Res	E	2.20	2.8E-07	2.8E-07	2.3E-07	7.4E-10
A	Nearest Res	ESE	2.80	2.5E-07	2.5E-07	2.0E-07	1.0E-09
A	Nearest Res	SE	3.00	3.2E-07	3.2E-07	2.6E-07	1.4E-09
A	Nearest Res	SSE	3.00	2.7E-07	2.7E-07	2.1E-07	1.8E-09
A	Nearest Cow	NNW	3.50	3.1E-07	3.1E-07	2.4E-07	8.0E-10
A	Nearest Garde	SSW	3.00	1.5E-07	1.4E-07	1.2E-07	6.9E-10
A	Nearest Garde	SW	1.30	5.7E-07	5.7E-07	4.9E-07	2.5E-09
A	Nearest Garde	WSW	1.90	2.3E-07	2.3E-07	1.9E-07	6.1E-10
A	Nearest Garde	W	2.80	7.0E-08	6.9E-08	5.6E-08	2.6E-10
A	Nearest Garde	WNW	1.70	1.8E-07	1.8E-07	1.5E-07	9.6E-10
A	Nearest Garde	NW	1.90	3.3E-07	3.3E-07	2.8E-07	1.6E-09
A	Nearest Garde	NNW	1.90	1.0E-06	1.0E-06	8.5E-07	3.3E-09
A	Nearest Garde	ENE	1.70	4.9E-07	4.9E-07	4.1E-07	1.8E-09
A	Nearest Garde	ESE	2.30	3.7E-07	3.6E-07	3.0E-07	1.6E-09
A	Nearest Garde	SSE	3.00	2.7E-07	2.7E-07	2.1E-07	1.8E-09

B245

Atmospheric Diffusion Estimates

Ground Level Releases

April-June 2014

VENTS GROUND LEVEL RELEASES - APR-JUN 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE										
	SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000
S	4.120E-05	1.330E-05	7.205E-06	3.654E-06	1.486E-06	8.107E-07	5.169E-07	3.625E-07	2.710E-07	2.121E-07	1.717E-07
SSW	2.025E-05	6.820E-06	3.726E-06	1.882E-06	7.428E-07	3.972E-07	2.493E-07	1.726E-07	1.277E-07	9.904E-08	7.957E-08
SW	1.579E-05	5.504E-06	2.998E-06	1.504E-06	5.882E-07	3.124E-07	1.951E-07	1.345E-07	9.913E-08	7.662E-08	6.137E-08
WSW	1.532E-05	5.369E-06	2.893E-06	1.442E-06	5.664E-07	3.020E-07	1.891E-07	1.308E-07	9.660E-08	7.482E-08	6.004E-08
W	1.321E-05	4.728E-06	2.570E-06	1.282E-06	4.970E-07	2.624E-07	1.630E-07	1.120E-07	8.226E-08	6.340E-08	5.065E-08
WNW	2.271E-05	8.089E-06	4.355E-06	2.160E-06	8.304E-07	4.358E-07	2.696E-07	1.845E-07	1.351E-07	1.038E-07	8.276E-08
NW	2.526E-05	8.913E-06	4.811E-06	2.395E-06	9.351E-07	4.963E-07	3.098E-07	2.136E-07	1.574E-07	1.217E-07	9.745E-08
NNW	5.172E-05	1.734E-05	9.248E-06	4.616E-06	1.853E-06	1.003E-06	6.361E-07	4.441E-07	3.309E-07	2.581E-07	2.085E-07
N	9.021E-05	2.824E-05	1.474E-05	7.364E-06	3.055E-06	1.692E-06	1.090E-06	7.715E-07	5.811E-07	4.577E-07	3.727E-07
NNE	3.413E-05	1.080E-05	5.667E-06	2.837E-06	1.169E-06	6.443E-07	4.138E-07	2.920E-07	2.194E-07	1.724E-07	1.402E-07
NE	2.365E-05	7.439E-06	3.955E-06	1.996E-06	8.191E-07	4.499E-07	2.883E-07	2.030E-07	1.522E-07	1.195E-07	9.700E-08
ENE	1.921E-05	6.031E-06	3.187E-06	1.605E-06	6.630E-07	3.658E-07	2.352E-07	1.660E-07	1.248E-07	9.813E-08	7.979E-08
E	2.178E-05	6.844E-06	3.616E-06	1.817E-06	7.473E-07	4.112E-07	2.638E-07	1.860E-07	1.397E-07	1.097E-07	8.913E-08
ESE	3.049E-05	9.374E-06	4.829E-06	2.406E-06	1.005E-06	5.589E-07	3.614E-07	2.563E-07	1.934E-07	1.526E-07	1.244E-07
SE	3.757E-05	1.178E-05	6.320E-06	3.210E-06	1.321E-06	7.268E-07	4.661E-07	3.283E-07	2.464E-07	1.934E-07	1.570E-07
SSE	5.838E-05	1.818E-05	9.496E-06	4.755E-06	1.972E-06	1.091E-06	7.027E-07	4.969E-07	3.741E-07	2.945E-07	2.397E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE										
	SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000
S	1.428E-07	7.470E-08	4.902E-08	2.861E-08	1.961E-08	1.465E-08	1.157E-08	9.476E-09	7.978E-09	6.857E-09	5.991E-09
SSW	6.570E-08	3.347E-08	2.156E-08	1.227E-08	8.277E-09	6.111E-09	4.775E-09	3.879E-09	3.242E-09	2.769E-09	2.406E-09
SW	5.055E-08	2.550E-08	1.631E-08	9.181E-09	6.139E-09	4.502E-09	3.498E-09	2.828E-09	2.354E-09	2.003E-09	1.735E-09
WSW	4.954E-08	2.516E-08	1.617E-08	9.171E-09	6.164E-09	4.539E-09	3.539E-09	2.871E-09	2.396E-09	2.044E-09	1.774E-09
W	4.162E-08	2.078E-08	1.320E-08	7.359E-09	4.894E-09	3.573E-09	2.766E-09	2.230E-09	1.851E-09	1.571E-09	1.358E-09
WNW	6.786E-08	3.365E-08	2.125E-08	1.177E-08	7.803E-09	5.682E-09	4.390E-09	3.532E-09	2.928E-09	2.483E-09	2.143E-09
NW	8.027E-08	4.049E-08	2.590E-08	1.460E-08	9.780E-09	7.182E-09	5.588E-09	4.524E-09	3.770E-09	3.211E-09	2.783E-09
NNW	1.730E-07	8.981E-08	5.864E-08	3.400E-08	2.321E-08	1.729E-08	1.362E-08	1.114E-08	9.362E-09	8.037E-09	7.015E-09
N	3.115E-07	1.660E-07	1.104E-07	6.561E-08	4.554E-08	3.437E-08	2.734E-08	2.255E-08	1.910E-08	1.650E-08	1.448E-08
NNE	1.169E-07	6.197E-08	4.103E-08	2.425E-08	1.677E-08	1.262E-08	1.002E-08	8.248E-09	6.974E-09	6.017E-09	5.275E-09
NE	8.084E-08	4.264E-08	2.815E-08	1.657E-08	1.142E-08	8.579E-09	6.798E-09	5.588E-09	4.719E-09	4.066E-09	3.561E-09
ENE	6.658E-08	3.529E-08	2.337E-08	1.381E-08	9.547E-09	7.184E-09	5.701E-09	4.693E-09	3.967E-09	3.422E-09	3.000E-09
E	7.434E-08	3.932E-08	2.601E-08	1.536E-08	1.062E-08	7.995E-09	6.346E-09	5.225E-09	4.418E-09	3.811E-09	3.341E-09
ESE	1.041E-07	5.574E-08	3.717E-08	2.218E-08	1.544E-08	1.168E-08	9.311E-09	7.692E-09	6.523E-09	5.643E-09	4.959E-09
SE	1.309E-07	6.900E-08	4.553E-08	2.676E-08	1.843E-08	1.382E-08	1.094E-08	8.986E-09	7.582E-09	6.530E-09	5.715E-09
SSE	2.003E-07	1.066E-07	7.080E-08	4.202E-08	2.914E-08	2.198E-08	1.747E-08	1.441E-08	1.220E-08	1.053E-08	9.243E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.981E-06	1.668E-06	5.335E-07	2.747E-07	1.730E-07	7.842E-08	2.914E-08	1.474E-08	9.502E-09	6.869E-09
SSW	3.594E-06	8.423E-07	2.581E-07	1.296E-07	8.020E-08	3.534E-08	1.256E-08	6.154E-09	3.893E-09	2.775E-09
SW	2.891E-06	6.692E-07	2.021E-07	1.007E-07	6.188E-08	2.698E-08	9.413E-09	4.537E-09	2.839E-09	2.008E-09
WSW	2.798E-06	6.434E-07	1.959E-07	9.806E-08	6.053E-08	2.658E-08	9.390E-09	4.572E-09	2.881E-09	2.048E-09
W	2.477E-06	5.671E-07	1.691E-07	8.356E-08	5.108E-08	2.204E-08	7.560E-09	3.603E-09	2.239E-09	1.575E-09
WNW	4.209E-06	9.504E-07	2.799E-07	1.373E-07	8.348E-08	3.574E-08	1.212E-08	5.731E-09	3.547E-09	2.489E-09
NW	4.649E-06	1.065E-06	3.210E-07	1.598E-07	9.826E-08	4.285E-08	1.497E-08	7.237E-09	4.541E-09	3.218E-09
NNW	8.988E-06	2.090E-06	6.573E-07	3.355E-07	2.101E-07	9.444E-08	3.468E-08	1.740E-08	1.117E-08	8.051E-09
N	1.446E-05	3.407E-06	1.123E-06	5.885E-07	3.752E-07	1.736E-07	6.664E-08	3.454E-08	2.261E-08	1.652E-08
NNE	5.549E-06	1.307E-06	4.265E-07	2.222E-07	1.411E-07	6.488E-08	2.466E-08	1.269E-08	8.269E-09	6.026E-09
NE	3.858E-06	9.165E-07	2.973E-07	1.543E-07	9.768E-08	4.469E-08	1.686E-08	8.625E-09	5.603E-09	4.072E-09
ENE	3.116E-06	7.402E-07	2.424E-07	1.264E-07	8.033E-08	3.694E-08	1.404E-08	7.221E-09	4.705E-09	3.427E-09
E	3.534E-06	8.357E-07	2.720E-07	1.415E-07	8.975E-08	4.119E-08	1.562E-08	8.036E-09	5.238E-09	3.817E-09
ESE	4.762E-06	1.118E-06	3.720E-07	1.959E-07	1.253E-07	5.824E-08	2.252E-08	1.174E-08	7.710E-09	5.650E-09
SE	6.152E-06	1.477E-06	4.805E-07	2.496E-07	1.581E-07	7.231E-08	2.723E-08	1.390E-08	9.010E-09	6.540E-09
SSE	9.318E-06	2.199E-06	7.239E-07	3.788E-07	2.413E-07	1.115E-07	4.269E-08	2.208E-08	1.444E-08	1.055E-08

VENTS GROUND LEVEL RELEASES - APR-JUN 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
SECTOR											
S	4.113E-05	1.326E-05	7.170E-06	3.631E-06	1.471E-06	7.998E-07	5.081E-07	3.551E-07	2.645E-07	2.063E-07	1.665E-07
SSW	2.023E-05	6.802E-06	3.711E-06	1.871E-06	7.365E-07	3.926E-07	2.457E-07	1.696E-07	1.251E-07	9.671E-08	7.746E-08
SW	1.577E-05	5.491E-06	2.987E-06	1.497E-06	5.838E-07	3.093E-07	1.926E-07	1.324E-07	9.734E-08	7.504E-08	5.994E-08
WSW	1.530E-05	5.357E-06	2.883E-06	1.435E-06	5.624E-07	2.991E-07	1.869E-07	1.288E-07	9.494E-08	7.334E-08	5.870E-08
W	1.320E-05	4.717E-06	2.561E-06	1.276E-06	4.934E-07	2.598E-07	1.610E-07	1.103E-07	8.084E-08	6.215E-08	4.953E-08
WNW	2.268E-05	8.071E-06	4.340E-06	2.150E-06	8.247E-07	4.318E-07	2.665E-07	1.819E-07	1.329E-07	1.019E-07	8.104E-08
NW	2.524E-05	8.895E-06	4.796E-06	2.385E-06	9.293E-07	4.921E-07	3.065E-07	2.108E-07	1.550E-07	1.195E-07	9.553E-08
NNW	5.165E-05	1.729E-05	9.212E-06	4.592E-06	1.838E-06	9.925E-07	6.273E-07	4.367E-07	3.243E-07	2.523E-07	2.031E-07
N	9.003E-05	2.813E-05	1.465E-05	7.308E-06	3.020E-06	1.665E-06	1.069E-06	7.532E-07	5.649E-07	4.431E-07	3.593E-07
NNE	3.406E-05	1.076E-05	5.636E-06	2.816E-06	1.156E-06	6.345E-07	4.059E-07	2.852E-07	2.134E-07	1.671E-07	1.352E-07
NE	2.360E-05	7.409E-06	3.931E-06	1.980E-06	8.091E-07	4.426E-07	2.823E-07	1.979E-07	1.478E-07	1.155E-07	9.335E-08
ENE	1.917E-05	6.008E-06	3.169E-06	1.593E-06	6.553E-07	3.601E-07	2.305E-07	1.621E-07	1.213E-07	9.500E-08	7.692E-08
E	2.174E-05	6.820E-06	3.597E-06	1.805E-06	7.394E-07	4.053E-07	2.590E-07	1.819E-07	1.361E-07	1.065E-07	8.617E-08
ESE	3.042E-05	9.333E-06	4.798E-06	2.386E-06	9.922E-07	5.492E-07	3.535E-07	2.495E-07	1.874E-07	1.472E-07	1.195E-07
SE	3.749E-05	1.174E-05	6.285E-06	3.186E-06	1.306E-06	7.156E-07	4.570E-07	3.206E-07	2.396E-07	1.873E-07	1.515E-07
SSE	5.826E-05	1.811E-05	9.439E-06	4.717E-06	1.948E-06	1.073E-06	6.881E-07	4.844E-07	3.631E-07	2.846E-07	2.306E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
SECTOR											
S	1.379E-07	7.087E-08	4.569E-08	2.575E-08	1.707E-08	1.234E-08	9.437E-09	7.496E-09	6.123E-09	5.111E-09	4.340E-09
SSW	6.376E-08	3.198E-08	2.029E-08	1.120E-08	7.336E-09	5.262E-09	3.997E-09	3.159E-09	2.570E-09	2.138E-09	1.810E-09
SW	4.924E-08	2.450E-08	1.546E-08	8.473E-09	5.519E-09	3.944E-09	2.988E-09	2.357E-09	1.915E-09	1.591E-09	1.346E-09
WSW	4.831E-08	2.421E-08	1.535E-08	8.481E-09	5.553E-09	3.985E-09	3.030E-09	2.397E-09	1.953E-09	1.627E-09	1.379E-09
W	4.059E-08	2.002E-08	1.255E-08	6.826E-09	4.430E-09	3.158E-09	2.388E-09	1.881E-09	1.526E-09	1.267E-09	1.070E-09
WNW	6.629E-08	3.249E-08	2.028E-08	1.098E-08	7.115E-09	5.067E-09	3.830E-09	3.016E-09	2.447E-09	2.032E-09	1.717E-09
NW	7.850E-08	3.915E-08	2.475E-08	1.363E-08	8.926E-09	6.409E-09	4.878E-09	3.864E-09	3.152E-09	2.629E-09	2.232E-09
NNW	1.681E-07	8.592E-08	5.525E-08	3.108E-08	2.060E-08	1.491E-08	1.142E-08	9.086E-09	7.438E-09	6.222E-09	5.295E-09
N	2.990E-07	1.561E-07	1.017E-07	5.802E-08	3.871E-08	2.811E-08	2.155E-08	1.714E-08	1.402E-08	1.170E-08	9.938E-09
NNE	1.124E-07	5.835E-08	3.786E-08	2.151E-08	1.431E-08	1.037E-08	7.936E-09	6.306E-09	5.152E-09	4.299E-09	3.648E-09
NE	7.746E-08	3.998E-08	2.583E-08	1.457E-08	9.641E-09	6.956E-09	5.300E-09	4.195E-09	3.414E-09	2.838E-09	2.400E-09
ENE	6.393E-08	3.318E-08	2.152E-08	1.221E-08	8.115E-09	5.875E-09	4.492E-09	3.565E-09	2.910E-09	2.425E-09	2.056E-09
E	7.159E-08	3.714E-08	2.410E-08	1.370E-08	9.138E-09	6.638E-09	5.091E-09	4.053E-09	3.318E-09	2.773E-09	2.358E-09
ESE	9.950E-08	5.204E-08	3.392E-08	1.935E-08	1.289E-08	9.348E-09	7.150E-09	5.675E-09	4.629E-09	3.856E-09	3.266E-09
SE	1.257E-07	6.496E-08	4.200E-08	2.373E-08	1.572E-08	1.135E-08	8.666E-09	6.870E-09	5.600E-09	4.664E-09	3.951E-09
SSE	1.918E-07	9.988E-08	6.490E-08	3.690E-08	2.454E-08	1.777E-08	1.358E-08	1.078E-08	8.792E-09	7.324E-09	6.204E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.949E-06	1.652E-06	5.247E-07	2.682E-07	1.677E-07	7.458E-08	2.632E-08	1.244E-08	7.528E-09	5.125E-09
SSW	3.580E-06	8.359E-07	2.544E-07	1.270E-07	7.809E-08	3.385E-08	1.150E-08	5.309E-09	3.174E-09	2.145E-09
SW	2.881E-06	6.647E-07	1.996E-07	9.887E-08	6.045E-08	2.598E-08	8.713E-09	3.982E-09	2.369E-09	1.596E-09
WSW	2.789E-06	6.393E-07	1.936E-07	9.640E-08	5.919E-08	2.563E-08	8.707E-09	4.021E-09	2.409E-09	1.631E-09
W	2.469E-06	5.634E-07	1.671E-07	8.214E-08	4.996E-08	2.127E-08	7.033E-09	3.189E-09	1.891E-09	1.271E-09
WNW	4.196E-06	9.445E-07	2.768E-07	1.351E-07	8.176E-08	3.458E-08	1.133E-08	5.118E-09	3.032E-09	2.038E-09
NW	4.636E-06	1.059E-06	3.177E-07	1.574E-07	9.634E-08	4.149E-08	1.401E-08	6.468E-09	3.882E-09	2.637E-09
NNW	8.955E-06	2.075E-06	6.485E-07	3.290E-07	2.047E-07	9.054E-08	3.179E-08	1.503E-08	9.125E-09	6.239E-09
N	1.438E-05	3.371E-06	1.102E-06	5.723E-07	3.618E-07	1.637E-07	5.914E-08	2.831E-08	1.721E-08	1.174E-08
NNE	5.520E-06	1.293E-06	4.186E-07	2.163E-07	1.362E-07	6.125E-08	2.194E-08	1.045E-08	6.332E-09	4.310E-09
NE	3.837E-06	9.064E-07	2.913E-07	1.498E-07	9.403E-08	4.202E-08	1.488E-08	7.010E-09	4.213E-09	2.846E-09
ENE	3.099E-06	7.324E-07	2.377E-07	1.229E-07	7.747E-08	3.483E-08	1.246E-08	5.919E-09	3.580E-09	2.432E-09
E	3.517E-06	8.276E-07	2.672E-07	1.379E-07	8.678E-08	3.900E-08	1.399E-08	6.686E-09	4.069E-09	2.781E-09
ESE	4.733E-06	1.105E-06	3.641E-07	1.898E-07	1.203E-07	5.453E-08	1.972E-08	9.415E-09	5.698E-09	3.866E-09
SE	6.120E-06	1.462E-06	4.714E-07	2.429E-07	1.526E-07	6.826E-08	2.423E-08	1.144E-08	6.899E-09	4.677E-09
SSE	9.267E-06	2.174E-06	7.092E-07	3.679E-07	2.322E-07	1.048E-07	3.763E-08	1.790E-08	1.082E-08	7.344E-09

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VENTS GROUND LEVEL RELEASES - APR-JUN 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.897E-05	1.213E-05	6.412E-06	3.193E-06	1.258E-06	6.687E-07	4.167E-07	2.862E-07	2.100E-07	1.615E-07	1.287E-07
SSW	1.916E-05	6.223E-06	3.317E-06	1.645E-06	6.293E-07	3.278E-07	2.011E-07	1.364E-07	9.907E-08	7.552E-08	5.970E-08
SW	1.494E-05	5.022E-06	2.669E-06	1.315E-06	4.985E-07	2.580E-07	1.574E-07	1.064E-07	7.695E-08	5.847E-08	4.609E-08
WSW	1.449E-05	4.900E-06	2.576E-06	1.260E-06	4.801E-07	2.494E-07	1.527E-07	1.034E-07	7.500E-08	5.711E-08	4.511E-08
W	1.250E-05	4.315E-06	2.288E-06	1.121E-06	4.212E-07	2.166E-07	1.316E-07	8.857E-08	6.387E-08	4.839E-08	3.805E-08
WNW	2.148E-05	7.382E-06	3.877E-06	1.888E-06	7.039E-07	3.599E-07	2.177E-07	1.460E-07	1.049E-07	7.929E-08	6.220E-08
NW	2.390E-05	8.134E-06	4.284E-06	2.094E-06	7.928E-07	4.100E-07	2.502E-07	1.690E-07	1.223E-07	9.292E-08	7.327E-08
NNW	4.893E-05	1.582E-05	8.232E-06	4.035E-06	1.570E-06	8.284E-07	5.132E-07	3.511E-07	2.567E-07	1.969E-07	1.565E-07
N	8.533E-05	2.576E-05	1.311E-05	6.432E-06	2.586E-06	1.395E-06	8.783E-07	6.086E-07	4.498E-07	3.481E-07	2.789E-07
NNE	3.228E-05	9.848E-06	5.042E-06	2.478E-06	9.898E-07	5.312E-07	3.334E-07	2.304E-07	1.698E-07	1.312E-07	1.049E-07
NE	2.237E-05	6.785E-06	3.518E-06	1.743E-06	6.932E-07	3.708E-07	2.321E-07	1.601E-07	1.178E-07	9.084E-08	7.254E-08
ENE	1.817E-05	5.502E-06	2.836E-06	1.402E-06	5.612E-07	3.016E-07	1.894E-07	1.310E-07	9.660E-08	7.463E-08	5.970E-08
E	2.061E-05	6.244E-06	3.217E-06	1.588E-06	6.328E-07	3.391E-07	2.126E-07	1.468E-07	1.082E-07	8.350E-08	6.674E-08
ESE	2.884E-05	8.549E-06	4.295E-06	2.101E-06	8.505E-07	4.605E-07	2.909E-07	2.020E-07	1.496E-07	1.159E-07	9.300E-08
SE	3.553E-05	1.075E-05	5.623E-06	2.804E-06	1.118E-06	5.992E-07	3.754E-07	2.590E-07	1.907E-07	1.471E-07	1.175E-07
SSE	5.522E-05	1.658E-05	8.448E-06	4.153E-06	1.669E-06	8.990E-07	5.658E-07	3.918E-07	2.894E-07	2.239E-07	1.793E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.054E-07	5.187E-08	3.226E-08	1.725E-08	1.099E-08	7.699E-09	5.732E-09	4.450E-09	3.562E-09	2.918E-09	2.436E-09
SSW	4.856E-08	2.329E-08	1.423E-08	7.429E-09	4.664E-09	3.233E-09	2.386E-09	1.839E-09	1.464E-09	1.193E-09	9.914E-10
SW	3.740E-08	1.777E-08	1.079E-08	5.577E-09	3.475E-09	2.395E-09	1.759E-09	1.351E-09	1.072E-09	8.713E-10	7.223E-10
WSW	3.666E-08	1.754E-08	1.070E-08	5.574E-09	3.490E-09	2.416E-09	1.781E-09	1.372E-09	1.091E-09	8.891E-10	7.386E-10
W	3.080E-08	1.450E-08	8.738E-09	4.477E-09	2.776E-09	1.907E-09	1.397E-09	1.070E-09	8.472E-10	6.877E-10	5.693E-10
WNW	5.025E-08	2.348E-08	1.409E-08	7.175E-09	4.436E-09	3.040E-09	2.224E-09	1.702E-09	1.346E-09	1.092E-09	9.034E-10
NW	5.945E-08	2.827E-08	1.717E-08	8.899E-09	5.560E-09	3.842E-09	2.830E-09	2.178E-09	1.731E-09	1.410E-09	1.171E-09
NNW	1.279E-07	6.251E-08	3.872E-08	2.059E-08	1.308E-08	9.148E-09	6.803E-09	5.277E-09	4.222E-09	3.459E-09	2.887E-09
N	2.295E-07	1.150E-07	7.241E-08	3.935E-08	2.533E-08	1.789E-08	1.340E-08	1.046E-08	8.403E-09	6.908E-09	5.782E-09
NNE	8.619E-08	4.293E-08	2.693E-08	1.456E-08	9.340E-09	6.581E-09	4.920E-09	3.832E-09	3.075E-09	2.525E-09	2.112E-09
NE	5.953E-08	2.951E-08	1.845E-08	9.921E-09	6.343E-09	4.456E-09	3.323E-09	2.582E-09	2.068E-09	1.695E-09	1.415E-09
ENE	4.906E-08	2.444E-08	1.533E-08	8.282E-09	5.311E-09	3.741E-09	2.795E-09	2.176E-09	1.745E-09	1.433E-09	1.198E-09
E	5.482E-08	2.727E-08	1.709E-08	9.235E-09	5.930E-09	4.182E-09	3.128E-09	2.438E-09	1.958E-09	1.609E-09	1.346E-09
ESE	7.661E-08	3.852E-08	2.432E-08	1.325E-08	8.546E-09	6.043E-09	4.530E-09	3.535E-09	2.841E-09	2.336E-09	1.955E-09
SE	9.643E-08	4.780E-08	2.988E-08	1.606E-08	1.026E-08	7.206E-09	5.372E-09	4.174E-09	3.343E-09	2.740E-09	2.288E-09
SSE	1.474E-07	7.374E-08	4.638E-08	2.515E-08	1.617E-08	1.140E-08	8.532E-09	6.648E-09	5.337E-09	4.383E-09	3.666E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.253E-06	1.426E-06	4.317E-07	2.133E-07	1.298E-07	5.505E-08	1.780E-08	7.789E-09	4.478E-09	2.930E-09
SSW	3.220E-06	7.210E-07	2.090E-07	1.008E-07	6.026E-08	2.488E-08	7.712E-09	3.276E-09	1.853E-09	1.199E-09
SW	2.590E-06	5.730E-07	1.638E-07	7.831E-08	4.654E-08	1.903E-08	5.800E-09	2.429E-09	1.361E-09	8.755E-10
WSW	2.508E-06	5.509E-07	1.588E-07	7.631E-08	4.554E-08	1.875E-08	5.787E-09	2.449E-09	1.382E-09	8.932E-10
W	2.220E-06	4.857E-07	1.371E-07	6.503E-08	3.843E-08	1.556E-08	4.668E-09	1.935E-09	1.079E-09	6.911E-10
WNW	3.772E-06	8.141E-07	2.269E-07	1.069E-07	6.284E-08	2.526E-08	7.494E-09	3.086E-09	1.716E-09	1.097E-09
NW	4.166E-06	9.118E-07	2.603E-07	1.244E-07	7.398E-08	3.027E-08	9.254E-09	3.895E-09	2.194E-09	1.417E-09
NNW	8.054E-06	1.788E-06	5.324E-07	2.609E-07	1.579E-07	6.646E-08	2.128E-08	9.258E-09	5.311E-09	3.473E-09
N	1.295E-05	2.911E-06	9.081E-07	4.564E-07	2.811E-07	1.215E-07	4.047E-08	1.808E-08	1.052E-08	6.934E-09
NNE	4.971E-06	1.117E-06	3.449E-07	1.724E-07	1.058E-07	4.543E-08	1.499E-08	6.652E-09	3.854E-09	2.535E-09
NE	3.455E-06	7.832E-07	2.403E-07	1.196E-07	7.314E-08	3.126E-08	1.022E-08	4.506E-09	2.598E-09	1.702E-09
ENE	2.791E-06	6.326E-07	1.959E-07	9.805E-08	6.018E-08	2.586E-08	8.527E-09	3.781E-09	2.189E-09	1.438E-09
E	3.166E-06	7.144E-07	2.200E-07	1.098E-07	6.729E-08	2.887E-08	9.512E-09	4.227E-09	2.452E-09	1.615E-09
ESE	4.265E-06	9.551E-07	3.006E-07	1.518E-07	9.373E-08	4.067E-08	1.362E-08	6.106E-09	3.555E-09	2.345E-09
SE	5.509E-06	1.262E-06	3.885E-07	1.936E-07	1.185E-07	5.064E-08	1.655E-08	7.288E-09	4.200E-09	2.751E-09
SSE	8.347E-06	1.879E-06	5.851E-07	2.937E-07	1.807E-07	7.796E-08	2.587E-08	1.153E-08	6.687E-09	4.400E-09

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VENTS GROUND LEVEL RELEASES - APR-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****												
DIRECTION FROM SITE		DISTANCES IN MILES										
		.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S		1.744E-07	5.897E-08	3.028E-08	1.439E-08	5.170E-09	2.564E-09	1.510E-09	9.886E-10	6.956E-10	5.155E-10	3.973E-10
SSW		1.077E-07	3.642E-08	1.870E-08	8.889E-09	3.193E-09	1.584E-09	9.324E-10	6.105E-10	4.296E-10	3.184E-10	2.453E-10
SW		8.944E-08	3.025E-08	1.553E-08	7.383E-09	2.652E-09	1.315E-09	7.744E-10	5.071E-10	3.568E-10	2.644E-10	2.038E-10
WSW		8.512E-08	2.879E-08	1.478E-08	7.026E-09	2.524E-09	1.252E-09	7.370E-10	4.826E-10	3.396E-10	2.517E-10	1.939E-10
W		7.026E-08	2.376E-08	1.220E-08	5.799E-09	2.083E-09	1.033E-09	6.083E-10	3.983E-10	2.803E-10	2.077E-10	1.601E-10
WNW		1.171E-07	3.958E-08	2.032E-08	9.662E-09	3.471E-09	1.721E-09	1.013E-09	6.636E-10	4.670E-10	3.461E-10	2.667E-10
NW		1.764E-07	5.965E-08	3.063E-08	1.456E-08	5.230E-09	2.594E-09	1.527E-09	1.000E-09	7.037E-10	5.215E-10	4.019E-10
NNW		3.386E-07	1.145E-07	5.879E-08	2.795E-08	1.004E-08	4.979E-09	2.932E-09	1.920E-09	1.351E-09	1.001E-09	7.714E-10
N		3.665E-07	1.239E-07	6.363E-08	3.025E-08	1.087E-08	5.389E-09	3.173E-09	2.078E-09	1.462E-09	1.083E-09	8.349E-10
NNE		1.266E-07	4.279E-08	2.197E-08	1.045E-08	3.752E-09	1.861E-09	1.096E-09	7.174E-10	5.048E-10	3.741E-10	2.883E-10
NE		6.899E-08	2.333E-08	1.198E-08	5.695E-09	2.046E-09	1.014E-09	5.973E-10	3.911E-10	2.752E-10	2.040E-10	1.572E-10
ENE		6.023E-08	2.037E-08	1.046E-08	4.972E-09	1.786E-09	8.856E-10	5.215E-10	3.415E-10	2.403E-10	1.781E-10	1.372E-10
E		7.294E-08	2.467E-08	1.266E-08	6.021E-09	2.163E-09	1.073E-09	6.315E-10	4.135E-10	2.910E-10	2.156E-10	1.662E-10
ESE		8.100E-08	2.739E-08	1.406E-08	6.686E-09	2.402E-09	1.191E-09	7.013E-10	4.592E-10	3.231E-10	2.395E-10	1.845E-10
SE		1.481E-07	5.007E-08	2.571E-08	1.222E-08	4.390E-09	2.177E-09	1.282E-09	8.394E-10	5.907E-10	4.377E-10	3.373E-10
SSE		2.328E-07	7.872E-08	4.042E-08	1.922E-08	6.903E-09	3.423E-09	2.016E-09	1.320E-09	9.287E-10	6.882E-10	5.304E-10
DIRECTION FROM SITE		DISTANCES IN MILES										
		5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S		3.156E-10	1.402E-10	8.493E-11	4.293E-11	2.598E-11	1.742E-11	1.248E-11	9.373E-12	7.288E-12	5.822E-12	4.752E-12
SSW		1.949E-10	8.659E-11	5.245E-11	2.651E-11	1.605E-11	1.076E-11	7.709E-12	5.789E-12	4.501E-12	3.595E-12	2.935E-12
SW		1.619E-10	7.191E-11	4.356E-11	2.202E-11	1.333E-11	8.935E-12	6.403E-12	4.808E-12	3.738E-12	2.986E-12	2.437E-12
WSW		1.541E-10	6.844E-11	4.146E-11	2.096E-11	1.268E-11	8.504E-12	6.093E-12	4.575E-12	3.558E-12	2.842E-12	2.320E-12
W		1.272E-10	5.649E-11	3.422E-11	1.730E-11	1.047E-11	7.019E-12	5.029E-12	3.776E-12	2.936E-12	2.345E-12	1.914E-12
WNW		2.119E-10	9.412E-11	5.701E-11	2.882E-11	1.744E-11	1.169E-11	8.379E-12	6.292E-12	4.892E-12	3.908E-12	3.190E-12
NW		3.193E-10	1.418E-10	8.592E-11	4.343E-11	2.628E-11	1.762E-11	1.263E-11	9.482E-12	7.372E-12	5.889E-12	4.807E-12
NNW		6.128E-10	2.722E-10	1.649E-10	8.336E-11	5.045E-11	3.383E-11	2.424E-11	1.820E-11	1.415E-11	1.130E-11	9.227E-12
N		6.633E-10	2.947E-10	1.785E-10	9.022E-11	5.460E-11	3.661E-11	2.623E-11	1.970E-11	1.532E-11	1.223E-11	9.986E-12
NNE		2.290E-10	1.017E-10	6.163E-11	3.115E-11	1.886E-11	1.264E-11	9.059E-12	6.802E-12	5.289E-12	4.225E-12	3.448E-12
NE		1.249E-10	5.547E-11	3.360E-11	1.698E-11	1.028E-11	6.892E-12	4.939E-12	3.708E-12	2.883E-12	2.303E-12	1.880E-12
ENE		1.090E-10	4.843E-11	2.933E-11	1.483E-11	8.974E-12	6.017E-12	4.311E-12	3.237E-12	2.517E-12	2.011E-12	1.641E-12
E		1.320E-10	5.865E-11	3.553E-11	1.796E-11	1.087E-11	7.287E-12	5.221E-12	3.921E-12	3.048E-12	2.435E-12	1.988E-12
ESE		1.466E-10	6.513E-11	3.945E-11	1.994E-11	1.207E-11	8.092E-12	5.798E-12	4.354E-12	3.385E-12	2.704E-12	2.207E-12
SE		2.680E-10	1.191E-10	7.212E-11	3.645E-11	2.206E-11	1.479E-11	1.060E-11	7.959E-12	6.188E-12	4.943E-12	4.035E-12
SSE		4.214E-10	1.872E-10	1.134E-10	5.731E-11	3.469E-11	2.326E-11	1.666E-11	1.251E-11	9.730E-12	7.772E-12	6.344E-12

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***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE		SEGMENT BOUNDARIES IN MILES									
		.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S		2.959E-08	6.062E-09	1.582E-09	7.107E-10	4.021E-10	1.546E-10	4.473E-11	1.773E-11	9.467E-12	5.860E-12
SSW		1.828E-08	3.744E-09	9.773E-10	4.389E-10	2.483E-10	9.549E-11	2.762E-11	1.095E-11	5.847E-12	3.619E-12
SW		1.518E-08	3.109E-09	8.117E-10	3.645E-10	2.062E-10	7.931E-11	2.294E-11	9.093E-12	4.856E-12	3.006E-12
WSW		1.445E-08	2.959E-09	7.725E-10	3.469E-10	1.963E-10	7.548E-11	2.183E-11	8.654E-12	4.621E-12	2.860E-12
W		1.192E-08	2.442E-09	6.376E-10	2.863E-10	1.620E-10	6.229E-11	1.802E-11	7.143E-12	3.814E-12	2.361E-12
WNW		1.987E-08	4.069E-09	1.062E-09	4.771E-10	2.699E-10	1.038E-10	3.003E-11	1.190E-11	6.355E-12	3.933E-12
NW		2.994E-08	6.132E-09	1.601E-09	7.190E-10	4.067E-10	1.564E-10	4.525E-11	1.793E-11	9.577E-12	5.928E-12
NNW		5.746E-08	1.177E-08	3.073E-09	1.380E-09	7.807E-10	3.002E-10	8.686E-11	3.442E-11	1.838E-11	1.138E-11
N		6.219E-08	1.274E-08	3.326E-09	1.494E-09	8.450E-10	3.249E-10	9.400E-11	3.726E-11	1.990E-11	1.231E-11
NNE		2.148E-08	4.399E-09	1.148E-09	5.158E-10	2.918E-10	1.122E-10	3.246E-11	1.287E-11	6.870E-12	4.252E-12
NE		1.171E-08	2.398E-09	6.261E-10	2.812E-10	1.591E-10	6.117E-11	1.770E-11	7.014E-12	3.746E-12	2.318E-12
ENE		1.022E-08	2.094E-09	5.466E-10	2.455E-10	1.389E-10	5.340E-11	1.545E-11	6.123E-12	3.270E-12	2.024E-12
E		1.238E-08	2.536E-09	6.619E-10	2.973E-10	1.682E-10	6.467E-11	1.871E-11	7.416E-12	3.960E-12	2.451E-12
ESE		1.375E-08	2.816E-09	7.351E-10	3.301E-10	1.868E-10	7.182E-11	2.078E-11	8.235E-12	4.398E-12	2.722E-12
SE		2.513E-08	5.147E-09	1.344E-09	6.035E-10	3.414E-10	1.313E-10	3.798E-11	1.505E-11	8.039E-12	4.976E-12
SSE		3.951E-08	8.093E-09	2.113E-09	9.488E-10	5.368E-10	2.064E-10	5.972E-11	2.367E-11	1.264E-11	7.823E-12

VENTS GROUND LEVEL RELEASES - APR-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SPECIFIC POINTS OF INTEREST							
RELEASE TYPE OF	DIRECTION	DIST.	X/Q	X/Q	X/Q	D/Q	
ID	LOCATION	FROM SITE (MI)	(SEC/M3)	(SEC/M3)	(SEC/M3)	(PER SQ.METER)	
			NO	2.26 DAY	8.0 DAY		
			DECAY	DECAY	DECAY		
			UNDELETED	UNDELETED	DELETED		
A	Site Boundary	S	.80	6.2E-06	6.2E-06	5.5E-06	2.6E-08
A	Site Boundary	SSW	.82	3.0E-06	3.0E-06	2.6E-06	1.5E-08
A	Site Boundary	SW	.97	1.6E-06	1.6E-06	1.4E-06	7.9E-09
A	Site Boundary	WSW	.93	1.7E-06	1.7E-06	1.5E-06	8.6E-09
A	Site Boundary	W	.91	1.6E-06	1.6E-06	1.4E-06	7.3E-09
A	Site Boundary	WNW	.94	2.5E-06	2.5E-06	2.2E-06	1.1E-08
A	Site Boundary	NW	.81	4.0E-06	4.0E-06	3.5E-06	2.5E-08
A	Site Boundary	NNW	.69	1.1E-05	1.1E-05	9.5E-06	6.8E-08
A	Site Boundary	N	.67	1.7E-05	1.7E-05	1.6E-05	7.6E-08
A	Site Boundary	NNE	.60	8.1E-06	8.0E-06	7.3E-06	3.2E-08
A	Site Boundary	NE	.62	5.2E-06	5.2E-06	4.7E-06	1.6E-08
A	Site Boundary	ENE	.59	4.7E-06	4.6E-06	4.2E-06	1.6E-08
A	Site Boundary	E	.53	6.3E-06	6.3E-06	5.7E-06	2.3E-08
A	Site Boundary	ESE	.54	8.3E-06	8.2E-06	7.5E-06	2.4E-08
A	Site Boundary	SE	.65	7.8E-06	7.8E-06	7.0E-06	3.3E-08
A	Site Boundary	SSE	.81	7.9E-06	7.8E-06	7.0E-06	3.3E-08
A	Nearest Res	SSW	3.00	1.7E-07	1.7E-07	1.4E-07	6.1E-10
A	Nearest Res	SW	1.30	8.1E-07	8.1E-07	7.0E-07	3.8E-09
A	Nearest Res	WSW	1.90	3.4E-07	3.3E-07	2.8E-07	1.4E-09
A	Nearest Res	W	1.00	1.3E-06	1.3E-06	1.1E-06	5.8E-09
A	Nearest Res	WNW	1.70	6.3E-07	6.2E-07	5.2E-07	2.6E-09
A	Nearest Res	NW	.90	3.1E-06	3.1E-06	2.7E-06	1.9E-08
A	Nearest Res	NNW	1.90	1.1E-06	1.1E-06	9.3E-07	5.6E-09
A	Nearest Res	N	2.50	1.1E-06	1.1E-06	8.8E-07	3.2E-09
A	Nearest Res	NNE	1.70	9.0E-07	8.9E-07	7.5E-07	2.8E-09
A	Nearest Res	ENE	1.70	5.1E-07	5.0E-07	4.3E-07	1.3E-09
A	Nearest Res	E	2.20	3.4E-07	3.3E-07	2.8E-07	8.5E-10
A	Nearest Res	ESE	2.80	2.9E-07	2.8E-07	2.3E-07	5.4E-10
A	Nearest Res	SE	3.00	3.3E-07	3.2E-07	2.6E-07	8.4E-10
A	Nearest Res	SSE	3.00	5.0E-07	4.8E-07	3.9E-07	1.3E-09
A	Nearest Cow	NNW	3.50	3.3E-07	3.2E-07	2.6E-07	1.4E-09
A	Nearest Garde	SSW	3.00	1.7E-07	1.7E-07	1.4E-07	6.1E-10
A	Nearest Garde	SW	1.30	8.1E-07	8.1E-07	7.0E-07	3.8E-09
A	Nearest Garde	WSW	1.90	3.4E-07	3.3E-07	2.8E-07	1.4E-09
A	Nearest Garde	W	2.80	1.3E-07	1.3E-07	1.0E-07	4.7E-10
A	Nearest Garde	WNW	1.70	6.3E-07	6.2E-07	5.2E-07	2.6E-09
A	Nearest Garde	NW	1.90	5.5E-07	5.5E-07	4.6E-07	2.9E-09
A	Nearest Garde	NNW	1.90	1.1E-06	1.1E-06	9.3E-07	5.6E-09
A	Nearest Garde	ENE	1.70	5.1E-07	5.0E-07	4.3E-07	1.3E-09
A	Nearest Garde	ESE	2.30	4.2E-07	4.2E-07	3.4E-07	8.5E-10
A	Nearest Garde	SSE	3.00	5.0E-07	4.8E-07	3.9E-07	1.3E-09

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Atmospheric Diffusion Estimates

Ground Level Releases

January-June 2014

VENTS GROUND LEVEL RELEASES - JAN-JUN 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.264E-05	1.425E-05	7.635E-06	3.826E-06	1.530E-06	8.258E-07	5.220E-07	3.635E-07	2.702E-07	2.104E-07	1.697E-07
SSW	1.937E-05	6.575E-06	3.508E-06	1.747E-06	6.876E-07	3.670E-07	2.300E-07	1.591E-07	1.176E-07	9.117E-08	7.320E-08
SW	1.322E-05	4.707E-06	2.555E-06	1.276E-06	4.956E-07	2.619E-07	1.628E-07	1.119E-07	8.220E-08	6.337E-08	5.064E-08
WSW	1.330E-05	4.570E-06	2.424E-06	1.202E-06	4.777E-07	2.567E-07	1.618E-07	1.124E-07	8.342E-08	6.486E-08	5.223E-08
W	1.017E-05	3.659E-06	1.987E-06	9.906E-07	3.837E-07	2.024E-07	1.257E-07	8.627E-08	6.333E-08	4.878E-08	3.895E-08
WNW	1.467E-05	5.199E-06	2.787E-06	1.381E-06	5.340E-07	2.814E-07	1.747E-07	1.198E-07	8.796E-08	6.775E-08	5.410E-08
NW	2.067E-05	7.173E-06	3.830E-06	1.901E-06	7.479E-07	3.991E-07	2.502E-07	1.731E-07	1.280E-07	9.918E-08	7.964E-08
NNW	5.125E-05	1.673E-05	8.779E-06	4.367E-06	1.778E-06	9.718E-07	6.205E-07	4.358E-07	3.262E-07	2.556E-07	2.072E-07
N	8.153E-05	2.543E-05	1.326E-05	6.630E-06	2.757E-06	1.529E-06	9.863E-07	6.984E-07	5.264E-07	4.148E-07	3.379E-07
NNE	4.251E-05	1.320E-05	6.931E-06	3.483E-06	1.446E-06	8.007E-07	5.160E-07	3.650E-07	2.749E-07	2.164E-07	1.762E-07
NE	2.450E-05	7.682E-06	4.064E-06	2.047E-06	8.433E-07	4.643E-07	2.980E-07	2.101E-07	1.578E-07	1.239E-07	1.007E-07
ENE	1.847E-05	5.887E-06	3.130E-06	1.577E-06	6.475E-07	3.558E-07	2.280E-07	1.606E-07	1.204E-07	9.454E-08	7.675E-08
E	1.994E-05	6.317E-06	3.341E-06	1.679E-06	6.901E-07	3.796E-07	2.435E-07	1.716E-07	1.288E-07	1.012E-07	8.218E-08
ESE	2.769E-05	8.776E-06	4.580E-06	2.286E-06	9.421E-07	5.190E-07	3.333E-07	2.351E-07	1.766E-07	1.388E-07	1.128E-07
SE	3.722E-05	1.214E-05	6.512E-06	3.282E-06	1.333E-06	7.269E-07	4.632E-07	3.247E-07	2.427E-07	1.899E-07	1.537E-07
SSE	4.440E-05	1.442E-05	7.563E-06	3.767E-06	1.532E-06	8.363E-07	5.335E-07	3.744E-07	2.800E-07	2.193E-07	1.777E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.406E-07	7.246E-08	4.707E-08	2.711E-08	1.842E-08	1.367E-08	1.074E-08	8.760E-09	7.349E-09	6.298E-09	5.488E-09
SSW	6.042E-08	3.075E-08	1.979E-08	1.126E-08	7.600E-09	5.614E-09	4.389E-09	3.568E-09	2.985E-09	2.551E-09	2.218E-09
SW	4.161E-08	2.080E-08	1.321E-08	7.361E-09	4.887E-09	3.563E-09	2.756E-09	2.219E-09	1.841E-09	1.562E-09	1.349E-09
WSW	4.322E-08	2.220E-08	1.439E-08	8.260E-09	5.599E-09	4.151E-09	3.255E-09	2.653E-09	2.224E-09	1.905E-09	1.659E-09
W	3.199E-08	1.594E-08	1.010E-08	5.617E-09	3.723E-09	2.712E-09	2.095E-09	1.686E-09	1.397E-09	1.184E-09	1.022E-09
WNW	4.443E-08	2.217E-08	1.407E-08	7.843E-09	5.218E-09	3.812E-09	2.954E-09	2.383E-09	1.979E-09	1.681E-09	1.454E-09
NW	6.574E-08	3.346E-08	2.154E-08	1.225E-08	8.261E-09	6.097E-09	4.764E-09	3.871E-09	3.236E-09	2.765E-09	2.403E-09
NNW	1.725E-07	9.059E-08	5.963E-08	3.498E-08	2.406E-08	1.804E-08	1.428E-08	1.173E-08	9.896E-09	8.524E-09	7.461E-09
N	2.825E-07	1.508E-07	1.003E-07	5.969E-08	4.145E-08	3.130E-08	2.491E-08	2.055E-08	1.741E-08	1.504E-08	1.321E-08
NNE	1.472E-07	7.837E-08	5.206E-08	3.090E-08	2.142E-08	1.615E-08	1.284E-08	1.058E-08	8.958E-09	7.736E-09	6.787E-09
NE	8.399E-08	4.442E-08	2.938E-08	1.733E-08	1.197E-08	8.997E-09	7.135E-09	5.870E-09	4.960E-09	4.277E-09	3.747E-09
ENE	6.396E-08	3.372E-08	2.225E-08	1.309E-08	9.016E-09	6.767E-09	5.359E-09	4.403E-09	3.717E-09	3.202E-09	2.804E-09
E	6.852E-08	3.622E-08	2.394E-08	1.412E-08	9.756E-09	7.337E-09	5.820E-09	4.789E-09	4.047E-09	3.490E-09	3.058E-09
ESE	9.412E-08	4.983E-08	3.298E-08	1.949E-08	1.347E-08	1.014E-08	8.046E-09	6.624E-09	5.601E-09	4.832E-09	4.237E-09
SE	1.278E-07	6.675E-08	4.377E-08	2.551E-08	1.747E-08	1.305E-08	1.030E-08	8.434E-09	7.100E-09	6.102E-09	5.331E-09
SSE	1.478E-07	7.746E-08	5.092E-08	2.981E-08	2.048E-08	1.534E-08	1.213E-08	9.958E-09	8.399E-09	7.231E-09	6.327E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.413E-06	1.727E-06	5.396E-07	2.741E-07	1.710E-07	7.631E-08	2.768E-08	1.376E-08	8.788E-09	6.309E-09
SSW	3.407E-06	7.805E-07	2.382E-07	1.194E-07	7.379E-08	3.247E-08	1.153E-08	5.654E-09	3.581E-09	2.556E-09
SW	2.465E-06	5.652E-07	1.689E-07	8.351E-08	5.107E-08	2.205E-08	7.561E-09	3.593E-09	2.228E-09	1.565E-09
WSW	2.358E-06	5.405E-07	1.674E-07	8.464E-08	5.264E-08	2.340E-08	8.439E-09	4.179E-09	2.662E-09	1.908E-09
W	1.916E-06	4.380E-07	1.304E-07	6.434E-08	3.929E-08	1.691E-08	5.772E-09	2.735E-09	1.693E-09	1.187E-09
WNW	2.698E-06	6.099E-07	1.812E-07	8.937E-08	5.456E-08	2.351E-08	8.059E-09	3.844E-09	2.392E-09	1.685E-09
NW	3.716E-06	8.492E-07	2.591E-07	1.299E-07	8.028E-08	3.533E-08	1.254E-08	6.141E-09	3.885E-09	2.770E-09
NNW	8.585E-06	1.995E-06	6.403E-07	3.306E-07	2.087E-07	9.502E-08	3.561E-08	1.814E-08	1.176E-08	8.537E-09
N	1.302E-05	3.072E-06	1.016E-06	5.330E-07	3.402E-07	1.576E-07	6.061E-08	3.145E-08	2.060E-08	1.506E-08
NNE	6.792E-06	1.612E-06	5.315E-07	2.784E-07	1.774E-07	8.197E-08	3.139E-08	1.623E-08	1.061E-08	7.746E-09
NE	3.972E-06	9.424E-07	3.072E-07	1.598E-07	1.014E-07	4.653E-08	1.763E-08	9.045E-09	5.885E-09	4.283E-09
ENE	3.052E-06	7.244E-07	2.351E-07	1.220E-07	7.728E-08	3.534E-08	1.331E-08	6.804E-09	4.415E-09	3.207E-09
E	3.264E-06	7.718E-07	2.510E-07	1.305E-07	8.275E-08	3.794E-08	1.436E-08	7.375E-09	4.801E-09	3.495E-09
ESE	4.493E-06	1.053E-06	3.435E-07	1.789E-07	1.136E-07	5.219E-08	1.981E-08	1.019E-08	6.640E-09	4.839E-09
SE	6.327E-06	1.497E-06	4.781E-07	2.460E-07	1.548E-07	7.010E-08	2.600E-08	1.313E-08	8.458E-09	6.112E-09
SSE	7.399E-06	1.719E-06	5.506E-07	2.838E-07	1.789E-07	8.130E-08	3.035E-08	1.543E-08	9.985E-09	7.242E-09

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VENTS GROUND LEVEL RELEASES - JAN-JUN 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.258E-05	1.422E-05	7.605E-06	3.807E-06	1.518E-06	8.168E-07	5.149E-07	3.575E-07	2.650E-07	2.057E-07	1.654E-07
SSW	1.935E-05	6.559E-06	3.496E-06	1.739E-06	6.824E-07	3.632E-07	2.271E-07	1.567E-07	1.155E-07	8.923E-08	7.144E-08
SW	1.321E-05	4.697E-06	2.547E-06	1.270E-06	4.922E-07	2.595E-07	1.610E-07	1.103E-07	8.088E-08	6.220E-08	4.958E-08
WSW	1.329E-05	4.558E-06	2.415E-06	1.196E-06	4.738E-07	2.539E-07	1.596E-07	1.106E-07	8.178E-08	6.340E-08	5.090E-08
W	1.016E-05	3.651E-06	1.980E-06	9.862E-07	3.812E-07	2.006E-07	1.243E-07	8.511E-08	6.234E-08	4.791E-08	3.817E-08
WNW	1.465E-05	5.188E-06	2.778E-06	1.375E-06	5.306E-07	2.790E-07	1.728E-07	1.183E-07	8.663E-08	6.657E-08	5.304E-08
NW	2.065E-05	7.158E-06	3.819E-06	1.894E-06	7.433E-07	3.958E-07	2.475E-07	1.709E-07	1.260E-07	9.743E-08	7.805E-08
NNW	5.117E-05	1.668E-05	8.741E-06	4.342E-06	1.762E-06	9.602E-07	6.112E-07	4.278E-07	3.192E-07	2.493E-07	2.014E-07
N	8.138E-05	2.534E-05	1.319E-05	6.585E-06	2.729E-06	1.507E-06	9.690E-07	6.836E-07	5.133E-07	4.030E-07	3.271E-07
NNE	4.243E-05	1.315E-05	6.894E-06	3.458E-06	1.430E-06	7.888E-07	5.064E-07	3.568E-07	2.677E-07	2.099E-07	1.702E-07
NE	2.446E-05	7.656E-06	4.044E-06	2.034E-06	8.346E-07	4.579E-07	2.928E-07	2.057E-07	1.539E-07	1.204E-07	9.749E-08
ENE	1.845E-05	5.870E-06	3.116E-06	1.568E-06	6.417E-07	3.515E-07	2.245E-07	1.576E-07	1.179E-07	9.220E-08	7.461E-08
E	1.991E-05	6.296E-06	3.325E-06	1.668E-06	6.833E-07	3.745E-07	2.394E-07	1.681E-07	1.258E-07	9.842E-08	7.967E-08
ESE	2.764E-05	8.747E-06	4.558E-06	2.272E-06	9.328E-07	5.121E-07	3.277E-07	2.303E-07	1.724E-07	1.350E-07	1.093E-07
SE	3.717E-05	1.210E-05	6.484E-06	3.263E-06	1.321E-06	7.182E-07	4.562E-07	3.188E-07	2.375E-07	1.852E-07	1.494E-07
SSE	4.433E-05	1.438E-05	7.530E-06	3.745E-06	1.518E-06	8.261E-07	5.252E-07	3.673E-07	2.738E-07	2.136E-07	1.725E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.366E-07	6.937E-08	4.439E-08	2.481E-08	1.637E-08	1.181E-08	9.015E-09	7.155E-09	5.842E-09	4.875E-09	4.139E-09
SSW	5.880E-08	2.950E-08	1.872E-08	1.035E-08	6.787E-09	4.875E-09	3.708E-09	2.934E-09	2.390E-09	1.990E-09	1.687E-09
SW	4.065E-08	2.007E-08	1.259E-08	6.853E-09	4.443E-09	3.165E-09	2.392E-09	1.883E-09	1.527E-09	1.267E-09	1.070E-09
WSW	4.199E-08	2.124E-08	1.356E-08	7.545E-09	4.961E-09	3.569E-09	2.718E-09	2.152E-09	1.753E-09	1.460E-09	1.237E-09
W	3.127E-08	1.541E-08	9.654E-09	5.247E-09	3.402E-09	2.423E-09	1.832E-09	1.443E-09	1.171E-09	9.720E-10	8.216E-10
WNW	4.346E-08	2.144E-08	1.345E-08	7.329E-09	4.768E-09	3.407E-09	2.582E-09	2.038E-09	1.657E-09	1.378E-09	1.167E-09
NW	6.427E-08	3.232E-08	2.055E-08	1.141E-08	7.510E-09	5.413E-09	4.132E-09	3.281E-09	2.682E-09	2.241E-09	1.905E-09
NNW	1.671E-07	8.633E-08	5.589E-08	3.172E-08	2.113E-08	1.536E-08	1.179E-08	9.394E-09	7.698E-09	6.443E-09	5.485E-09
N	2.724E-07	1.427E-07	9.321E-08	5.347E-08	3.584E-08	2.614E-08	2.011E-08	1.606E-08	1.318E-08	1.104E-08	9.400E-09
NNE	1.417E-07	7.398E-08	4.821E-08	2.755E-08	1.841E-08	1.339E-08	1.028E-08	8.195E-09	6.711E-09	5.612E-09	4.772E-09
NE	8.101E-08	4.207E-08	2.731E-08	1.554E-08	1.036E-08	7.528E-09	5.775E-09	4.599E-09	3.764E-09	3.147E-09	2.676E-09
ENE	6.198E-08	3.216E-08	2.088E-08	1.190E-08	7.951E-09	5.792E-09	4.455E-09	3.558E-09	2.921E-09	2.449E-09	2.089E-09
E	6.20E-08	3.437E-08	2.232E-08	1.272E-08	8.495E-09	6.181E-09	4.748E-09	3.787E-09	3.104E-09	2.599E-09	2.212E-09
ESE	9.086E-08	4.724E-08	3.070E-08	1.750E-08	1.168E-08	8.492E-09	6.519E-09	5.195E-09	4.255E-09	3.560E-09	3.028E-09
SE	1.238E-07	6.363E-08	4.104E-08	2.316E-08	1.536E-08	1.112E-08	8.515E-09	6.770E-09	5.537E-09	4.626E-09	3.931E-09
SSE	1.430E-07	7.366E-08	4.758E-08	2.690E-08	1.787E-08	1.294E-08	9.909E-09	7.878E-09	6.441E-09	5.380E-09	4.569E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.387E-06	1.715E-06	5.325E-07	2.689E-07	1.667E-07	7.321E-08	2.541E-08	1.191E-08	7.186E-09	4.889E-09
SSW	3.396E-06	7.753E-07	2.352E-07	1.172E-07	7.203E-08	3.122E-08	1.062E-08	4.918E-09	2.948E-09	1.996E-09
SW	2.457E-06	5.617E-07	1.670E-07	8.218E-08	5.001E-08	2.132E-08	7.057E-09	3.196E-09	1.893E-09	1.271E-09
WSW	2.349E-06	5.366E-07	1.651E-07	8.300E-08	5.130E-08	2.244E-08	7.732E-09	3.600E-09	2.162E-09	1.464E-09
W	1.910E-06	4.354E-07	1.290E-07	6.335E-08	3.850E-08	1.638E-08	5.406E-09	2.448E-09	1.450E-09	9.752E-10
WNW	2.690E-06	6.064E-07	1.793E-07	8.803E-08	5.350E-08	2.278E-08	7.551E-09	3.440E-09	2.048E-09	1.383E-09
NW	3.705E-06	8.445E-07	2.564E-07	1.279E-07	7.869E-08	3.419E-08	1.171E-08	5.460E-09	3.296E-09	2.247E-09
NNW	8.551E-06	1.979E-06	6.309E-07	3.236E-07	2.029E-07	9.075E-08	3.239E-08	1.547E-08	9.431E-09	6.460E-09
N	1.296E-05	3.043E-06	9.984E-07	5.199E-07	3.293E-07	1.495E-07	5.446E-08	2.631E-08	1.612E-08	1.106E-08
NNE	6.758E-06	1.596E-06	5.219E-07	2.711E-07	1.714E-07	7.757E-08	2.808E-08	1.349E-08	8.226E-09	5.626E-09
NE	3.953E-06	9.336E-07	3.020E-07	1.559E-07	9.819E-08	4.416E-08	1.586E-08	7.583E-09	4.617E-09	3.155E-09
ENE	3.040E-06	7.185E-07	2.316E-07	1.194E-07	7.515E-08	3.377E-08	1.214E-08	5.833E-09	3.572E-09	2.455E-09
E	3.249E-06	7.649E-07	2.469E-07	1.274E-07	8.024E-08	3.609E-08	1.298E-08	6.225E-09	3.802E-09	2.605E-09
ESE	4.473E-06	1.043E-06	3.379E-07	1.747E-07	1.101E-07	4.958E-08	1.785E-08	8.553E-09	5.215E-09	3.569E-09
SE	6.301E-06	1.485E-06	4.711E-07	2.408E-07	1.505E-07	6.696E-08	2.367E-08	1.121E-08	6.799E-09	4.638E-09
SSE	7.369E-06	1.705E-06	5.423E-07	2.776E-07	1.738E-07	7.748E-08	2.748E-08	1.304E-08	7.911E-09	5.394E-09

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VENTS GROUND LEVEL RELEASES - JAN-JUN 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.034E-05	1.301E-05	6.796E-06	3.345E-06	1.297E-06	6.817E-07	4.212E-07	2.874E-07	2.097E-07	1.605E-07	1.274E-07
SSW	1.833E-05	6.000E-06	3.123E-06	1.527E-06	5.827E-07	3.030E-07	1.857E-07	1.258E-07	9.131E-08	6.956E-08	5.496E-08
SW	1.251E-05	4.296E-06	2.275E-06	1.116E-06	4.201E-07	2.163E-07	1.315E-07	8.852E-08	6.385E-08	4.839E-08	3.806E-08
WSW	1.259E-05	4.170E-06	2.158E-06	1.051E-06	4.047E-07	2.119E-07	1.305E-07	8.888E-08	6.473E-08	4.947E-08	3.920E-08
W	9.622E-06	3.339E-06	1.769E-06	8.660E-07	3.253E-07	1.672E-07	1.015E-07	6.826E-08	4.920E-08	3.726E-08	2.928E-08
WNW	1.388E-05	4.745E-06	2.481E-06	1.207E-06	4.527E-07	2.325E-07	1.410E-07	9.484E-08	6.834E-08	5.175E-08	4.067E-08
NW	1.956E-05	6.546E-06	3.410E-06	1.662E-06	6.341E-07	3.297E-07	2.021E-07	1.370E-07	9.942E-08	7.575E-08	5.987E-08
NNW	4.848E-05	1.527E-05	7.813E-06	3.816E-06	1.506E-06	8.020E-07	5.005E-07	3.443E-07	2.530E-07	1.948E-07	1.554E-07
N	7.712E-05	2.320E-05	1.180E-05	5.792E-06	2.335E-06	1.261E-06	7.949E-07	5.514E-07	4.078E-07	3.158E-07	2.531E-07
NNE	4.021E-05	1.204E-05	6.167E-06	3.043E-06	1.224E-06	6.602E-07	4.158E-07	2.881E-07	2.129E-07	1.647E-07	1.319E-07
NE	2.318E-05	7.008E-06	3.617E-06	1.789E-06	7.141E-07	3.829E-07	2.402E-07	1.659E-07	1.222E-07	9.437E-08	7.544E-08
ENE	1.748E-05	5.372E-06	2.786E-06	1.378E-06	5.485E-07	2.936E-07	1.839E-07	1.269E-07	9.340E-08	7.205E-08	5.756E-08
E	1.887E-05	5.763E-06	2.974E-06	1.467E-06	5.844E-07	3.131E-07	1.963E-07	1.355E-07	9.982E-08	7.705E-08	6.159E-08
ESE	2.619E-05	8.006E-06	4.076E-06	1.998E-06	7.978E-07	4.281E-07	2.687E-07	1.856E-07	1.369E-07	1.057E-07	8.453E-08
SE	3.521E-05	1.108E-05	5.796E-06	2.868E-06	1.129E-06	5.999E-07	3.736E-07	2.566E-07	1.882E-07	1.447E-07	1.153E-07
SSE	4.201E-05	1.316E-05	6.731E-06	3.292E-06	1.297E-06	6.901E-07	4.302E-07	2.957E-07	2.171E-07	1.671E-07	1.332E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.039E-07	5.044E-08	3.109E-08	1.642E-08	1.039E-08	7.241E-09	5.370E-09	4.157E-09	3.319E-09	2.715E-09	2.262E-09
SSW	4.469E-08	2.142E-08	1.308E-08	6.833E-09	4.292E-09	2.978E-09	2.200E-09	1.697E-09	1.352E-09	1.103E-09	9.172E-10
SW	3.081E-08	1.451E-08	8.752E-09	4.484E-09	2.776E-09	1.904E-09	1.394E-09	1.067E-09	8.441E-10	6.848E-10	5.666E-10
WSW	3.195E-08	1.545E-08	9.501E-09	5.002E-09	3.155E-09	2.195E-09	1.626E-09	1.257E-09	1.002E-09	8.189E-10	6.818E-10
W	2.369E-08	1.113E-08	6.700E-09	3.425E-09	2.118E-09	1.452E-09	1.062E-09	8.129E-10	6.429E-10	5.214E-10	4.314E-10
WNW	3.291E-08	1.548E-08	9.328E-09	4.782E-09	2.968E-09	2.041E-09	1.497E-09	1.148E-09	9.098E-10	7.393E-10	6.127E-10
NW	4.869E-08	2.335E-08	1.428E-08	7.463E-09	4.690E-09	3.256E-09	2.407E-09	1.858E-09	1.481E-09	1.209E-09	1.007E-09
NNW	1.274E-07	6.298E-08	3.932E-08	2.113E-08	1.352E-08	9.509E-09	7.102E-09	5.529E-09	4.436E-09	3.643E-09	3.047E-09
N	2.084E-07	1.046E-07	6.597E-08	3.593E-08	2.318E-08	1.640E-08	1.231E-08	9.615E-09	7.739E-09	6.371E-09	5.340E-09
NNE	1.085E-07	5.434E-08	3.420E-08	1.858E-08	1.196E-08	8.447E-09	6.329E-09	4.939E-09	3.971E-09	3.266E-09	2.735E-09
NE	6.196E-08	3.083E-08	1.932E-08	1.044E-08	6.696E-09	4.719E-09	3.529E-09	2.749E-09	2.208E-09	1.814E-09	1.518E-09
ENE	4.725E-08	2.345E-08	1.468E-08	7.914E-09	5.072E-09	3.573E-09	2.672E-09	2.082E-09	1.672E-09	1.374E-09	1.151E-09
E	5.058E-08	2.515E-08	1.576E-08	8.516E-09	5.468E-09	3.856E-09	2.885E-09	2.249E-09	1.807E-09	1.485E-09	1.244E-09
ESE	6.945E-08	3.459E-08	2.170E-08	1.174E-08	7.539E-09	5.317E-09	3.979E-09	3.102E-09	2.492E-09	2.049E-09	1.715E-09
SE	9.439E-08	4.641E-08	2.886E-08	1.542E-08	9.820E-09	6.882E-09	5.125E-09	3.979E-09	3.186E-09	2.612E-09	2.181E-09
SSE	1.091E-07	5.382E-08	3.354E-08	1.798E-08	1.148E-08	8.064E-09	6.015E-09	4.676E-09	3.748E-09	3.075E-09	2.570E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.642E-06	1.478E-06	4.371E-07	2.132E-07	1.285E-07	5.373E-08	1.700E-08	7.331E-09	4.184E-09	2.726E-09
SSW	3.053E-06	6.683E-07	1.930E-07	9.289E-08	5.548E-08	2.289E-08	7.093E-09	3.017E-09	1.709E-09	1.108E-09
SW	2.209E-06	4.841E-07	1.369E-07	6.501E-08	3.844E-08	1.557E-08	4.673E-09	1.933E-09	1.075E-09	6.882E-10
WSW	2.113E-06	4.626E-07	1.356E-07	6.582E-08	3.956E-08	1.647E-08	5.181E-09	2.223E-09	1.265E-09	8.224E-10
W	1.717E-06	3.752E-07	1.057E-07	5.009E-08	2.957E-08	1.195E-08	3.572E-09	1.474E-09	8.194E-10	5.241E-10
WNW	2.418E-06	5.224E-07	1.469E-07	6.959E-08	4.108E-08	1.662E-08	4.986E-09	2.071E-09	1.157E-09	7.429E-10
NW	3.330E-06	7.273E-07	2.101E-07	1.011E-07	6.043E-08	2.495E-08	7.745E-09	3.299E-09	1.871E-09	1.215E-09
NNW	7.693E-06	1.706E-06	5.184E-07	2.569E-07	1.567E-07	6.678E-08	2.179E-08	9.616E-09	5.562E-09	3.658E-09
N	1.166E-05	2.626E-06	8.217E-07	4.138E-07	2.551E-07	1.105E-07	3.694E-08	1.657E-08	9.669E-09	6.394E-09
NNE	6.085E-06	1.378E-06	4.299E-07	2.160E-07	1.330E-07	5.743E-08	1.911E-08	8.536E-09	4.967E-09	3.278E-09
NE	3.558E-06	8.057E-07	2.485E-07	1.241E-07	7.606E-08	3.263E-08	1.075E-08	4.770E-09	2.766E-09	1.821E-09
ENE	2.735E-06	6.195E-07	1.903E-07	9.483E-08	5.804E-08	2.484E-08	8.154E-09	3.612E-09	2.094E-09	1.380E-09
E	2.924E-06	6.599E-07	2.031E-07	1.013E-07	6.209E-08	2.663E-08	8.771E-09	3.897E-09	2.262E-09	1.491E-09
ESE	4.026E-06	9.001E-07	2.780E-07	1.389E-07	8.522E-08	3.661E-08	1.209E-08	5.375E-09	3.121E-09	2.057E-09
SE	5.668E-06	1.280E-06	3.871E-07	1.912E-07	1.163E-07	4.927E-08	1.592E-08	6.963E-09	4.005E-09	2.622E-09
SSE	6.630E-06	1.471E-06	4.457E-07	2.205E-07	1.343E-07	5.710E-08	1.855E-08	8.156E-09	4.705E-09	3.087E-09

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VENTS GROUND LEVEL RELEASES - JAN-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****												
DIRECTION		DISTANCES IN MILES										
FROM SITE	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	
S	2.361E-07	7.985E-08	4.100E-08	1.949E-08	7.001E-09	3.472E-09	2.044E-09	1.339E-09	9.419E-10	6.980E-10	5.379E-10	
SSW	1.145E-07	3.871E-08	1.988E-08	9.450E-09	3.394E-09	1.683E-09	9.912E-10	6.490E-10	4.567E-10	3.384E-10	2.608E-10	
SW	7.432E-08	2.513E-08	1.290E-08	6.134E-09	2.203E-09	1.093E-09	6.434E-10	4.213E-10	2.965E-10	2.197E-10	1.693E-10	
WSW	6.106E-08	2.065E-08	1.060E-08	5.040E-09	1.810E-09	8.978E-10	5.286E-10	3.461E-10	2.436E-10	1.805E-10	1.391E-10	
W	5.453E-08	1.844E-08	9.467E-09	4.501E-09	1.617E-09	8.018E-10	4.721E-10	3.091E-10	2.175E-10	1.612E-10	1.242E-10	
WNW	8.070E-08	2.729E-08	1.401E-08	6.661E-09	2.393E-09	1.187E-09	6.987E-10	4.575E-10	3.219E-10	2.386E-10	1.838E-10	
NW	1.368E-07	4.625E-08	2.375E-08	1.129E-08	4.055E-09	2.011E-09	1.184E-09	7.754E-10	5.456E-10	4.044E-10	3.116E-10	
NNW	2.701E-07	9.133E-08	4.689E-08	2.229E-08	8.008E-09	3.971E-09	2.338E-09	1.531E-09	1.077E-09	7.984E-10	6.153E-10	
N	3.322E-07	1.123E-07	5.768E-08	2.742E-08	9.849E-09	4.885E-09	2.876E-09	1.883E-09	1.325E-09	9.821E-10	7.568E-10	
NNE	1.413E-07	4.777E-08	2.453E-08	1.166E-08	4.189E-09	2.077E-09	1.223E-09	8.009E-10	5.635E-10	4.176E-10	3.218E-10	
NE	8.507E-08	2.877E-08	1.477E-08	7.022E-09	2.522E-09	1.251E-09	7.366E-10	4.823E-10	3.394E-10	2.515E-10	1.938E-10	
ENE	7.036E-08	2.379E-08	1.222E-08	5.808E-09	2.086E-09	1.035E-09	6.092E-10	3.989E-10	2.807E-10	2.080E-10	1.603E-10	
E	6.834E-08	2.311E-08	1.186E-08	5.641E-09	2.026E-09	1.005E-09	5.917E-10	3.874E-10	2.726E-10	2.020E-10	1.557E-10	
ESE	1.171E-07	3.960E-08	2.033E-08	9.666E-09	3.472E-09	1.722E-09	1.014E-09	6.639E-10	4.672E-10	3.462E-10	2.668E-10	
SE	2.015E-07	6.816E-08	3.499E-08	1.664E-08	5.976E-09	2.964E-09	1.745E-09	1.143E-09	8.040E-10	5.958E-10	4.592E-10	
SSE	2.721E-07	9.201E-08	4.724E-08	2.246E-08	8.068E-09	4.001E-09	2.356E-09	1.543E-09	1.085E-09	8.044E-10	6.199E-10	
DIRECTION		DISTANCES IN MILES										
FROM SITE	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	
S	4.274E-10	1.898E-10	1.150E-10	5.813E-11	3.518E-11	2.359E-11	1.690E-11	1.269E-11	9.868E-12	7.883E-12	6.434E-12	
SSW	2.072E-10	9.204E-11	5.576E-11	2.818E-11	1.706E-11	1.144E-11	8.195E-12	6.153E-12	4.784E-12	3.822E-12	3.119E-12	
SW	1.345E-10	5.975E-11	3.619E-11	1.829E-11	1.107E-11	7.424E-12	5.320E-12	3.995E-12	3.106E-12	2.481E-12	2.025E-12	
WSW	1.105E-10	4.909E-11	2.974E-11	1.503E-11	9.097E-12	6.099E-12	4.371E-12	3.282E-12	2.552E-12	2.038E-12	1.664E-12	
W	9.869E-11	4.384E-11	2.656E-11	1.342E-11	8.124E-12	5.447E-12	3.903E-12	2.931E-12	2.279E-12	1.820E-12	1.486E-12	
WNW	1.461E-10	6.488E-11	3.930E-11	1.987E-11	1.202E-11	8.062E-12	5.777E-12	4.338E-12	3.373E-12	2.694E-12	2.199E-12	
NW	2.476E-10	1.100E-10	6.662E-11	3.367E-11	2.038E-11	1.366E-11	9.791E-12	7.352E-12	5.716E-12	4.566E-12	3.727E-12	
NNW	4.888E-10	2.171E-10	1.315E-10	6.648E-11	4.024E-11	2.698E-11	1.933E-11	1.452E-11	1.129E-11	9.016E-12	7.359E-12	
N	6.012E-10	2.671E-10	1.618E-10	8.178E-11	4.949E-11	3.319E-11	2.378E-11	1.786E-11	1.388E-11	1.109E-11	9.052E-12	
NNE	2.557E-10	1.136E-10	6.880E-11	3.478E-11	2.105E-11	1.411E-11	1.011E-11	7.593E-12	5.904E-12	4.716E-12	3.849E-12	
NE	1.540E-10	6.840E-11	4.143E-11	2.094E-11	1.268E-11	8.499E-12	6.090E-12	4.573E-12	3.555E-12	2.840E-12	2.318E-12	
ENE	1.273E-10	5.657E-11	3.427E-11	1.732E-11	1.048E-11	7.029E-12	5.037E-12	3.782E-12	2.941E-12	2.349E-12	1.917E-12	
E	1.237E-10	5.494E-11	3.328E-11	1.682E-11	1.018E-11	6.827E-12	4.892E-12	3.673E-12	2.856E-12	2.281E-12	1.862E-12	
ESE	2.120E-10	9.416E-11	5.704E-11	2.883E-11	1.745E-11	1.170E-11	8.383E-12	6.295E-12	4.894E-12	3.910E-12	3.191E-12	
SE	3.648E-10	1.620E-10	9.816E-11	4.962E-11	3.003E-11	2.013E-11	1.443E-11	1.083E-11	8.423E-12	6.729E-12	5.492E-12	
SSE	4.925E-10	2.188E-10	1.325E-10	6.699E-11	4.054E-11	2.718E-11	1.948E-11	1.463E-11	1.137E-11	9.084E-12	7.415E-12	

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***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****											
DIRECTION		SEGMENT BOUNDARIES IN MILES									
FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	4.007E-08	8.208E-09	2.143E-09	9.624E-10	5.444E-10	2.094E-10	6.057E-11	2.401E-11	1.282E-11	7.934E-12	
SSW	1.943E-08	3.980E-09	1.039E-09	4.666E-10	2.640E-10	1.015E-10	2.937E-11	1.164E-11	6.215E-12	3.847E-12	
SW	1.261E-08	2.583E-09	6.744E-10	3.029E-10	1.713E-10	6.589E-11	1.906E-11	7.555E-12	4.035E-12	2.497E-12	
WSW	1.036E-08	2.122E-09	5.541E-10	2.488E-10	1.408E-10	5.414E-11	1.566E-11	6.207E-12	3.315E-12	2.052E-12	
W	9.254E-09	1.895E-09	4.948E-10	2.222E-10	1.257E-10	4.835E-11	1.399E-11	5.543E-12	2.960E-12	1.832E-12	
WNW	1.370E-08	2.805E-09	7.323E-10	3.289E-10	1.861E-10	7.155E-11	2.070E-11	8.204E-12	4.381E-12	2.712E-12	
NW	2.321E-08	4.755E-09	1.241E-09	5.575E-10	3.154E-10	1.213E-10	3.508E-11	1.391E-11	7.426E-12	4.596E-12	
NNW	4.583E-08	9.388E-09	2.451E-09	1.101E-09	6.227E-10	2.395E-10	6.928E-11	2.746E-11	1.466E-11	9.075E-12	
N	5.637E-08	1.155E-08	3.015E-09	1.354E-09	7.659E-10	2.945E-10	8.521E-11	3.377E-11	1.803E-11	1.116E-11	
NNE	2.397E-08	4.911E-09	1.282E-09	5.758E-10	3.257E-10	1.253E-10	3.624E-11	1.436E-11	7.669E-12	4.747E-12	
NE	1.444E-08	2.957E-09	7.720E-10	3.467E-10	1.962E-10	7.543E-11	2.182E-11	8.649E-12	4.619E-12	2.859E-12	
ENE	1.194E-08	2.446E-09	6.385E-10	2.868E-10	1.622E-10	6.239E-11	1.805E-11	7.153E-12	3.820E-12	2.364E-12	
E	1.160E-08	2.375E-09	6.201E-10	2.785E-10	1.576E-10	6.059E-11	1.753E-11	6.947E-12	3.710E-12	2.296E-12	
ESE	1.987E-08	4.071E-09	1.063E-09	4.773E-10	2.700E-10	1.038E-10	3.004E-11	1.191E-11	6.358E-12	3.935E-12	
SE	3.420E-08	7.006E-09	1.829E-09	8.215E-10	4.647E-10	1.787E-10	5.170E-11	2.049E-11	1.094E-11	6.773E-12	
SSE	4.618E-08	9.459E-09	2.469E-09	1.109E-09	6.274E-10	2.413E-10	6.980E-11	2.766E-11	1.477E-11	9.144E-12	

VENTS GROUND LEVEL RELEASES - JAN-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SPECIFIC POINTS OF INTEREST							
RELEASE TYPE OF	DIRECTION	DIST.	X/Q	X/Q	X/Q	D/Q	
ID	LOCATION	FROM SITE (MI)	(SEC/M3)	(SEC/M3)	(SEC/M3)	(PER SQ.METER)	
			NO	2.26 DAY	8.0 DAY		
			DECAY	DECAY	DECAY		
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	6.6E-06	6.5E-06	5.8E-06	3.5E-08
A	Site Boundary	SSW	.82	2.8E-06	2.8E-06	2.5E-06	1.6E-08
A	Site Boundary	SW	.97	1.4E-06	1.4E-06	1.2E-06	6.5E-09
A	Site Boundary	WSW	.93	1.5E-06	1.4E-06	1.3E-06	6.2E-09
A	Site Boundary	W	.91	1.2E-06	1.2E-06	1.1E-06	5.7E-09
A	Site Boundary	WNW	.94	1.6E-06	1.6E-06	1.4E-06	7.9E-09
A	Site Boundary	NW	.81	3.2E-06	3.2E-06	2.8E-06	1.9E-08
A	Site Boundary	NNW	.69	1.0E-05	1.0E-05	9.0E-06	5.4E-08
A	Site Boundary	N	.67	1.6E-05	1.6E-05	1.4E-05	6.9E-08
A	Site Boundary	NNE	.60	9.8E-06	9.8E-06	8.9E-06	3.6E-08
A	Site Boundary	NE	.62	5.4E-06	5.4E-06	4.8E-06	2.0E-08
A	Site Boundary	ENE	.59	4.6E-06	4.5E-06	4.1E-06	1.8E-08
A	Site Boundary	E	.53	5.8E-06	5.8E-06	5.3E-06	2.1E-08
A	Site Boundary	ESE	.54	7.8E-06	7.8E-06	7.1E-06	3.5E-08
A	Site Boundary	SE	.65	8.1E-06	8.1E-06	7.3E-06	4.5E-08
A	Site Boundary	SSE	.81	6.2E-06	6.2E-06	5.5E-06	3.9E-08
A	Nearest Res	SSW	3.00	1.6E-07	1.6E-07	1.3E-07	6.5E-10
A	Nearest Res	SW	1.30	6.9E-07	6.8E-07	5.9E-07	3.1E-09
A	Nearest Res	WSW	1.90	2.9E-07	2.8E-07	2.4E-07	1.0E-09
A	Nearest Res	W	1.00	9.9E-07	9.9E-07	8.7E-07	4.5E-09
A	Nearest Res	WNW	1.70	4.0E-07	4.0E-07	3.4E-07	1.8E-09
A	Nearest Res	NW	.90	2.5E-06	2.4E-06	2.2E-06	1.5E-08
A	Nearest Res	NNW	1.90	1.1E-06	1.1E-06	9.0E-07	4.5E-09
A	Nearest Res	N	2.50	9.9E-07	9.7E-07	8.0E-07	2.9E-09
A	Nearest Res	NNE	1.70	1.1E-06	1.1E-06	9.3E-07	3.1E-09
A	Nearest Res	ENE	1.70	5.0E-07	4.9E-07	4.2E-07	1.5E-09
A	Nearest Res	E	2.20	3.1E-07	3.1E-07	2.6E-07	8.0E-10
A	Nearest Res	ESE	2.80	2.7E-07	2.6E-07	2.1E-07	7.8E-10
A	Nearest Res	SE	3.00	3.2E-07	3.2E-07	2.6E-07	1.1E-09
A	Nearest Res	SSE	3.00	3.7E-07	3.7E-07	3.0E-07	1.5E-09
A	Nearest Cow	NNW	3.50	3.3E-07	3.2E-07	2.5E-07	1.1E-09
A	Nearest Garde	SSW	3.00	1.6E-07	1.6E-07	1.3E-07	6.5E-10
A	Nearest Garde	SW	1.30	6.9E-07	6.8E-07	5.9E-07	3.1E-09
A	Nearest Garde	WSW	1.90	2.9E-07	2.8E-07	2.4E-07	1.0E-09
A	Nearest Garde	W	2.80	9.9E-08	9.8E-08	7.9E-08	3.6E-10
A	Nearest Garde	WNW	1.70	4.0E-07	4.0E-07	3.4E-07	1.8E-09
A	Nearest Garde	NW	1.90	4.5E-07	4.4E-07	3.7E-07	2.3E-09
A	Nearest Garde	NNW	1.90	1.1E-06	1.1E-06	9.0E-07	4.5E-09
A	Nearest Garde	ENE	1.70	5.0E-07	4.9E-07	4.2E-07	1.5E-09
A	Nearest Garde	ESE	2.30	3.9E-07	3.9E-07	3.2E-07	1.2E-09
A	Nearest Garde	SSE	3.00	3.7E-07	3.7E-07	3.0E-07	1.5E-09

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Atmospheric Diffusion Estimates

Ground Level Releases

July-September 2014

VENTS GROUND LEVEL RELEASES - JUL-SEP 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE											
	SECTOR	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.511E-05	1.819E-05	9.815E-06	4.954E-06	2.003E-06	1.089E-06	6.926E-07	4.846E-07	3.616E-07	2.825E-07	2.284E-07	
SSW	2.604E-05	9.001E-06	4.910E-06	2.471E-06	9.694E-07	5.159E-07	3.226E-07	2.226E-07	1.642E-07	1.270E-07	1.018E-07	
SW	1.675E-05	6.127E-06	3.326E-06	1.654E-06	6.381E-07	3.356E-07	2.079E-07	1.424E-07	1.044E-07	8.026E-08	6.400E-08	
WSW	2.067E-05	7.290E-06	3.914E-06	1.949E-06	7.662E-07	4.084E-07	2.557E-07	1.766E-07	1.304E-07	1.009E-07	8.095E-08	
W	2.696E-05	9.774E-06	5.313E-06	2.650E-06	1.026E-06	5.412E-07	3.359E-07	2.305E-07	1.691E-07	1.302E-07	1.040E-07	
WNW	4.156E-05	1.448E-05	7.826E-06	3.910E-06	1.532E-06	8.153E-07	5.098E-07	3.519E-07	2.596E-07	2.009E-07	1.610E-07	
NW	4.303E-05	1.493E-05	8.122E-06	4.075E-06	1.606E-06	8.581E-07	5.383E-07	3.726E-07	2.756E-07	2.136E-07	1.716E-07	
NNW	5.931E-05	2.057E-05	1.127E-05	5.678E-06	2.247E-06	1.204E-06	7.566E-07	5.246E-07	3.885E-07	3.016E-07	2.425E-07	
N	1.055E-04	3.342E-05	1.785E-05	9.015E-06	3.704E-06	2.037E-06	1.306E-06	9.202E-07	6.907E-07	5.423E-07	4.405E-07	
NNE	8.011E-05	2.418E-05	1.247E-05	6.244E-06	2.641E-06	1.480E-06	9.624E-07	6.856E-07	5.192E-07	4.108E-07	3.358E-07	
NE	4.243E-05	1.278E-05	6.597E-06	3.304E-06	1.395E-06	7.811E-07	5.076E-07	3.614E-07	2.736E-07	2.164E-07	1.769E-07	
ENE	3.485E-05	1.044E-05	5.298E-06	2.633E-06	1.119E-06	6.289E-07	4.099E-07	2.925E-07	2.219E-07	1.758E-07	1.439E-07	
E	5.355E-05	1.604E-05	8.252E-06	4.132E-06	1.752E-06	9.832E-07	6.400E-07	4.562E-07	3.457E-07	2.737E-07	2.238E-07	
ESE	7.272E-05	2.157E-05	1.120E-05	5.650E-06	2.401E-06	1.349E-06	8.791E-07	6.271E-07	4.755E-07	3.765E-07	3.080E-07	
SE	1.272E-04	3.776E-05	1.924E-05	9.600E-06	4.100E-06	2.312E-06	1.510E-06	1.080E-06	8.199E-07	6.503E-07	5.327E-07	
SSE	1.082E-04	3.287E-05	1.704E-05	8.543E-06	3.595E-06	2.008E-06	1.302E-06	9.258E-07	7.000E-07	5.531E-07	4.516E-07	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE											
	SECTOR	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.897E-07	9.869E-08	6.451E-08	3.745E-08	2.556E-08	1.904E-08	1.499E-08	1.226E-08	1.030E-08	8.841E-09	7.714E-09	
SSW	8.387E-08	4.232E-08	2.706E-08	1.525E-08	1.020E-08	7.486E-09	5.819E-09	4.707E-09	3.920E-09	3.337E-09	2.890E-09	
SW	5.248E-08	2.599E-08	1.640E-08	9.057E-09	5.976E-09	4.335E-09	3.339E-09	2.679E-09	2.215E-09	1.874E-09	1.614E-09	
WSW	6.673E-08	3.374E-08	2.161E-08	1.219E-08	8.159E-09	5.987E-09	4.655E-09	3.767E-09	3.138E-09	2.672E-09	2.315E-09	
W	8.534E-08	4.246E-08	2.687E-08	1.490E-08	9.847E-09	7.154E-09	5.516E-09	4.431E-09	3.667E-09	3.104E-09	2.675E-09	
WNW	1.327E-07	6.711E-08	4.299E-08	2.428E-08	1.629E-08	1.197E-08	9.320E-09	7.549E-09	6.294E-09	5.364E-09	4.651E-09	
NW	1.417E-07	7.210E-08	4.641E-08	2.638E-08	1.776E-08	1.309E-08	1.022E-08	8.291E-09	6.924E-09	5.909E-09	5.129E-09	
NNW	2.004E-07	1.023E-07	6.600E-08	3.762E-08	2.536E-08	1.871E-08	1.461E-08	1.186E-08	9.912E-09	8.462E-09	7.348E-09	
N	3.672E-07	1.940E-07	1.282E-07	7.552E-08	5.212E-08	3.916E-08	3.104E-08	2.552E-08	2.156E-08	1.858E-08	1.627E-08	
NNE	2.816E-07	1.519E-07	1.018E-07	6.112E-08	4.270E-08	3.239E-08	2.586E-08	2.140E-08	1.817E-08	1.574E-08	1.384E-08	
NE	1.483E-07	7.994E-08	5.355E-08	3.215E-08	2.247E-08	1.704E-08	1.361E-08	1.127E-08	9.567E-09	8.286E-09	7.289E-09	
ENE	1.207E-07	6.537E-08	4.392E-08	2.647E-08	1.854E-08	1.409E-08	1.127E-08	9.340E-09	7.941E-09	6.884E-09	6.061E-09	
E	1.877E-07	1.014E-07	6.800E-08	4.088E-08	2.858E-08	2.168E-08	1.732E-08	1.434E-08	1.218E-08	1.055E-08	9.282E-09	
ESE	2.584E-07	1.397E-07	9.373E-08	5.637E-08	3.941E-08	2.990E-08	2.389E-08	1.977E-08	1.679E-08	1.455E-08	1.280E-08	
SE	4.475E-07	2.429E-07	1.635E-07	9.876E-08	6.926E-08	5.268E-08	4.217E-08	3.496E-08	2.973E-08	2.578E-08	2.271E-08	
SSE	3.783E-07	2.033E-07	1.359E-07	8.135E-08	5.671E-08	4.295E-08	3.426E-08	2.832E-08	2.402E-08	2.079E-08	1.827E-08	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.516E-06	2.253E-06	7.152E-07	3.666E-07	2.301E-07	1.037E-07	3.818E-08	1.916E-08	1.229E-08	8.856E-09
SSW	4.735E-06	1.101E-06	3.341E-07	1.667E-07	1.026E-07	4.477E-08	1.563E-08	7.544E-09	4.725E-09	3.344E-09
SW	3.205E-06	7.294E-07	2.158E-07	1.060E-07	6.455E-08	2.761E-08	9.319E-09	4.374E-09	2.691E-09	1.879E-09
WSW	3.791E-06	8.701E-07	2.648E-07	1.324E-07	8.161E-08	3.568E-08	1.249E-08	6.033E-09	3.781E-09	2.678E-09
W	5.121E-06	1.171E-06	3.485E-07	1.718E-07	1.049E-07	4.506E-08	1.531E-08	7.217E-09	4.450E-09	3.112E-09
WNW	7.565E-06	1.742E-06	5.281E-07	2.636E-07	1.624E-07	7.097E-08	2.489E-08	1.206E-08	7.577E-09	5.375E-09
NW	7.836E-06	1.822E-06	5.573E-07	2.797E-07	1.730E-07	7.614E-08	2.700E-08	1.319E-08	8.320E-09	5.921E-09
NNW	1.085E-05	2.546E-06	7.830E-07	3.943E-07	2.444E-07	1.080E-07	3.848E-08	1.884E-08	1.191E-08	8.479E-09
N	1.738E-05	4.143E-06	1.347E-06	6.997E-07	4.435E-07	2.032E-07	7.681E-08	3.937E-08	2.559E-08	1.861E-08
NNE	1.231E-05	2.926E-06	9.897E-07	5.254E-07	3.379E-07	1.584E-07	6.197E-08	3.253E-08	2.145E-08	1.576E-08
NE	6.508E-06	1.546E-06	5.221E-07	2.769E-07	1.780E-07	8.340E-08	3.260E-08	1.712E-08	1.129E-08	8.296E-09
ENE	5.256E-06	1.238E-06	4.214E-07	2.245E-07	1.447E-07	6.814E-08	2.682E-08	1.415E-08	9.359E-09	6.892E-09
E	8.153E-06	1.939E-06	6.580E-07	3.498E-07	2.252E-07	1.057E-07	4.144E-08	2.178E-08	1.437E-08	1.056E-08
ESE	1.104E-05	2.656E-06	9.037E-07	4.811E-07	3.100E-07	1.457E-07	5.713E-08	3.003E-08	1.982E-08	1.456E-08
SE	1.907E-05	4.527E-06	1.552E-06	8.295E-07	5.360E-07	2.531E-07	1.000E-07	5.290E-08	3.503E-08	2.581E-08
SSE	1.678E-05	3.989E-06	1.340E-06	7.085E-07	4.545E-07	2.122E-07	8.253E-08	4.314E-08	2.838E-08	2.082E-08

VENTS GROUND LEVEL RELEASES - JUL-SEP 2014
 2.260 DAY DECAY, UNDELETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.498E-05	1.811E-05	9.752E-06	4.911E-06	1.977E-06	1.070E-06	6.769E-07	4.713E-07	3.500E-07	2.721E-07	2.189E-07
SSW	2.600E-05	8.971E-06	4.884E-06	2.454E-06	9.589E-07	5.084E-07	3.166E-07	2.177E-07	1.599E-07	1.232E-07	9.836E-08
SW	1.673E-05	6.110E-06	3.312E-06	1.644E-06	6.326E-07	3.317E-07	2.049E-07	1.399E-07	1.022E-07	7.840E-08	6.233E-08
WSW	2.063E-05	7.263E-06	3.892E-06	1.935E-06	7.576E-07	4.021E-07	2.507E-07	1.725E-07	1.268E-07	9.775E-08	7.807E-08
W	2.692E-05	9.747E-06	5.291E-06	2.634E-06	1.017E-06	5.349E-07	3.310E-07	2.264E-07	1.657E-07	1.272E-07	1.012E-07
WNW	4.149E-05	1.443E-05	7.787E-06	3.884E-06	1.517E-06	8.040E-07	5.009E-07	3.445E-07	2.532E-07	1.951E-07	1.558E-07
NW	4.296E-05	1.488E-05	8.084E-06	4.049E-06	1.590E-06	8.468E-07	5.294E-07	3.651E-07	2.690E-07	2.078E-07	1.663E-07
NNW	5.922E-05	2.051E-05	1.122E-05	5.646E-06	2.227E-06	1.190E-06	7.455E-07	5.153E-07	3.804E-07	2.944E-07	2.359E-07
N	1.052E-04	3.325E-05	1.772E-05	8.925E-06	3.648E-06	1.995E-06	1.272E-06	8.916E-07	6.655E-07	5.197E-07	4.198E-07
NNE	7.983E-05	2.401E-05	1.235E-05	6.161E-06	2.588E-06	1.440E-06	9.298E-07	6.577E-07	4.946E-07	3.886E-07	3.154E-07
NE	4.229E-05	1.270E-05	6.533E-06	3.261E-06	1.368E-06	7.605E-07	4.908E-07	3.471E-07	2.610E-07	2.050E-07	1.664E-07
ENE	3.473E-05	1.037E-05	5.243E-06	2.597E-06	1.095E-06	6.114E-07	3.956E-07	2.803E-07	2.110E-07	1.660E-07	1.348E-07
E	5.337E-05	1.594E-05	8.171E-06	4.079E-06	1.718E-06	9.576E-07	6.191E-07	4.384E-07	3.300E-07	2.594E-07	2.108E-07
ESE	7.246E-05	2.142E-05	1.109E-05	5.573E-06	2.352E-06	1.313E-06	8.494E-07	6.017E-07	4.530E-07	3.563E-07	2.895E-07
SE	1.268E-04	3.750E-05	1.904E-05	9.467E-06	4.014E-06	2.248E-06	1.458E-06	1.035E-06	7.802E-07	6.143E-07	4.997E-07
SSE	1.078E-04	3.266E-05	1.688E-05	8.436E-06	3.526E-06	1.956E-06	1.260E-06	8.898E-07	6.683E-07	5.245E-07	4.254E-07

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.809E-07	9.183E-08	5.857E-08	3.239E-08	2.109E-08	1.501E-08	1.131E-08	8.857E-09	7.143E-09	5.892E-09	4.947E-09
SSW	8.072E-08	3.992E-08	2.503E-08	1.356E-08	8.731E-09	6.172E-09	4.628E-09	3.614E-09	2.908E-09	2.395E-09	2.009E-09
SW	5.096E-08	2.487E-08	1.546E-08	8.291E-09	5.316E-09	3.750E-09	2.809E-09	2.194E-09	1.766E-09	1.455E-09	1.221E-09
WSW	6.408E-08	3.171E-08	1.988E-08	1.075E-08	6.894E-09	4.853E-09	3.624E-09	2.818E-09	2.258E-09	1.851E-09	1.546E-09
W	8.282E-08	4.058E-08	2.529E-08	1.363E-08	8.729E-09	6.160E-09	4.616E-09	3.605E-09	2.903E-09	2.392E-09	2.007E-09
WNW	1.280E-07	6.347E-08	3.989E-08	2.170E-08	1.402E-08	9.941E-09	7.472E-09	5.849E-09	4.717E-09	3.891E-09	3.269E-09
NW	1.368E-07	6.839E-08	4.323E-08	2.371E-08	1.542E-08	1.099E-08	8.302E-09	6.528E-09	5.287E-09	4.380E-09	3.694E-09
NNW	1.943E-07	9.769E-08	6.204E-08	3.429E-08	2.243E-08	1.608E-08	1.221E-08	9.652E-09	7.856E-09	6.539E-09	5.541E-09
N	3.481E-07	1.789E-07	1.151E-07	6.432E-08	4.218E-08	3.017E-08	2.281E-08	1.792E-08	1.448E-08	1.197E-08	1.006E-08
NNE	2.626E-07	1.368E-07	8.858E-08	4.972E-08	3.254E-08	2.316E-08	1.740E-08	1.357E-08	1.089E-08	8.924E-09	7.443E-09
NE	1.386E-07	7.219E-08	4.677E-08	2.630E-08	1.725E-08	1.231E-08	9.267E-09	7.245E-09	5.824E-09	4.785E-09	4.000E-09
ENE	1.124E-07	5.867E-08	3.804E-08	2.137E-08	1.399E-08	9.954E-09	7.472E-09	5.823E-09	4.665E-09	3.819E-09	3.182E-09
E	1.756E-07	9.174E-08	5.955E-08	3.358E-08	2.207E-08	1.578E-08	1.190E-08	9.323E-09	7.509E-09	6.180E-09	5.176E-09
ESE	2.412E-07	1.260E-07	8.173E-08	4.601E-08	3.019E-08	2.154E-08	1.622E-08	1.268E-08	1.020E-08	8.377E-09	7.003E-09
SE	4.168E-07	2.184E-07	1.420E-07	8.013E-08	5.261E-08	3.756E-08	2.828E-08	2.210E-08	1.775E-08	1.457E-08	1.217E-08
SSE	3.539E-07	1.839E-07	1.189E-07	6.669E-08	4.364E-08	3.109E-08	2.338E-08	1.825E-08	1.466E-08	1.203E-08	1.005E-08

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.459E-06	2.226E-06	6.995E-07	3.550E-07	2.206E-07	9.684E-08	3.318E-08	1.515E-08	8.904E-09	5.913E-09
SSW	4.712E-06	1.091E-06	3.282E-07	1.624E-07	9.919E-08	4.237E-08	1.396E-08	6.237E-09	3.635E-09	2.404E-09
SW	3.193E-06	7.238E-07	2.127E-07	1.039E-07	6.288E-08	2.648E-08	8.562E-09	3.791E-09	2.207E-09	1.461E-09
WSW	3.771E-06	8.612E-07	2.598E-07	1.288E-07	7.872E-08	3.365E-08	1.107E-08	4.906E-09	2.835E-09	1.858E-09
W	5.100E-06	1.162E-06	3.435E-07	1.684E-07	1.021E-07	4.317E-08	1.403E-08	6.228E-09	3.626E-09	2.401E-09
WNW	7.529E-06	1.726E-06	5.191E-07	2.571E-07	1.572E-07	6.732E-08	2.233E-08	1.004E-08	5.881E-09	3.905E-09
NW	7.802E-06	1.806E-06	5.483E-07	2.732E-07	1.677E-07	7.241E-08	2.436E-08	1.110E-08	6.562E-09	4.395E-09
NNW	1.081E-05	2.526E-06	7.718E-07	3.862E-07	2.378E-07	1.033E-07	3.519E-08	1.623E-08	9.699E-09	6.560E-09
N	1.726E-05	4.086E-06	1.313E-06	6.746E-07	4.229E-07	1.881E-07	6.576E-08	3.043E-08	1.801E-08	1.201E-08
NNE	1.219E-05	2.872E-06	9.570E-07	5.008E-07	3.176E-07	1.433E-07	5.072E-08	2.336E-08	1.364E-08	8.957E-09
NE	6.448E-06	1.518E-06	5.052E-07	2.642E-07	1.675E-07	7.564E-08	2.682E-08	1.241E-08	7.281E-09	4.802E-09
ENE	5.205E-06	1.214E-06	4.070E-07	2.136E-07	1.357E-07	6.143E-08	2.179E-08	1.004E-08	5.853E-09	3.834E-09
E	8.078E-06	1.905E-06	6.371E-07	3.341E-07	2.122E-07	9.607E-08	3.423E-08	1.590E-08	9.369E-09	6.202E-09
ESE	1.093E-05	2.606E-06	8.739E-07	4.586E-07	2.914E-07	1.319E-07	4.692E-08	2.172E-08	1.275E-08	8.407E-09
SE	1.889E-05	4.441E-06	1.499E-06	7.897E-07	5.030E-07	2.285E-07	8.165E-08	3.786E-08	2.221E-08	1.463E-08
SSE	1.663E-05	3.919E-06	1.298E-06	6.768E-07	4.283E-07	1.928E-07	6.805E-08	3.135E-08	1.835E-08	1.208E-08

B260

VENTS GROUND LEVEL RELEASES - JUL-SEP 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.212E-05	1.659E-05	8.731E-06	4.326E-06	1.695E-06	8.975E-07	5.574E-07	3.819E-07	2.795E-07	2.146E-07	1.706E-07
SSW	2.464E-05	8.212E-06	4.369E-06	2.159E-06	8.207E-07	4.254E-07	2.599E-07	1.757E-07	1.272E-07	9.666E-08	7.622E-08
SW	1.585E-05	5.591E-06	2.960E-06	1.445E-06	5.406E-07	2.770E-07	1.677E-07	1.126E-07	8.096E-08	6.120E-08	4.802E-08
WSW	1.955E-05	6.650E-06	3.482E-06	1.703E-06	6.486E-07	3.367E-07	2.060E-07	1.394E-07	1.009E-07	7.678E-08	6.057E-08
W	2.550E-05	8.919E-06	4.729E-06	2.316E-06	8.694E-07	4.466E-07	2.710E-07	1.822E-07	1.312E-07	9.930E-08	7.800E-08
WNW	3.932E-05	1.321E-05	6.964E-06	3.416E-06	1.298E-06	6.725E-07	4.109E-07	2.778E-07	2.011E-07	1.529E-07	1.206E-07
NW	4.070E-05	1.362E-05	7.228E-06	3.561E-06	1.360E-06	7.079E-07	4.340E-07	2.943E-07	2.136E-07	1.627E-07	1.286E-07
NNW	5.611E-05	1.877E-05	1.003E-05	4.962E-06	1.903E-06	9.933E-07	6.103E-07	4.146E-07	3.013E-07	2.299E-07	1.819E-07
N	9.977E-05	3.047E-05	1.587E-05	7.869E-06	3.132E-06	1.677E-06	1.050E-06	7.244E-07	5.332E-07	4.113E-07	3.285E-07
NNE	7.575E-05	2.204E-05	1.108E-05	5.445E-06	2.230E-06	1.216E-06	7.720E-07	5.381E-07	3.996E-07	3.104E-07	2.494E-07
NE	4.012E-05	1.165E-05	5.863E-06	2.881E-06	1.178E-06	6.419E-07	4.073E-07	2.838E-07	2.106E-07	1.636E-07	1.314E-07
ENE	3.295E-05	9.515E-06	4.707E-06	2.296E-06	9.445E-07	5.166E-07	3.287E-07	2.295E-07	1.707E-07	1.327E-07	1.068E-07
E	5.063E-05	1.462E-05	7.333E-06	3.604E-06	1.480E-06	8.081E-07	5.135E-07	3.583E-07	2.662E-07	2.069E-07	1.663E-07
ESE	6.875E-05	1.966E-05	9.951E-06	4.926E-06	2.027E-06	1.109E-06	7.052E-07	4.923E-07	3.659E-07	2.845E-07	2.288E-07
SE	1.203E-04	3.442E-05	1.709E-05	8.370E-06	3.461E-06	1.899E-06	1.211E-06	8.472E-07	6.308E-07	4.912E-07	3.955E-07
SSE	1.023E-04	2.996E-05	1.514E-05	7.452E-06	3.036E-06	1.650E-06	1.045E-06	7.271E-07	5.390E-07	4.182E-07	3.357E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.395E-07	6.814E-08	4.214E-08	2.230E-08	1.408E-08	9.796E-09	7.242E-09	5.585E-09	4.443E-09	3.618E-09	3.003E-09
SSW	6.183E-08	2.933E-08	1.777E-08	9.157E-09	5.687E-09	3.906E-09	2.860E-09	2.189E-09	1.730E-09	1.401E-09	1.158E-09
SW	3.879E-08	1.809E-08	1.083E-08	5.489E-09	3.373E-09	2.299E-09	1.673E-09	1.274E-09	1.003E-09	8.106E-10	6.681E-10
WSW	4.917E-08	2.336E-08	1.417E-08	7.306E-09	4.532E-09	3.110E-09	2.275E-09	1.739E-09	1.373E-09	1.111E-09	9.171E-10
W	6.307E-08	2.954E-08	1.774E-08	9.021E-09	5.550E-09	3.786E-09	2.758E-09	2.102E-09	1.656E-09	1.338E-09	1.103E-09
WNW	9.790E-08	4.656E-08	2.826E-08	1.461E-08	9.095E-09	6.261E-09	4.593E-09	3.521E-09	2.787E-09	2.261E-09	1.871E-09
NW	1.045E-07	5.006E-08	3.054E-08	1.589E-08	9.939E-09	6.867E-09	5.053E-09	3.883E-09	3.081E-09	2.505E-09	2.076E-09
NNW	1.480E-07	7.117E-08	4.355E-08	2.276E-08	1.427E-08	9.883E-09	7.288E-09	5.612E-09	4.462E-09	3.634E-09	3.018E-09
N	2.696E-07	1.336E-07	8.344E-08	4.478E-08	2.856E-08	2.001E-08	1.488E-08	1.153E-08	9.207E-09	7.524E-09	6.262E-09
NNE	2.058E-07	1.039E-07	6.568E-08	3.577E-08	2.300E-08	1.620E-08	1.209E-08	9.385E-09	7.505E-09	6.138E-09	5.110E-09
NE	1.084E-07	5.472E-08	3.459E-08	1.884E-08	1.213E-08	8.547E-09	6.382E-09	4.960E-09	3.969E-09	3.248E-09	2.706E-09
ENE	8.817E-08	4.467E-08	2.830E-08	1.546E-08	9.958E-09	7.022E-09	5.245E-09	4.076E-09	3.261E-09	2.668E-09	2.222E-09
E	1.373E-07	6.944E-08	4.396E-08	2.399E-08	1.545E-08	1.090E-08	8.143E-09	6.332E-09	5.071E-09	4.153E-09	3.462E-09
ESE	1.889E-07	9.559E-08	6.052E-08	3.302E-08	2.126E-08	1.499E-08	1.119E-08	8.698E-09	6.961E-09	5.697E-09	4.746E-09
SE	3.268E-07	1.661E-07	1.055E-07	5.776E-08	3.727E-08	2.632E-08	1.968E-08	1.531E-08	1.227E-08	1.004E-08	8.372E-09
SSE	2.767E-07	1.392E-07	8.784E-08	4.771E-08	3.063E-08	2.155E-08	1.607E-08	1.247E-08	9.971E-09	8.153E-09	6.787E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.520E-06	1.925E-06	5.779E-07	2.840E-07	1.721E-07	7.244E-08	2.306E-08	9.918E-09	5.623E-09	3.635E-09
SSW	4.241E-06	9.423E-07	2.704E-07	1.294E-07	7.695E-08	3.142E-08	9.529E-09	3.963E-09	2.206E-09	1.408E-09
SW	2.872E-06	6.245E-07	1.748E-07	8.246E-08	4.851E-08	1.947E-08	5.736E-09	2.335E-09	1.285E-09	8.150E-10
WSW	3.395E-06	7.442E-07	2.142E-07	1.027E-07	6.115E-08	2.501E-08	7.599E-09	3.155E-09	1.753E-09	1.117E-09
W	4.587E-06	1.003E-06	2.823E-07	1.336E-07	7.878E-08	3.175E-08	9.416E-09	3.845E-09	2.119E-09	1.345E-09
WNW	6.776E-06	1.491E-06	4.274E-07	2.047E-07	1.218E-07	4.984E-08	1.519E-08	6.350E-09	3.548E-09	2.273E-09
NW	7.019E-06	1.559E-06	4.511E-07	2.173E-07	1.298E-07	5.349E-08	1.650E-08	6.961E-09	3.912E-09	2.517E-09
NNW	9.720E-06	2.179E-06	6.342E-07	3.065E-07	1.836E-07	7.598E-08	2.361E-08	1.002E-08	5.653E-09	3.651E-09
N	1.556E-05	3.538E-06	1.087E-06	5.414E-07	3.312E-07	1.415E-07	4.616E-08	2.024E-08	1.160E-08	7.555E-09
NNE	1.101E-05	2.494E-06	7.969E-07	4.052E-07	2.513E-07	1.095E-07	3.674E-08	1.637E-08	9.441E-09	6.162E-09
NE	5.824E-06	1.318E-06	4.204E-07	2.136E-07	1.324E-07	5.770E-08	1.936E-08	8.635E-09	4.989E-09	3.261E-09
ENE	4.704E-06	1.055E-06	3.391E-07	1.730E-07	1.076E-07	4.706E-08	1.587E-08	7.094E-09	4.099E-09	2.678E-09
E	7.296E-06	1.653E-06	5.300E-07	2.699E-07	1.676E-07	7.319E-08	2.463E-08	1.101E-08	6.369E-09	4.169E-09
ESE	9.874E-06	2.263E-06	7.276E-07	3.710E-07	2.305E-07	1.007E-07	3.390E-08	1.514E-08	8.749E-09	5.719E-09
SE	1.707E-05	3.858E-06	1.249E-06	6.394E-07	3.984E-07	1.749E-07	5.925E-08	2.659E-08	1.540E-08	1.008E-08
SSE	1.502E-05	3.401E-06	1.079E-06	5.467E-07	3.383E-07	1.469E-07	4.904E-08	2.178E-08	1.255E-08	8.186E-09

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VENTS GROUND LEVEL RELEASES - JUL-SEP 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.006E-07	6.782E-08	3.482E-08	1.655E-08	5.946E-09	2.949E-09	1.736E-09	1.137E-09	8.000E-10	5.929E-10	4.569E-10
SSW	1.077E-07	3.641E-08	1.870E-08	8.888E-09	3.193E-09	1.583E-09	9.323E-10	6.105E-10	4.295E-10	3.183E-10	2.453E-10
SW	6.533E-08	2.209E-08	1.134E-08	5.392E-09	1.937E-09	9.606E-10	5.656E-10	3.703E-10	2.606E-10	1.931E-10	1.488E-10
WSW	6.368E-08	2.153E-08	1.106E-08	5.256E-09	1.888E-09	9.364E-10	5.514E-10	3.610E-10	2.540E-10	1.883E-10	1.451E-10
W	1.072E-07	3.624E-08	1.861E-08	8.846E-09	3.177E-09	1.576E-09	9.279E-10	6.076E-10	4.275E-10	3.168E-10	2.441E-10
WNW	1.603E-07	5.419E-08	2.783E-08	1.323E-08	4.752E-09	2.357E-09	1.388E-09	9.086E-10	6.393E-10	4.738E-10	3.651E-10
NW	2.061E-07	6.970E-08	3.579E-08	1.701E-08	6.112E-09	3.031E-09	1.785E-09	1.169E-09	8.223E-10	6.094E-10	4.696E-10
NNW	3.480E-07	1.177E-07	6.042E-08	2.872E-08	1.032E-08	5.117E-09	3.013E-09	1.973E-09	1.388E-09	1.029E-09	7.928E-10
N	3.178E-07	1.075E-07	5.518E-08	2.623E-08	9.423E-09	4.673E-09	2.752E-09	1.802E-09	1.268E-09	9.395E-10	7.240E-10
NNE	1.156E-07	3.908E-08	2.007E-08	9.540E-09	3.427E-09	1.699E-09	1.001E-09	6.552E-10	4.610E-10	3.417E-10	2.633E-10
NE	6.059E-08	2.049E-08	1.052E-08	5.001E-09	1.796E-09	8.909E-10	5.246E-10	3.435E-10	2.417E-10	1.791E-10	1.380E-10
ENE	4.500E-08	1.522E-08	7.814E-09	3.715E-09	1.334E-09	6.617E-10	3.896E-10	2.551E-10	1.795E-10	1.330E-10	1.025E-10
E	6.793E-08	2.297E-08	1.179E-08	5.607E-09	2.014E-09	9.989E-10	5.881E-10	3.851E-10	2.710E-10	2.008E-10	1.548E-10
ESE	8.954E-08	3.028E-08	1.555E-08	7.391E-09	2.655E-09	1.317E-09	7.752E-10	5.076E-10	3.572E-10	2.647E-10	2.040E-10
SE	1.525E-07	5.156E-08	2.647E-08	1.259E-08	4.521E-09	2.242E-09	1.320E-09	8.644E-10	6.082E-10	4.508E-10	3.474E-10
SSE	2.084E-07	7.046E-08	3.618E-08	1.720E-08	6.178E-09	3.064E-09	1.804E-09	1.181E-09	8.312E-10	6.160E-10	4.747E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	3.630E-10	1.612E-10	9.768E-11	4.937E-11	2.988E-11	2.003E-11	1.436E-11	1.078E-11	8.382E-12	6.695E-12	5.465E-12
SSW	1.949E-10	8.658E-11	5.244E-11	2.651E-11	1.604E-11	1.076E-11	7.708E-12	5.788E-12	4.500E-12	3.595E-12	2.934E-12
SW	1.182E-10	5.252E-11	3.182E-11	1.608E-11	9.733E-12	6.526E-12	4.676E-12	3.511E-12	2.730E-12	2.181E-12	1.780E-12
WSW	1.153E-10	5.120E-11	3.102E-11	1.568E-11	9.488E-12	6.362E-12	4.558E-12	3.423E-12	2.661E-12	2.126E-12	1.735E-12
W	1.940E-10	8.616E-11	5.219E-11	2.638E-11	1.597E-11	1.071E-11	7.671E-12	5.760E-12	4.479E-12	3.578E-12	2.920E-12
WNW	2.901E-10	1.289E-10	7.805E-11	3.945E-11	2.388E-11	1.601E-11	1.147E-11	8.614E-12	6.698E-12	5.350E-12	4.367E-12
NW	3.731E-10	1.657E-10	1.004E-10	5.074E-11	3.071E-11	2.059E-11	1.476E-11	1.108E-11	8.615E-12	6.881E-12	5.617E-12
NNW	6.298E-10	2.798E-10	1.695E-10	8.566E-11	5.185E-11	3.476E-11	2.491E-11	1.870E-11	1.454E-11	1.162E-11	9.482E-12
N	5.752E-10	2.555E-10	1.548E-10	7.823E-11	4.735E-11	3.175E-11	2.275E-11	1.708E-11	1.328E-11	1.061E-11	8.660E-12
NNE	2.092E-10	9.293E-11	5.629E-11	2.845E-11	1.722E-11	1.155E-11	8.273E-12	6.212E-12	4.830E-12	3.858E-12	3.149E-12
NE	1.097E-10	4.871E-11	2.951E-11	1.491E-11	9.027E-12	6.052E-12	4.337E-12	3.257E-12	2.532E-12	2.023E-12	1.651E-12
ENE	8.145E-11	3.618E-11	2.192E-11	1.108E-11	6.705E-12	4.496E-12	3.221E-12	2.419E-12	1.881E-12	1.502E-12	1.226E-12
E	1.229E-10	5.462E-11	3.308E-11	1.672E-11	1.012E-11	6.786E-12	4.863E-12	3.651E-12	2.839E-12	2.268E-12	1.851E-12
ESE	1.621E-10	7.199E-11	4.361E-11	2.204E-11	1.334E-11	8.945E-12	6.409E-12	4.813E-12	3.742E-12	2.989E-12	2.440E-12
SE	2.760E-10	1.226E-10	7.426E-11	3.753E-11	2.272E-11	1.523E-11	1.091E-11	8.195E-12	6.372E-12	5.090E-12	4.155E-12
SSE	3.771E-10	1.675E-10	1.015E-10	5.129E-11	3.104E-11	2.081E-11	1.491E-11	1.120E-11	8.708E-12	6.956E-12	5.677E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.404E-08	6.971E-09	1.820E-09	8.174E-10	4.624E-10	1.778E-10	5.144E-11	2.039E-11	1.089E-11	6.739E-12
SSW	1.827E-08	3.743E-09	9.772E-10	4.389E-10	2.483E-10	9.548E-11	2.762E-11	1.095E-11	5.846E-12	3.618E-12
SW	1.109E-08	2.271E-09	5.928E-10	2.662E-10	1.506E-10	5.792E-11	1.676E-11	6.641E-12	3.547E-12	2.195E-12
WSW	1.081E-08	2.214E-09	5.779E-10	2.595E-10	1.468E-10	5.646E-11	1.633E-11	6.474E-12	3.457E-12	2.140E-12
W	1.819E-08	3.725E-09	9.725E-10	4.368E-10	2.471E-10	9.502E-11	2.749E-11	1.090E-11	5.818E-12	3.601E-12
WNW	2.720E-08	5.571E-09	1.454E-09	6.532E-10	3.695E-10	1.421E-10	4.111E-11	1.629E-11	8.701E-12	5.385E-12
NW	3.498E-08	7.165E-09	1.871E-09	8.401E-10	4.753E-10	1.828E-10	5.287E-11	2.096E-11	1.119E-11	6.927E-12
NNW	5.905E-08	1.210E-08	3.158E-09	1.418E-09	8.023E-10	3.085E-10	8.926E-11	3.538E-11	1.889E-11	1.169E-11
N	5.393E-08	1.105E-08	2.884E-09	1.295E-09	7.327E-10	2.818E-10	8.152E-11	3.231E-11	1.725E-11	1.068E-11
NNE	1.961E-08	4.018E-09	1.049E-09	4.711E-10	2.665E-10	1.025E-10	2.965E-11	1.175E-11	6.275E-12	3.884E-12
NE	1.028E-08	2.106E-09	5.498E-10	2.469E-10	1.397E-10	5.372E-11	1.554E-11	6.159E-12	3.289E-12	2.036E-12
ENE	7.637E-09	1.564E-09	4.084E-10	1.834E-10	1.038E-10	3.990E-11	1.154E-11	4.575E-12	2.443E-12	1.512E-12
E	1.153E-08	2.361E-09	6.165E-10	2.769E-10	1.566E-10	6.023E-11	1.742E-11	6.906E-12	3.688E-12	2.283E-12
ESE	1.520E-08	3.113E-09	8.126E-10	3.649E-10	2.064E-10	7.939E-11	2.297E-11	9.103E-12	4.861E-12	3.009E-12
SE	2.588E-08	5.300E-09	1.384E-09	6.214E-10	3.516E-10	1.352E-10	3.911E-11	1.550E-11	8.278E-12	5.124E-12
SSE	3.536E-08	7.243E-09	1.891E-09	8.492E-10	4.804E-10	1.847E-10	5.345E-11	2.118E-11	1.131E-11	7.001E-12

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VENTS GROUND LEVEL RELEASES - JUL-SEP 2014
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SPECIFIC POINTS OF INTEREST						
RELEASE TYPE OF DIRECTION DIST.						
ID	LOCATION	FROM SITE (MI)	X/Q (SEC/M3) NO DECAY	X/Q (SEC/M3) 2.26 DAY DECAY	X/Q (SEC/M3) 8.0 DAY DECAY	D/Q (PER SQ.METER)
			UNDEPLETED	UNDEPLETED	DEPLETED	
A	Site Boundary	S	.80 8.5E-06	8.4E-06	7.5E-06	3.0E-08
A	Site Boundary	SSW	.82 3.9E-06	3.9E-06	3.5E-06	1.5E-08
A	Site Boundary	SW	.97 1.8E-06	1.7E-06	1.5E-06	5.8E-09
A	Site Boundary	WSW	.93 2.4E-06	2.3E-06	2.1E-06	6.4E-09
A	Site Boundary	W	.91 3.3E-06	3.3E-06	2.9E-06	1.1E-08
A	Site Boundary	WNW	.94 4.6E-06	4.5E-06	4.0E-06	1.6E-08
A	Site Boundary	NW	.81 6.7E-06	6.7E-06	6.0E-06	2.9E-08
A	Site Boundary	NNW	.69 1.3E-05	1.3E-05	1.1E-05	7.0E-08
A	Site Boundary	N	.67 2.1E-05	2.1E-05	1.9E-05	6.6E-08
A	Site Boundary	NNE	.60 1.8E-05	1.8E-05	1.6E-05	2.9E-08
A	Site Boundary	NE	.62 8.8E-06	8.7E-06	7.9E-06	1.4E-08
A	Site Boundary	ENE	.59 8.0E-06	7.9E-06	7.2E-06	1.2E-08
A	Site Boundary	E	.53 1.5E-05	1.5E-05	1.3E-05	2.1E-08
A	Site Boundary	ESE	.54 1.9E-05	1.9E-05	1.7E-05	2.7E-08
A	Site Boundary	SE	.65 2.4E-05	2.4E-05	2.2E-05	3.4E-08
A	Site Boundary	SSE	.81 1.4E-05	1.4E-05	1.2E-05	3.0E-08
A	Nearest Res	SSW	3.00 2.2E-07	2.2E-07	1.8E-07	6.1E-10
A	Nearest Res	SW	1.30 8.9E-07	8.8E-07	7.6E-07	2.8E-09
A	Nearest Res	WSW	1.90 4.6E-07	4.5E-07	3.8E-07	1.1E-09
A	Nearest Res	W	1.00 2.7E-06	2.6E-06	2.3E-06	8.9E-09
A	Nearest Res	WNW	1.70 1.2E-06	1.1E-06	9.7E-07	3.5E-09
A	Nearest Res	NW	.90 5.2E-06	5.2E-06	4.6E-06	2.2E-08
A	Nearest Res	NNW	1.90 1.3E-06	1.3E-06	1.1E-06	5.8E-09
A	Nearest Res	N	2.50 1.3E-06	1.3E-06	1.1E-06	2.8E-09
A	Nearest Res	NNE	1.70 2.0E-06	2.0E-06	1.7E-06	2.5E-09
A	Nearest Res	ENE	1.70 8.7E-07	8.5E-07	7.2E-07	9.8E-10
A	Nearest Res	E	2.20 8.2E-07	7.9E-07	6.6E-07	8.0E-10
A	Nearest Res	ESE	2.80 7.1E-07	6.8E-07	5.6E-07	6.0E-10
A	Nearest Res	SE	3.00 1.1E-06	1.0E-06	8.5E-07	8.6E-10
A	Nearest Res	SSE	3.00 9.3E-07	8.9E-07	7.3E-07	1.2E-09
A	Nearest Cow	NNW	3.50 3.9E-07	3.8E-07	3.0E-07	1.4E-09
A	Nearest Garde	SSW	3.00 2.2E-07	2.2E-07	1.8E-07	6.1E-10
A	Nearest Garde	SW	1.30 8.9E-07	8.8E-07	7.6E-07	2.8E-09
A	Nearest Garde	WSW	1.90 4.6E-07	4.5E-07	3.8E-07	1.1E-09
A	Nearest Garde	W	2.80 2.7E-07	2.6E-07	2.1E-07	7.1E-10
A	Nearest Garde	WNW	1.70 1.2E-06	1.1E-06	9.7E-07	3.5E-09
A	Nearest Garde	NW	1.90 9.6E-07	9.5E-07	7.9E-07	3.4E-09
A	Nearest Garde	NNW	1.90 1.3E-06	1.3E-06	1.1E-06	5.8E-09
A	Nearest Garde	ENE	1.70 8.7E-07	8.5E-07	7.2E-07	9.8E-10
A	Nearest Garde	ESE	2.30 1.0E-06	1.0E-06	8.3E-07	9.4E-10
A	Nearest Garde	SSE	3.00 9.3E-07	8.9E-07	7.3E-07	1.2E-09

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Atmospheric Diffusion Estimates

Ground Level Releases

October-December 2014

VENTS GROUND LEVEL RELEASES - OCT-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.730E-05	1.268E-05	6.731E-06	3.348E-06	1.337E-06	7.207E-07	4.553E-07	3.170E-07	2.355E-07	1.834E-07	1.478E-07
SSW	2.465E-05	8.040E-06	4.200E-06	2.087E-06	8.501E-07	4.648E-07	2.968E-07	2.084E-07	1.560E-07	1.222E-07	9.901E-08
SW	1.732E-05	5.928E-06	3.193E-06	1.598E-06	6.332E-07	3.396E-07	2.137E-07	1.483E-07	1.099E-07	8.533E-08	6.864E-08
WSW	1.699E-05	6.029E-06	3.224E-06	1.600E-06	6.261E-07	3.327E-07	2.078E-07	1.433E-07	1.056E-07	8.166E-08	6.541E-08
W	1.743E-05	6.017E-06	3.182E-06	1.575E-06	6.260E-07	3.365E-07	2.121E-07	1.474E-07	1.094E-07	8.505E-08	6.849E-08
WNW	1.711E-05	6.000E-06	3.283E-06	1.650E-06	6.463E-07	3.437E-07	2.148E-07	1.482E-07	1.093E-07	8.455E-08	6.776E-08
NW	2.807E-05	1.011E-05	5.505E-06	2.752E-06	1.070E-06	5.656E-07	3.518E-07	2.417E-07	1.776E-07	1.369E-07	1.094E-07
NNW	6.537E-05	2.137E-05	1.131E-05	5.660E-06	2.306E-06	1.261E-06	8.049E-07	5.651E-07	4.229E-07	3.313E-07	2.685E-07
N	1.061E-04	3.266E-05	1.671E-05	8.298E-06	3.489E-06	1.948E-06	1.263E-06	8.983E-07	6.792E-07	5.367E-07	4.383E-07
NNE	5.516E-05	1.680E-05	8.505E-06	4.204E-06	1.777E-06	9.955E-07	6.474E-07	4.612E-07	3.494E-07	2.765E-07	2.261E-07
NE	2.088E-05	6.876E-06	3.688E-06	1.857E-06	7.510E-07	4.085E-07	2.597E-07	1.817E-07	1.356E-07	1.060E-07	8.568E-08
ENE	2.012E-05	6.241E-06	3.349E-06	1.704E-06	7.025E-07	3.868E-07	2.482E-07	1.750E-07	1.314E-07	1.032E-07	8.379E-08
E	2.647E-05	8.234E-06	4.178E-06	2.060E-06	8.633E-07	4.812E-07	3.118E-07	2.215E-07	1.674E-07	1.322E-07	1.079E-07
ESE	3.512E-05	1.167E-05	6.243E-06	3.130E-06	1.276E-06	6.897E-07	4.389E-07	3.074E-07	2.295E-07	1.795E-07	1.452E-07
SE	5.821E-05	1.869E-05	9.778E-06	4.875E-06	1.993E-06	1.092E-06	6.985E-07	4.911E-07	3.680E-07	2.885E-07	2.341E-07
SSE	6.692E-05	2.103E-05	1.099E-05	5.493E-06	2.259E-06	1.243E-06	7.972E-07	5.619E-07	4.218E-07	3.313E-07	2.692E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.224E-07	6.309E-08	4.097E-08	2.358E-08	1.601E-08	1.188E-08	9.326E-09	7.607E-09	6.381E-09	5.468E-09	4.764E-09
SSW	8.239E-08	4.321E-08	2.842E-08	1.665E-08	1.144E-08	8.571E-09	6.779E-09	5.565E-09	4.694E-09	4.042E-09	3.537E-09
SW	5.673E-08	2.900E-08	1.872E-08	1.069E-08	7.230E-09	5.348E-09	4.186E-09	3.406E-09	2.850E-09	2.437E-09	2.120E-09
WSW	5.386E-08	2.713E-08	1.733E-08	9.742E-09	6.506E-09	4.767E-09	3.702E-09	2.993E-09	2.491E-09	2.120E-09	1.835E-09
W	5.666E-08	2.908E-08	1.883E-08	1.080E-08	7.321E-09	5.427E-09	4.256E-09	3.468E-09	2.907E-09	2.490E-09	2.168E-09
WNW	5.582E-08	2.816E-08	1.801E-08	1.015E-08	6.792E-09	4.984E-09	3.875E-09	3.134E-09	2.610E-09	2.221E-09	1.924E-09
NW	8.991E-08	4.489E-08	2.848E-08	1.585E-08	1.050E-08	7.641E-09	5.900E-09	4.746E-09	3.932E-09	3.332E-09	2.874E-09
NNW	2.234E-07	1.172E-07	7.704E-08	4.509E-08	3.096E-08	2.317E-08	1.832E-08	1.503E-08	1.267E-08	1.090E-08	9.532E-09
N	3.672E-07	1.974E-07	1.321E-07	7.911E-08	5.519E-08	4.181E-08	3.337E-08	2.760E-08	2.342E-08	2.028E-08	1.783E-08
NNE	1.896E-07	1.024E-07	6.868E-08	4.131E-08	2.890E-08	2.195E-08	1.755E-08	1.453E-08	1.235E-08	1.071E-08	9.422E-09
NE	7.115E-08	3.701E-08	2.420E-08	1.405E-08	9.590E-09	7.148E-09	5.629E-09	4.604E-09	3.871E-09	3.323E-09	2.900E-09
ENE	6.986E-08	3.688E-08	2.435E-08	1.434E-08	9.883E-09	7.420E-09	5.877E-09	4.830E-09	4.077E-09	3.513E-09	3.076E-09
E	9.040E-08	4.857E-08	3.247E-08	1.945E-08	1.357E-08	1.028E-08	8.209E-09	6.791E-09	5.766E-09	4.993E-09	4.391E-09
ESE	1.207E-07	6.294E-08	4.122E-08	2.400E-08	1.642E-08	1.226E-08	9.665E-09	7.913E-09	6.659E-09	5.721E-09	4.997E-09
SE	1.949E-07	1.025E-07	6.757E-08	3.969E-08	2.733E-08	2.051E-08	1.624E-08	1.335E-08	1.127E-08	9.708E-09	8.501E-09
SSE	2.245E-07	1.187E-07	7.850E-08	4.634E-08	3.203E-08	2.410E-08	1.913E-08	1.575E-08	1.332E-08	1.149E-08	1.007E-08

DIRECTION FROM SITE	CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT									
	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.550E-06	1.510E-06	4.707E-07	2.389E-07	1.490E-07	6.644E-08	2.408E-08	1.196E-08	7.631E-09	5.478E-09
SSW	4.114E-06	9.537E-07	3.062E-07	1.581E-07	9.972E-08	4.534E-08	1.695E-08	8.619E-09	5.580E-09	4.048E-09
SW	3.092E-06	7.171E-07	2.211E-07	1.115E-07	6.918E-08	3.059E-08	1.094E-08	5.385E-09	3.417E-09	2.442E-09
WSW	3.125E-06	7.120E-07	2.153E-07	1.073E-07	6.595E-08	2.871E-08	9.990E-09	4.805E-09	3.004E-09	2.124E-09
W	3.098E-06	7.082E-07	2.194E-07	1.110E-07	6.901E-08	3.065E-08	1.104E-08	5.463E-09	3.480E-09	2.494E-09
WNW	3.161E-06	7.349E-07	2.226E-07	1.110E-07	6.831E-08	2.980E-08	1.040E-08	5.022E-09	3.146E-09	2.226E-09
NW	5.304E-06	1.220E-06	3.648E-07	1.804E-07	1.103E-07	4.760E-08	1.628E-08	7.706E-09	4.765E-09	3.340E-09
NNW	1.104E-05	2.587E-06	8.305E-07	4.286E-07	2.704E-07	1.229E-07	4.591E-08	2.331E-08	1.507E-08	1.092E-08
N	1.652E-05	3.873E-06	1.300E-06	6.875E-07	4.411E-07	2.061E-07	8.024E-08	4.200E-08	2.766E-08	2.030E-08
NNE	8.438E-06	1.969E-06	6.658E-07	3.536E-07	2.275E-07	1.068E-07	4.188E-08	2.204E-08	1.456E-08	1.072E-08
NE	3.582E-06	8.444E-07	2.682E-07	1.375E-07	8.631E-08	3.890E-08	1.432E-08	7.192E-09	4.618E-09	3.329E-09
ENE	3.261E-06	7.848E-07	2.559E-07	1.331E-07	8.437E-08	3.864E-08	1.458E-08	7.460E-09	4.843E-09	3.518E-09
E	4.138E-06	9.593E-07	3.209E-07	1.695E-07	1.086E-07	5.071E-08	1.973E-08	1.033E-08	6.806E-09	4.999E-09
ESE	6.067E-06	1.425E-06	4.532E-07	2.327E-07	1.463E-07	6.611E-08	2.446E-08	1.233E-08	7.936E-09	5.731E-09
SE	9.580E-06	2.233E-06	7.205E-07	3.729E-07	2.357E-07	1.075E-07	4.039E-08	2.062E-08	1.338E-08	9.723E-09
SSE	1.078E-05	2.526E-06	8.219E-07	4.274E-07	2.710E-07	1.243E-07	4.713E-08	2.423E-08	1.579E-08	1.151E-08

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VENTS GROUND LEVEL RELEASES - OCT-DEC 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.723E-05	1.264E-05	6.695E-06	3.324E-06	1.322E-06	7.100E-07	4.467E-07	3.097E-07	2.292E-07	1.777E-07	1.426E-07
SSW	2.459E-05	8.004E-06	4.172E-06	2.069E-06	8.388E-07	4.563E-07	2.899E-07	2.026E-07	1.508E-07	1.176E-07	9.481E-08
SW	1.729E-05	5.908E-06	3.176E-06	1.587E-06	6.267E-07	3.349E-07	2.099E-07	1.451E-07	1.071E-07	8.289E-08	6.642E-08
WSW	1.696E-05	6.010E-06	3.209E-06	1.589E-06	6.200E-07	3.283E-07	2.044E-07	1.404E-07	1.031E-07	7.945E-08	6.342E-08
W	1.740E-05	5.997E-06	3.166E-06	1.565E-06	6.195E-07	3.318E-07	2.083E-07	1.442E-07	1.066E-07	8.254E-08	6.620E-08
WNW	1.709E-05	5.984E-06	3.269E-06	1.641E-06	6.409E-07	3.398E-07	2.118E-07	1.457E-07	1.071E-07	8.262E-08	6.601E-08
NW	2.804E-05	1.009E-05	5.489E-06	2.741E-06	1.063E-06	5.610E-07	3.482E-07	2.388E-07	1.751E-07	1.347E-07	1.074E-07
NNW	6.523E-05	2.129E-05	1.125E-05	5.620E-06	2.280E-06	1.241E-06	7.893E-07	5.519E-07	4.113E-07	3.208E-07	2.589E-07
N	1.058E-04	3.249E-05	1.658E-05	8.212E-06	3.433E-06	1.906E-06	1.229E-06	8.688E-07	6.532E-07	5.132E-07	4.167E-07
NNE	5.499E-05	1.671E-05	8.433E-06	4.157E-06	1.746E-06	9.726E-07	6.286E-07	4.451E-07	3.351E-07	2.636E-07	2.142E-07
NE	2.084E-05	6.852E-06	3.669E-06	1.844E-06	7.431E-07	4.026E-07	2.550E-07	1.777E-07	1.321E-07	1.028E-07	8.281E-08
ENE	2.008E-05	6.216E-06	3.329E-06	1.691E-06	6.943E-07	3.808E-07	2.433E-07	1.708E-07	1.277E-07	9.986E-08	8.077E-08
E	2.640E-05	8.192E-06	4.148E-06	2.040E-06	8.505E-07	4.716E-07	3.039E-07	2.147E-07	1.614E-07	1.268E-07	1.029E-07
ESE	3.506E-05	1.163E-05	6.212E-06	3.109E-06	1.254E-06	6.799E-07	4.310E-07	3.007E-07	2.237E-07	1.742E-07	1.404E-07
SE	5.809E-05	1.862E-05	9.725E-06	4.840E-06	1.971E-06	1.075E-06	6.849E-07	4.795E-07	3.577E-07	2.793E-07	2.256E-07
SSE	6.676E-05	2.093E-05	1.091E-05	5.445E-06	2.228E-06	1.220E-06	7.784E-07	5.458E-07	4.077E-07	3.186E-07	2.575E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.176E-07	5.934E-08	3.773E-08	2.081E-08	1.355E-08	9.656E-09	7.284E-09	5.716E-09	4.617E-09	3.814E-09	3.207E-09
SSW	7.850E-08	4.014E-08	2.573E-08	1.433E-08	9.378E-09	6.698E-09	5.058E-09	3.969E-09	3.205E-09	2.645E-09	2.221E-09
SW	5.469E-08	2.743E-08	1.737E-08	9.557E-09	6.227E-09	4.443E-09	3.357E-09	2.639E-09	2.136E-09	1.768E-09	1.489E-09
WSW	5.203E-08	2.573E-08	1.614E-08	8.745E-09	5.632E-09	3.982E-09	2.986E-09	2.332E-09	1.877E-09	1.545E-09	1.295E-09
W	5.455E-08	2.743E-08	1.740E-08	9.581E-09	6.237E-09	4.445E-09	3.354E-09	2.633E-09	2.128E-09	1.758E-09	1.479E-09
WNW	5.422E-08	2.696E-08	1.699E-08	9.295E-09	6.047E-09	4.315E-09	3.264E-09	2.571E-09	2.085E-09	1.730E-09	1.461E-09
NW	8.807E-08	4.350E-08	2.731E-08	1.488E-08	9.656E-09	6.886E-09	5.212E-09	4.110E-09	3.340E-09	2.777E-09	2.351E-09
NNW	2.145E-07	1.101E-07	7.085E-08	3.974E-08	2.618E-08	1.882E-08	1.431E-08	1.130E-08	9.186E-09	7.631E-09	6.450E-09
N	3.470E-07	1.813E-07	1.178E-07	6.674E-08	4.409E-08	3.169E-08	2.403E-08	1.892E-08	1.531E-08	1.266E-08	1.065E-08
NNE	1.785E-07	9.349E-08	6.083E-08	3.447E-08	2.276E-08	1.634E-08	1.237E-08	9.726E-09	7.858E-09	6.486E-09	5.446E-09
NE	6.849E-08	3.492E-08	2.238E-08	1.249E-08	8.201E-09	5.886E-09	4.469E-09	3.528E-09	2.866E-09	2.380E-09	2.011E-09
ENE	6.705E-08	3.467E-08	2.242E-08	1.267E-08	8.396E-09	6.067E-09	4.632E-09	3.673E-09	2.996E-09	2.497E-09	2.117E-09
E	8.572E-08	4.480E-08	2.914E-08	1.654E-08	1.095E-08	7.891E-09	6.000E-09	4.735E-09	3.843E-09	3.185E-09	2.686E-09
ESE	1.162E-07	5.941E-08	3.815E-08	2.135E-08	1.406E-08	1.011E-08	7.693E-09	6.083E-09	4.949E-09	4.116E-09	3.483E-09
SE	1.870E-07	9.623E-08	6.203E-08	3.488E-08	2.302E-08	1.658E-08	1.262E-08	9.979E-09	8.118E-09	6.749E-09	5.710E-09
SSE	2.136E-07	1.101E-07	7.093E-08	3.980E-08	2.618E-08	1.878E-08	1.423E-08	1.120E-08	9.065E-09	7.499E-09	6.312E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE										
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	6.518E-06	1.495E-06	4.621E-07	2.326E-07	1.438E-07	6.269E-08	2.134E-08	9.746E-09	5.745E-09	3.827E-09	
SSW	4.089E-06	9.421E-07	2.994E-07	1.529E-07	9.551E-08	4.226E-08	1.466E-08	6.757E-09	3.989E-09	2.654E-09	
SW	3.077E-06	7.104E-07	2.173E-07	1.088E-07	6.696E-08	2.902E-08	9.814E-09	4.484E-09	2.652E-09	1.774E-09	
WSW	3.111E-06	7.058E-07	2.119E-07	1.048E-07	6.395E-08	2.731E-08	9.004E-09	4.024E-09	2.345E-09	1.551E-09	
W	3.083E-06	7.016E-07	2.156E-07	1.082E-07	6.673E-08	2.900E-08	9.833E-09	4.486E-09	2.646E-09	1.764E-09	
WNW	3.149E-06	7.293E-07	2.195E-07	1.088E-07	6.657E-08	2.859E-08	9.561E-09	4.357E-09	2.584E-09	1.736E-09	
NW	5.289E-06	1.213E-06	3.612E-07	1.779E-07	1.083E-07	4.621E-08	1.532E-08	6.955E-09	4.132E-09	2.786E-09	
NNW	1.098E-05	2.561E-06	8.149E-07	4.170E-07	2.608E-07	1.159E-07	4.063E-08	1.898E-08	1.136E-08	7.654E-09	
N	1.640E-05	3.816E-06	1.265E-06	6.615E-07	4.195E-07	1.899E-07	6.803E-08	3.193E-08	1.901E-08	1.270E-08	
NNE	8.372E-06	1.938E-06	6.469E-07	3.393E-07	2.156E-07	9.787E-08	3.512E-08	1.647E-08	9.771E-09	6.507E-09	
NE	3.565E-06	8.364E-07	2.635E-07	1.340E-07	8.343E-08	3.681E-08	1.278E-08	5.937E-09	3.545E-09	2.387E-09	
ENE	3.243E-06	7.765E-07	2.510E-07	1.294E-07	8.134E-08	3.642E-08	1.294E-08	6.114E-09	3.689E-09	2.504E-09	
E	4.110E-06	9.464E-07	3.129E-07	1.634E-07	1.036E-07	4.693E-08	1.685E-08	7.951E-09	4.757E-09	3.195E-09	
ESE	6.038E-06	1.411E-06	4.453E-07	2.268E-07	1.414E-07	6.258E-08	2.184E-08	1.020E-08	6.111E-09	4.128E-09	
SE	9.531E-06	2.210E-06	7.069E-07	3.626E-07	2.272E-07	1.012E-07	3.564E-08	1.671E-08	1.002E-08	6.770E-09	
SSE	1.071E-05	2.495E-06	8.030E-07	4.132E-07	2.593E-07	1.157E-07	4.066E-08	1.893E-08	1.125E-08	7.523E-09	

B266

VENTS GROUND LEVEL RELEASES - OCT-DEC 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.528E-05	1.157E-05	5.989E-06	2.924E-06	1.132E-06	5.942E-07	3.668E-07	2.501E-07	1.824E-07	1.395E-07	1.106E-07
SSW	2.332E-05	7.333E-06	3.736E-06	1.822E-06	7.192E-07	3.829E-07	2.388E-07	1.642E-07	1.205E-07	9.276E-08	7.394E-08
SW	1.639E-05	5.408E-06	2.841E-06	1.396E-06	5.362E-07	2.801E-07	1.722E-07	1.171E-07	8.512E-08	6.496E-08	5.141E-08
WSW	1.607E-05	5.501E-06	2.869E-06	1.398E-06	5.303E-07	2.745E-07	1.675E-07	1.132E-07	8.187E-08	6.220E-08	4.902E-08
W	1.649E-05	5.490E-06	2.832E-06	1.376E-06	5.301E-07	2.775E-07	1.709E-07	1.164E-07	8.472E-08	6.473E-08	5.128E-08
WNW	1.619E-05	5.475E-06	2.922E-06	1.442E-06	5.476E-07	2.837E-07	1.733E-07	1.172E-07	8.481E-08	6.448E-08	5.085E-08
NW	2.656E-05	9.223E-06	4.901E-06	2.407E-06	9.070E-07	4.673E-07	2.841E-07	1.913E-07	1.380E-07	1.046E-07	8.230E-08
NNW	6.183E-05	1.950E-05	1.007E-05	4.945E-06	1.952E-06	1.039E-06	6.484E-07	4.458E-07	3.274E-07	2.520E-07	2.009E-07
N	1.003E-04	2.978E-05	1.486E-05	7.243E-06	2.949E-06	1.603E-06	1.015E-06	7.068E-07	5.241E-07	4.068E-07	3.266E-07
NNE	5.216E-05	1.532E-05	7.561E-06	3.669E-06	1.502E-06	8.189E-07	5.200E-07	3.627E-07	2.694E-07	2.094E-07	1.683E-07
NE	1.975E-05	6.273E-06	3.282E-06	1.622E-06	6.359E-07	3.368E-07	2.093E-07	1.434E-07	1.050E-07	8.064E-08	6.415E-08
ENE	1.903E-05	5.693E-06	2.979E-06	1.489E-06	5.946E-07	3.189E-07	1.999E-07	1.380E-07	1.017E-07	7.846E-08	6.269E-08
E	2.504E-05	7.508E-06	3.716E-06	1.798E-06	7.301E-07	3.962E-07	2.507E-07	1.744E-07	1.293E-07	1.003E-07	8.051E-08
ESE	3.322E-05	1.065E-05	5.556E-06	2.735E-06	1.073E-06	5.688E-07	3.537E-07	2.426E-07	1.778E-07	1.366E-07	1.087E-07
SE	5.506E-05	1.705E-05	8.700E-06	4.258E-06	1.687E-06	9.004E-07	5.626E-07	3.874E-07	2.848E-07	2.194E-07	1.751E-07
SSE	6.329E-05	1.918E-05	9.773E-06	4.796E-06	1.911E-06	1.024E-06	6.414E-07	4.426E-07	3.260E-07	2.515E-07	2.009E-07

SECTOR	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.022E-08	4.369E-08	2.687E-08	1.413E-08	8.893E-09	6.172E-09	4.558E-09	3.512E-09	2.793E-09	2.274E-09	1.888E-09
SSW	6.057E-08	2.982E-08	1.855E-08	9.904E-09	6.295E-09	4.400E-09	3.267E-09	2.529E-09	2.018E-09	1.648E-09	1.371E-09
SW	4.185E-08	2.012E-08	1.231E-08	6.434E-09	4.039E-09	2.798E-09	2.064E-09	1.589E-09	1.263E-09	1.028E-09	8.534E-10
WSW	3.976E-08	1.883E-08	1.140E-08	5.869E-09	3.640E-09	2.499E-09	1.829E-09	1.400E-09	1.106E-09	8.964E-10	7.407E-10
W	4.178E-08	2.015E-08	1.236E-08	6.483E-09	4.075E-09	2.826E-09	2.085E-09	1.606E-09	1.277E-09	1.040E-09	8.626E-10
WNW	4.127E-08	1.961E-08	1.190E-08	6.150E-09	3.833E-09	2.642E-09	1.941E-09	1.490E-09	1.181E-09	9.600E-10	7.956E-10
NW	6.662E-08	3.136E-08	1.890E-08	9.674E-09	5.982E-09	4.099E-09	2.998E-09	2.294E-09	1.814E-09	1.471E-09	1.217E-09
NNW	1.646E-07	8.112E-08	5.051E-08	2.701E-08	1.719E-08	1.203E-08	8.944E-09	6.933E-09	5.540E-09	4.531E-09	3.775E-09
N	2.693E-07	1.358E-07	8.583E-08	4.678E-08	3.013E-08	2.127E-08	1.591E-08	1.238E-08	9.928E-09	8.140E-09	6.795E-09
NNE	1.389E-07	7.031E-08	4.454E-08	2.435E-08	1.572E-08	1.111E-08	8.313E-09	6.475E-09	5.193E-09	4.259E-09	3.555E-09
NE	5.246E-08	2.566E-08	1.589E-08	8.435E-09	5.343E-09	3.727E-09	2.764E-09	2.138E-09	1.705E-09	1.393E-09	1.159E-09
ENE	5.146E-08	2.554E-08	1.597E-08	8.594E-09	5.495E-09	3.861E-09	2.879E-09	2.237E-09	1.792E-09	1.469E-09	1.226E-09
E	6.637E-08	3.345E-08	2.113E-08	1.152E-08	7.429E-09	5.248E-09	3.928E-09	3.060E-09	2.455E-09	2.015E-09	1.683E-09
ESE	8.897E-08	4.363E-08	2.707E-08	1.441E-08	9.150E-09	6.394E-09	4.748E-09	3.676E-09	2.936E-09	2.400E-09	1.999E-09
SE	1.436E-07	7.096E-08	4.427E-08	2.375E-08	1.515E-08	1.063E-08	7.915E-09	6.143E-09	4.915E-09	4.024E-09	3.356E-09
SSE	1.649E-07	8.187E-08	5.120E-08	2.755E-08	1.761E-08	1.236E-08	9.208E-09	7.146E-09	5.715E-09	4.677E-09	3.897E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.867E-06	1.291E-06	3.808E-07	1.854E-07	1.116E-07	4.656E-08	1.464E-08	6.252E-09	3.537E-09	2.285E-09
SSW	3.685E-06	8.148E-07	2.474E-07	1.224E-07	7.456E-08	3.164E-08	1.022E-08	4.452E-09	2.545E-09	1.655E-09
SW	2.769E-06	6.134E-07	1.789E-07	8.657E-08	5.189E-08	2.148E-08	6.675E-09	2.835E-09	1.601E-09	1.033E-09
WSW	2.800E-06	6.093E-07	1.743E-07	8.332E-08	4.949E-08	2.018E-08	6.109E-09	2.535E-09	1.411E-09	9.009E-10
W	2.775E-06	6.058E-07	1.775E-07	8.614E-08	5.175E-08	2.150E-08	6.719E-09	2.862E-09	1.618E-09	1.044E-09
WNW	2.832E-06	6.291E-07	1.803E-07	8.631E-08	5.134E-08	2.099E-08	6.397E-09	2.679E-09	1.501E-09	9.647E-10
NW	4.753E-06	1.045E-06	2.958E-07	1.405E-07	8.311E-08	3.366E-08	1.008E-08	4.161E-09	2.312E-09	1.479E-09
NNW	9.886E-06	2.211E-06	6.716E-07	3.325E-07	2.026E-07	8.606E-08	2.786E-08	1.217E-08	6.977E-09	4.550E-09
N	1.479E-05	3.305E-06	1.049E-06	5.316E-07	3.292E-07	1.433E-07	4.806E-08	2.149E-08	1.245E-08	8.172E-09
NNE	7.555E-06	1.680E-06	5.368E-07	2.732E-07	1.696E-07	7.410E-08	2.500E-08	1.122E-08	6.512E-09	4.275E-09
NE	3.209E-06	7.221E-07	2.170E-07	1.067E-07	6.471E-08	2.727E-08	8.717E-09	3.773E-09	2.152E-09	1.399E-09
ENE	2.920E-06	6.707E-07	2.069E-07	1.032E-07	6.320E-08	2.705E-08	8.856E-09	3.904E-09	2.251E-09	1.475E-09
E	3.706E-06	8.190E-07	2.590E-07	1.311E-07	8.113E-08	3.529E-08	1.184E-08	5.301E-09	3.078E-09	2.022E-09
ESE	5.434E-06	1.218E-06	3.666E-07	1.806E-07	1.097E-07	4.635E-08	1.489E-08	6.470E-09	3.700E-09	2.410E-09
SE	8.582E-06	1.909E-06	5.826E-07	2.892E-07	1.766E-07	7.524E-08	2.449E-08	1.075E-08	6.182E-09	4.041E-09
SSE	9.652E-06	2.158E-06	6.638E-07	3.309E-07	2.026E-07	8.670E-08	2.839E-08	1.250E-08	7.190E-09	4.696E-09

VENTS GROUND LEVEL RELEASES - OCT-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****													
DIRECTION FROM SITE	DISTANCES IN MILES												
	25	50	75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50		
S	1.526E-07	5.162E-08	2.650E-08	1.260E-08	4.526E-09	2.244E-09	1.322E-09	8.653E-10	6.089E-10	4.512E-10	3.477E-10		
SSW	7.059E-08	2.387E-08	1.226E-08	5.827E-09	2.093E-09	1.038E-09	6.112E-10	4.002E-10	2.816E-10	2.087E-10	1.608E-10		
SW	5.834E-08	1.973E-08	1.013E-08	4.816E-09	1.730E-09	8.579E-10	5.051E-10	3.308E-10	2.327E-10	1.725E-10	1.329E-10		
WSW	5.925E-08	2.003E-08	1.029E-08	4.890E-09	1.757E-09	8.712E-10	5.129E-10	3.359E-10	2.363E-10	1.751E-10	1.350E-10		
W	6.254E-08	2.115E-08	1.086E-08	5.162E-09	1.854E-09	9.196E-10	5.415E-10	3.546E-10	2.495E-10	1.849E-10	1.425E-10		
WNW	7.496E-08	2.535E-08	1.302E-08	6.188E-09	2.223E-09	1.102E-09	6.490E-10	4.250E-10	2.990E-10	2.216E-10	1.708E-10		
NW	1.714E-07	5.796E-08	2.976E-08	1.415E-08	5.082E-09	2.520E-09	1.484E-09	9.716E-10	6.837E-10	5.067E-10	3.905E-10		
NNW	2.883E-07	9.749E-08	5.005E-08	2.380E-08	8.548E-09	4.239E-09	2.496E-09	1.634E-09	1.150E-09	8.523E-10	6.568E-10		
N	2.496E-07	8.440E-08	4.334E-08	2.060E-08	7.401E-09	3.670E-09	2.161E-09	1.415E-09	9.957E-10	7.379E-10	5.686E-10		
NNE	1.258E-07	4.253E-08	2.183E-08	1.038E-08	3.729E-09	1.849E-09	1.089E-09	7.129E-10	5.017E-10	3.718E-10	2.865E-10		
NE	8.791E-08	2.973E-08	1.526E-08	7.257E-09	2.607E-09	1.293E-09	7.612E-10	4.984E-10	3.507E-10	2.599E-10	2.003E-10		
ENE	6.177E-08	2.089E-08	1.072E-08	5.099E-09	1.831E-09	9.083E-10	5.348E-10	3.502E-10	2.464E-10	1.826E-10	1.407E-10		
E	7.086E-08	2.396E-08	1.230E-08	5.849E-09	2.101E-09	1.042E-09	6.135E-10	4.017E-10	2.827E-10	2.095E-10	1.614E-10		
ESE	1.630E-07	5.513E-08	2.831E-08	1.346E-08	4.834E-09	2.397E-09	1.412E-09	9.243E-10	6.504E-10	4.820E-10	3.714E-10		
SE	3.194E-07	1.080E-07	5.546E-08	2.637E-08	9.470E-09	4.697E-09	2.765E-09	1.811E-09	1.274E-09	9.443E-10	7.277E-10		
SSE	2.997E-07	1.013E-07	5.203E-08	2.474E-08	8.886E-09	4.407E-09	2.595E-09	1.699E-09	1.196E-09	8.860E-10	6.828E-10		

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****													
DIRECTION FROM SITE	DISTANCES IN MILES												
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00		
S	2.763E-10	1.227E-10	7.434E-11	3.757E-11	2.274E-11	1.525E-11	1.093E-11	8.204E-12	6.379E-12	5.096E-12	4.159E-12		
SSW	1.278E-10	5.676E-11	3.438E-11	1.738E-11	1.052E-11	7.052E-12	5.053E-12	3.794E-12	2.950E-12	2.357E-12	1.923E-12		
SW	1.056E-10	4.691E-11	2.841E-11	1.436E-11	8.693E-12	5.828E-12	4.176E-12	3.136E-12	2.438E-12	1.948E-12	1.590E-12		
WSW	1.072E-10	4.763E-11	2.885E-11	1.458E-11	8.827E-12	5.919E-12	4.241E-12	3.184E-12	2.476E-12	1.978E-12	1.614E-12		
W	1.132E-10	5.028E-11	3.046E-11	1.540E-11	9.318E-12	6.248E-12	4.477E-12	3.362E-12	2.614E-12	2.088E-12	1.704E-12		
WNW	1.357E-10	6.027E-11	3.651E-11	1.845E-11	1.117E-11	7.489E-12	5.366E-12	4.029E-12	3.133E-12	2.503E-12	2.043E-12		
NW	3.102E-10	1.378E-10	8.347E-11	4.219E-11	2.554E-11	1.712E-11	1.227E-11	9.212E-12	7.163E-12	5.722E-12	4.670E-12		
NNW	5.218E-10	2.318E-10	1.404E-10	7.097E-11	4.295E-11	2.880E-11	2.064E-11	1.550E-11	1.205E-11	9.624E-12	7.856E-12		
N	4.517E-10	2.007E-10	1.216E-10	6.144E-11	3.719E-11	2.493E-11	1.787E-11	1.342E-11	1.043E-11	8.333E-12	6.801E-12		
NNE	2.276E-10	1.011E-10	6.125E-11	3.096E-11	1.874E-11	1.256E-11	9.002E-12	6.760E-12	5.256E-12	4.198E-12	3.427E-12		
NE	1.591E-10	7.068E-11	4.282E-11	2.164E-11	1.310E-11	8.782E-12	6.293E-12	4.725E-12	3.674E-12	2.935E-12	2.396E-12		
ENE	1.118E-10	4.966E-11	3.008E-11	1.521E-11	9.204E-12	6.171E-12	4.422E-12	3.320E-12	2.582E-12	2.062E-12	1.683E-12		
E	1.283E-10	5.698E-11	3.451E-11	1.744E-11	1.056E-11	7.079E-12	5.073E-12	3.809E-12	2.962E-12	2.366E-12	1.931E-12		
ESE	2.951E-10	1.311E-10	7.941E-11	4.014E-11	2.429E-11	1.629E-11	1.167E-11	8.764E-12	6.814E-12	5.443E-12	4.443E-12		
SE	5.781E-10	2.568E-10	1.556E-10	7.863E-11	4.759E-11	3.191E-11	2.286E-11	1.717E-11	1.335E-11	1.066E-11	8.704E-12		
SSE	5.424E-10	2.410E-10	1.460E-10	7.378E-11	4.465E-11	2.994E-11	2.145E-11	1.611E-11	1.253E-11	1.001E-11	8.166E-12		

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***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES										
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	2.590E-08	5.306E-09	1.385E-09	6.221E-10	3.519E-10	1.353E-10	3.915E-11	1.552E-11	8.287E-12	5.129E-12	
SSW	1.198E-08	2.454E-09	6.406E-10	2.877E-10	1.628E-10	6.259E-11	1.811E-11	7.176E-12	3.832E-12	2.372E-12	
SW	9.901E-09	2.028E-09	5.294E-10	2.378E-10	1.345E-10	5.173E-11	1.497E-11	5.931E-12	3.167E-12	1.960E-12	
WSW	1.005E-08	2.059E-09	5.376E-10	2.415E-10	1.366E-10	5.253E-11	1.520E-11	6.023E-12	3.216E-12	1.991E-12	
W	1.061E-08	2.174E-09	5.676E-10	2.549E-10	1.442E-10	5.545E-11	1.604E-11	6.358E-12	3.395E-12	2.102E-12	
WNW	1.272E-08	2.606E-09	6.803E-10	3.055E-10	1.728E-10	6.647E-11	1.923E-11	7.621E-12	4.070E-12	2.519E-12	
NW	2.909E-08	5.958E-09	1.555E-09	6.985E-10	3.952E-10	1.520E-10	4.396E-11	1.742E-11	9.305E-12	5.759E-12	
NNW	4.892E-08	1.002E-08	2.616E-09	1.175E-09	6.647E-10	2.556E-10	7.395E-11	2.931E-11	1.565E-11	9.687E-12	
N	4.236E-08	8.676E-09	2.265E-09	1.017E-09	5.755E-10	2.213E-10	6.402E-11	2.538E-11	1.355E-11	8.387E-12	
NNE	2.134E-08	4.371E-09	1.141E-09	5.125E-10	2.900E-10	1.115E-10	3.226E-11	1.279E-11	6.827E-12	4.226E-12	
NE	1.492E-08	3.056E-09	7.978E-10	3.583E-10	2.027E-10	7.795E-11	2.255E-11	8.938E-12	4.773E-12	2.954E-12	
ENE	1.048E-08	2.147E-09	5.606E-10	2.518E-10	1.424E-10	5.477E-11	1.584E-11	6.280E-12	3.354E-12	2.076E-12	
E	1.203E-08	2.463E-09	6.431E-10	2.888E-10	1.634E-10	6.283E-11	1.818E-11	7.204E-12	3.847E-12	2.381E-12	
ESE	2.767E-08	5.668E-09	1.480E-09	6.645E-10	3.759E-10	1.446E-10	4.182E-11	1.658E-11	8.851E-12	5.479E-12	
SE	5.421E-08	1.110E-08	2.899E-09	1.302E-09	7.364E-10	2.832E-10	8.193E-11	3.247E-11	1.734E-11	1.073E-11	
SSE	5.086E-08	1.042E-08	2.720E-09	1.221E-09	6.910E-10	2.657E-10	7.687E-11	3.047E-11	1.627E-11	1.007E-11	

VENTS GROUND LEVEL RELEASES - OCT-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

ID	LOCATION	DIRECTION	DIST. FROM SITE (MI)	X/Q		X/Q		D/Q
				(SEC/M3)	NO	(SEC/M3)	2.26 DAY	
				UNDEPLETED	UNDEPLETED	DEPLETED		
				DECAY	DECAY	DECAY		
A	Site Boundary	S	.80	5.8E-06	5.7E-06	5.1E-06	2.3E-08	
A	Site Boundary	SSW	.82	3.3E-06	3.3E-06	3.0E-06	9.6E-09	
A	Site Boundary	SW	.97	1.7E-06	1.7E-06	1.5E-06	5.1E-09	
A	Site Boundary	WSW	.93	1.9E-06	1.9E-06	1.7E-06	6.0E-09	
A	Site Boundary	W	.91	2.0E-06	2.0E-06	1.7E-06	6.5E-09	
A	Site Boundary	WNW	.94	1.9E-06	1.9E-06	1.7E-06	7.3E-09	
A	Site Boundary	NW	.81	4.6E-06	4.5E-06	4.0E-06	2.4E-08	
A	Site Boundary	NNW	.69	1.3E-05	1.3E-05	1.2E-05	5.8E-08	
A	Site Boundary	N	.67	2.0E-05	2.0E-05	1.8E-05	5.2E-08	
A	Site Boundary	NNE	.60	1.2E-05	1.2E-05	1.1E-05	3.2E-08	
A	Site Boundary	NE	.62	4.9E-06	4.8E-06	4.4E-06	2.1E-08	
A	Site Boundary	ENE	.59	4.8E-06	4.8E-06	4.4E-06	1.6E-08	
A	Site Boundary	E	.53	7.6E-06	7.5E-06	6.9E-06	2.2E-08	
A	Site Boundary	ESE	.54	1.0E-05	1.0E-05	9.5E-06	4.9E-08	
A	Site Boundary	SE	.65	1.2E-05	1.2E-05	1.1E-05	7.1E-08	
A	Site Boundary	SSE	.81	9.1E-06	9.0E-06	8.0E-06	4.3E-08	
A	Nearest Res	SSW	3.00	2.1E-07	2.0E-07	1.6E-07	4.0E-10	
A	Nearest Res	SW	1.30	8.7E-07	8.6E-07	7.5E-07	2.5E-09	
A	Nearest Res	WSW	1.90	3.7E-07	3.7E-07	3.1E-07	9.9E-10	
A	Nearest Res	W	1.00	1.6E-06	1.6E-06	1.4E-06	5.2E-09	
A	Nearest Res	WNW	1.70	4.9E-07	4.8E-07	4.1E-07	1.6E-09	
A	Nearest Res	NW	.90	3.6E-06	3.5E-06	3.1E-06	1.9E-08	
A	Nearest Res	NNW	1.90	1.4E-06	1.4E-06	1.2E-06	4.8E-09	
A	Nearest Res	N	2.50	1.3E-06	1.2E-06	1.0E-06	2.2E-09	
A	Nearest Res	NNE	1.70	1.4E-06	1.3E-06	1.1E-06	2.7E-09	
A	Nearest Res	ENE	1.70	5.4E-07	5.3E-07	4.5E-07	1.3E-09	
A	Nearest Res	E	2.20	4.0E-07	3.9E-07	3.3E-07	8.3E-10	
A	Nearest Res	ESE	2.80	3.5E-07	3.4E-07	2.8E-07	1.1E-09	
A	Nearest Res	SE	3.00	4.9E-07	4.8E-07	3.9E-07	1.8E-09	
A	Nearest Res	SSE	3.00	5.6E-07	5.5E-07	4.4E-07	1.7E-09	
A	Nearest Cow	NNW	3.50	4.2E-07	4.1E-07	3.3E-07	1.2E-09	
A	Nearest Garde	SSW	3.00	2.1E-07	2.0E-07	1.6E-07	4.0E-10	
A	Nearest Garde	SW	1.30	8.7E-07	8.6E-07	7.5E-07	2.5E-09	
A	Nearest Garde	WSW	1.90	3.7E-07	3.7E-07	3.1E-07	9.9E-10	
A	Nearest Garde	W	2.80	1.7E-07	1.7E-07	1.3E-07	4.2E-10	
A	Nearest Garde	WNW	1.70	4.9E-07	4.8E-07	4.1E-07	1.6E-09	
A	Nearest Garde	NW	1.90	6.3E-07	6.3E-07	5.2E-07	2.9E-09	
A	Nearest Garde	NNW	1.90	1.4E-06	1.4E-06	1.2E-06	4.8E-09	
A	Nearest Garde	ENE	1.70	5.4E-07	5.3E-07	4.5E-07	1.3E-09	
A	Nearest Garde	ESE	2.30	5.2E-07	5.1E-07	4.2E-07	1.7E-09	
A	Nearest Garde	SSE	3.00	5.6E-07	5.5E-07	4.4E-07	1.7E-09	

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Atmospheric Diffusion Estimates

Ground Level Releases

July-December 2014

VENTS GROUND LEVEL RELEASES - JUL-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.591E-05	1.535E-05	8.223E-06	4.124E-06	1.659E-06	8.989E-07	5.700E-07	3.980E-07	2.965E-07	2.313E-07	1.868E-07
SSW	2.577E-05	8.641E-06	4.612E-06	2.307E-06	9.222E-07	4.975E-07	3.144E-07	2.190E-07	1.627E-07	1.267E-07	1.022E-07
SW	1.738E-05	6.126E-06	3.312E-06	1.653E-06	6.473E-07	3.442E-07	2.151E-07	1.484E-07	1.094E-07	8.461E-08	6.780E-08
WSW	1.878E-05	6.644E-06	3.560E-06	1.770E-06	6.942E-07	3.695E-07	2.310E-07	1.595E-07	1.177E-07	9.101E-08	7.295E-08
W	2.227E-05	7.913E-06	4.253E-06	2.114E-06	8.273E-07	4.397E-07	2.747E-07	1.895E-07	1.397E-07	1.080E-07	8.652E-08
WNW	2.927E-05	1.021E-05	5.543E-06	2.775E-06	1.087E-06	5.784E-07	3.616E-07	2.496E-07	1.841E-07	1.424E-07	1.142E-07
NW	3.534E-05	1.245E-05	6.780E-06	3.397E-06	1.331E-06	7.079E-07	4.425E-07	3.054E-07	2.252E-07	1.742E-07	1.396E-07
NNW	6.388E-05	2.141E-05	1.152E-05	5.785E-06	2.326E-06	1.260E-06	7.993E-07	5.581E-07	4.158E-07	3.244E-07	2.620E-07
N	1.078E-04	3.362E-05	1.757E-05	8.797E-06	3.658E-06	2.027E-06	1.308E-06	9.260E-07	6.977E-07	5.497E-07	4.478E-07
NNE	6.766E-05	2.050E-05	1.049E-05	5.222E-06	2.208E-06	1.237E-06	8.048E-07	5.733E-07	4.343E-07	3.436E-07	2.810E-07
NE	3.120E-05	9.698E-06	5.081E-06	2.550E-06	1.060E-06	5.871E-07	3.786E-07	2.679E-07	2.018E-07	1.589E-07	1.294E-07
ENE	2.748E-05	8.341E-06	4.335E-06	2.178E-06	9.138E-07	5.093E-07	3.299E-07	2.342E-07	1.769E-07	1.397E-07	1.140E-07
E	3.914E-05	1.188E-05	6.074E-06	3.022E-06	1.277E-06	7.150E-07	4.647E-07	3.309E-07	2.506E-07	1.982E-07	1.620E-07
ESE	5.246E-05	1.620E-05	8.502E-06	4.278E-06	1.786E-06	9.924E-07	6.413E-07	4.545E-07	3.428E-07	2.703E-07	2.203E-07
SE	9.066E-05	2.764E-05	1.421E-05	7.089E-06	2.982E-06	1.665E-06	1.080E-06	7.680E-07	5.807E-07	4.589E-07	3.747E-07
SSE	8.755E-05	2.695E-05	1.403E-05	7.029E-06	2.930E-06	1.627E-06	1.051E-06	7.443E-07	5.612E-07	4.424E-07	3.605E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.550E-07	8.031E-08	5.236E-08	3.029E-08	2.063E-08	1.535E-08	1.207E-08	9.858E-09	8.279E-09	7.101E-09	6.193E-09
SSW	8.461E-08	4.359E-08	2.830E-08	1.629E-08	1.107E-08	8.217E-09	6.452E-09	5.264E-09	4.416E-09	3.784E-09	3.298E-09
SW	5.585E-08	2.817E-08	1.801E-08	1.014E-08	6.790E-09	4.984E-09	3.875E-09	3.136E-09	2.612E-09	2.224E-09	1.927E-09
WSW	6.011E-08	3.033E-08	1.941E-08	1.093E-08	7.307E-09	5.358E-09	4.164E-09	3.368E-09	2.804E-09	2.387E-09	2.068E-09
W	7.126E-08	3.593E-08	2.297E-08	1.293E-08	8.643E-09	6.337E-09	4.925E-09	3.983E-09	3.316E-09	2.822E-09	2.444E-09
WNW	9.408E-08	4.754E-08	3.044E-08	1.718E-08	1.151E-08	8.457E-09	6.581E-09	5.329E-09	4.441E-09	3.783E-09	3.279E-09
NW	1.150E-07	5.809E-08	3.718E-08	2.095E-08	1.402E-08	1.028E-08	7.991E-09	6.463E-09	5.380E-09	4.579E-09	3.966E-09
NNW	2.174E-07	1.127E-07	7.355E-08	4.258E-08	2.902E-08	2.159E-08	1.699E-08	1.388E-08	1.166E-08	1.000E-08	8.721E-09
N	3.743E-07	1.996E-07	1.328E-07	7.895E-08	5.481E-08	4.137E-08	3.292E-08	2.715E-08	2.300E-08	1.987E-08	1.744E-08
NNE	2.356E-07	1.272E-07	8.526E-08	5.124E-08	3.582E-08	2.718E-08	2.172E-08	1.798E-08	1.527E-08	1.323E-08	1.164E-08
NE	1.081E-07	5.759E-08	3.827E-08	2.273E-08	1.576E-08	1.189E-08	9.457E-09	7.798E-09	6.602E-09	5.702E-09	5.004E-09
ENE	9.539E-08	5.113E-08	3.412E-08	2.038E-08	1.419E-08	1.073E-08	8.553E-09	7.066E-09	5.991E-09	5.182E-09	4.553E-09
E	1.358E-07	7.326E-08	4.909E-08	2.948E-08	2.060E-08	1.563E-08	1.249E-08	1.033E-08	8.777E-09	7.603E-09	6.688E-09
ESE	1.843E-07	9.845E-08	6.555E-08	3.902E-08	2.710E-08	2.046E-08	1.628E-08	1.343E-08	1.138E-08	9.831E-09	8.630E-09
SE	3.139E-07	1.688E-07	1.128E-07	6.758E-08	4.714E-08	3.571E-08	2.849E-08	2.356E-08	2.000E-08	1.731E-08	1.522E-08
SSE	3.015E-07	1.610E-07	1.072E-07	6.381E-08	4.434E-08	3.349E-08	2.667E-08	2.201E-08	1.865E-08	1.612E-08	1.415E-08

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.985E-06	1.869E-06	5.889E-07	3.007E-07	1.882E-07	8.448E-08	3.090E-08	1.544E-08	9.888E-09	7.114E-09
SSW	4.483E-06	1.041E-06	3.251E-07	1.651E-07	1.029E-07	4.591E-08	1.664E-08	8.271E-09	5.280E-09	3.791E-09
SW	3.200E-06	7.361E-07	2.228E-07	1.111E-07	6.836E-08	2.980E-08	1.040E-08	5.022E-09	3.148E-09	2.229E-09
WSW	3.450E-06	7.888E-07	2.393E-07	1.195E-07	7.355E-08	3.209E-08	1.120E-08	5.400E-09	3.381E-09	2.392E-09
W	4.115E-06	9.410E-07	2.846E-07	1.418E-07	8.723E-08	3.802E-08	1.325E-08	6.387E-09	3.998E-09	2.829E-09
WNW	5.351E-06	1.236E-06	3.746E-07	1.869E-07	1.151E-07	5.028E-08	1.761E-08	8.521E-09	5.348E-09	3.791E-09
NW	6.537E-06	1.513E-06	4.584E-07	2.287E-07	1.408E-07	6.145E-08	2.147E-08	1.036E-08	6.487E-09	4.590E-09
NNW	1.117E-05	2.621E-06	8.258E-07	4.217E-07	2.640E-07	1.186E-07	4.343E-08	2.173E-08	1.392E-08	1.002E-08
N	1.724E-05	4.075E-06	1.347E-06	7.066E-07	4.508E-07	2.087E-07	8.018E-08	4.157E-08	2.722E-08	1.990E-08
NNE	1.037E-05	2.446E-06	8.276E-07	4.395E-07	2.827E-07	1.326E-07	5.194E-08	2.730E-08	1.802E-08	1.325E-08
NE	4.982E-06	1.181E-06	3.899E-07	2.043E-07	1.303E-07	6.024E-08	2.309E-08	1.195E-08	7.816E-09	5.710E-09
ENE	4.267E-06	1.015E-06	3.395E-07	1.791E-07	1.147E-07	5.341E-08	2.068E-08	1.078E-08	7.081E-09	5.189E-09
E	6.008E-06	1.415E-06	4.779E-07	2.536E-07	1.631E-07	7.643E-08	2.989E-08	1.570E-08	1.036E-08	7.612E-09
ESE	8.335E-06	1.987E-06	6.602E-07	3.471E-07	2.218E-07	1.029E-07	3.962E-08	2.056E-08	1.346E-08	9.844E-09
SE	1.403E-05	3.309E-06	1.111E-06	5.878E-07	3.771E-07	1.762E-07	6.855E-08	3.587E-08	2.361E-08	1.733E-08
SSE	1.379E-05	3.262E-06	1.082E-06	5.683E-07	3.629E-07	1.683E-07	6.479E-08	3.365E-08	2.206E-08	1.614E-08

B271

VENTS GROUND LEVEL RELEASES - JUL-DEC 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.581E-05	1.529E-05	8.174E-06	4.091E-06	1.639E-06	8.841E-07	5.581E-07	3.879E-07	2.877E-07	2.234E-07	1.796E-07
SSW	2.572E-05	8.606E-06	4.585E-06	2.288E-06	9.108E-07	4.892E-07	3.077E-07	2.133E-07	1.578E-07	1.223E-07	9.815E-08
SW	1.735E-05	6.106E-06	3.296E-06	1.642E-06	6.409E-07	3.395E-07	2.114E-07	1.453E-07	1.068E-07	8.228E-08	6.570E-08
WSW	1.874E-05	6.621E-06	3.542E-06	1.757E-06	6.869E-07	3.642E-07	2.269E-07	1.560E-07	1.146E-07	8.834E-08	7.053E-08
W	2.223E-05	7.888E-06	4.233E-06	2.101E-06	8.195E-07	4.341E-07	2.702E-07	1.858E-07	1.365E-07	1.052E-07	8.395E-08
WNW	2.922E-05	1.018E-05	5.516E-06	2.757E-06	1.077E-06	5.708E-07	3.556E-07	2.446E-07	1.798E-07	1.386E-07	1.107E-07
NW	3.529E-05	1.242E-05	6.753E-06	3.379E-06	1.320E-06	7.001E-07	4.363E-07	3.002E-07	2.208E-07	1.703E-07	1.361E-07
NNW	6.376E-05	2.134E-05	1.146E-05	5.746E-06	2.302E-06	1.242E-06	7.848E-07	5.459E-07	4.051E-07	3.148E-07	2.532E-07
N	1.075E-04	3.344E-05	1.743E-05	8.705E-06	3.599E-06	1.984E-06	1.272E-06	8.957E-07	6.711E-07	5.257E-07	4.257E-07
NNE	6.743E-05	2.036E-05	1.039E-05	5.157E-06	2.166E-06	1.206E-06	7.791E-07	5.513E-07	4.148E-07	3.261E-07	2.648E-07
NE	3.111E-05	9.645E-06	5.040E-06	2.523E-06	1.043E-06	5.743E-07	3.681E-07	2.590E-07	1.939E-07	1.519E-07	1.229E-07
ENE	2.739E-05	8.292E-06	4.298E-06	2.153E-06	8.979E-07	4.974E-07	3.202E-07	2.260E-07	1.696E-07	1.331E-07	1.079E-07
E	3.902E-05	1.181E-05	6.021E-06	2.988E-06	1.254E-06	6.981E-07	4.510E-07	3.192E-07	2.402E-07	1.888E-07	1.534E-07
ESE	5.230E-05	1.611E-05	8.433E-06	4.232E-06	1.757E-06	9.705E-07	6.235E-07	4.394E-07	3.295E-07	2.583E-07	2.093E-07
SE	9.038E-05	2.748E-05	1.409E-05	7.009E-06	2.930E-06	1.627E-06	1.049E-06	7.410E-07	5.568E-07	4.373E-07	3.549E-07
SSE	8.729E-05	2.680E-05	1.391E-05	6.951E-06	2.880E-06	1.589E-06	1.020E-06	7.183E-07	5.383E-07	4.217E-07	3.415E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.483E-07	7.509E-08	4.784E-08	2.644E-08	1.722E-08	1.227E-08	9.248E-09	7.252E-09	5.854E-09	4.833E-09	4.061E-09
SSW	8.091E-08	4.071E-08	2.582E-08	1.418E-08	9.202E-09	6.535E-09	4.914E-09	3.844E-09	3.096E-09	2.550E-09	2.139E-09
SW	5.392E-08	2.670E-08	1.676E-08	9.108E-09	5.885E-09	4.172E-09	3.136E-09	2.455E-09	1.980E-09	1.634E-09	1.372E-09
WSW	5.788E-08	2.864E-08	1.796E-08	9.720E-09	6.247E-09	4.407E-09	3.297E-09	2.570E-09	2.063E-09	1.695E-09	1.418E-09
W	6.891E-08	3.413E-08	2.143E-08	1.164E-08	7.515E-09	5.324E-09	4.000E-09	3.130E-09	2.524E-09	2.082E-09	1.748E-09
WNW	9.090E-08	4.512E-08	2.838E-08	1.546E-08	1.001E-08	7.110E-09	5.355E-09	4.199E-09	3.392E-09	2.803E-09	2.359E-09
NW	1.118E-07	5.561E-08	3.506E-08	1.918E-08	1.247E-08	8.890E-09	6.722E-09	5.293E-09	4.293E-09	3.563E-09	3.010E-09
NNW	2.093E-07	1.064E-07	6.801E-08	3.785E-08	2.482E-08	1.780E-08	1.350E-08	1.066E-08	8.655E-09	7.187E-09	6.075E-09
N	3.538E-07	1.833E-07	1.185E-07	6.664E-08	4.383E-08	3.140E-08	2.375E-08	1.866E-08	1.508E-08	1.246E-08	1.047E-08
NNE	2.206E-07	1.152E-07	7.472E-08	4.210E-08	2.765E-08	1.975E-08	1.489E-08	1.165E-08	9.373E-09	7.705E-09	6.444E-09
NE	1.021E-07	5.283E-08	3.410E-08	1.913E-08	1.256E-08	8.985E-09	6.788E-09	5.327E-09	4.300E-09	3.547E-09	2.977E-09
ENE	8.979E-08	4.668E-08	3.022E-08	1.701E-08	1.118E-08	7.997E-09	6.041E-09	4.739E-09	3.823E-09	3.152E-09	2.644E-09
E	1.278E-07	6.684E-08	4.345E-08	2.459E-08	1.622E-08	1.164E-08	8.814E-09	6.929E-09	5.600E-09	4.625E-09	3.886E-09
ESE	1.740E-07	9.032E-08	5.843E-08	3.288E-08	2.163E-08	1.549E-08	1.172E-08	9.209E-09	7.441E-09	6.145E-09	5.164E-09
SE	2.955E-07	1.540E-07	9.990E-08	5.636E-08	3.711E-08	2.659E-08	2.010E-08	1.578E-08	1.274E-08	1.051E-08	8.826E-09
SSE	2.838E-07	1.470E-07	9.489E-08	5.321E-08	3.488E-08	2.491E-08	1.878E-08	1.471E-08	1.185E-08	9.752E-09	8.169E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.941E-06	1.848E-06	5.770E-07	2.918E-07	1.810E-07	7.925E-08	2.710E-08	1.238E-08	7.290E-09	4.849E-09
SSW	4.458E-06	1.030E-06	3.184E-07	1.601E-07	9.892E-08	4.302E-08	1.455E-08	6.598E-09	3.864E-09	2.559E-09
SW	3.186E-06	7.295E-07	2.191E-07	1.085E-07	6.625E-08	2.833E-08	9.377E-09	4.214E-09	2.469E-09	1.640E-09
WSW	3.433E-06	7.814E-07	2.352E-07	1.164E-07	7.112E-08	3.039E-08	1.001E-08	4.454E-09	2.585E-09	1.701E-09
W	4.098E-06	9.330E-07	2.801E-07	1.386E-07	8.466E-08	3.621E-08	1.198E-08	5.379E-09	3.148E-09	2.089E-09
WNW	5.327E-06	1.225E-06	3.686E-07	1.826E-07	1.116E-07	4.785E-08	1.591E-08	7.181E-09	4.222E-09	2.813E-09
NW	6.513E-06	1.502E-06	4.522E-07	2.242E-07	1.372E-07	5.895E-08	1.972E-08	8.976E-09	5.321E-09	3.574E-09
NNW	1.112E-05	2.596E-06	8.112E-07	4.109E-07	2.552E-07	1.122E-07	3.876E-08	1.795E-08	1.071E-08	7.210E-09
N	1.711E-05	4.016E-06	1.311E-06	6.799E-07	4.287E-07	1.924E-07	6.803E-08	3.165E-08	1.875E-08	1.250E-08
NNE	1.028E-05	2.404E-06	8.018E-07	4.200E-07	2.666E-07	1.206E-07	4.293E-08	1.991E-08	1.171E-08	7.732E-09
NE	4.945E-06	1.163E-06	3.794E-07	1.965E-07	1.238E-07	5.546E-08	1.954E-08	9.060E-09	5.353E-09	3.559E-09
ENE	4.232E-06	9.988E-07	3.298E-07	1.718E-07	1.087E-07	4.894E-08	1.735E-08	8.063E-09	4.762E-09	3.163E-09
E	5.960E-06	1.392E-06	4.642E-07	2.432E-07	1.544E-07	6.999E-08	2.506E-08	1.173E-08	6.962E-09	4.640E-09
ESE	8.272E-06	1.957E-06	6.424E-07	3.338E-07	2.108E-07	9.475E-08	3.356E-08	1.562E-08	9.253E-09	6.166E-09
SE	1.392E-05	3.257E-06	1.080E-06	5.639E-07	3.573E-07	1.614E-07	5.748E-08	2.680E-08	1.586E-08	1.055E-08
SSE	1.368E-05	3.211E-06	1.051E-06	5.453E-07	3.439E-07	1.542E-07	5.433E-08	2.512E-08	1.478E-08	9.786E-09

B272

VENTS GROUND LEVEL RELEASES - JUL-DEC 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.342E-05	1.400E-05	7.315E-06	3.602E-06	1.404E-06	7.408E-07	4.590E-07	3.138E-07	2.294E-07	1.758E-07	1.397E-07
SSW	2.437E-05	7.882E-06	4.103E-06	2.015E-06	7.804E-07	4.100E-07	2.531E-07	1.726E-07	1.259E-07	9.629E-08	7.636E-08
SW	1.644E-05	5.589E-06	2.948E-06	1.444E-06	5.482E-07	2.839E-07	1.734E-07	1.172E-07	8.479E-08	6.444E-08	5.081E-08
WSW	1.776E-05	6.062E-06	3.168E-06	1.546E-06	5.878E-07	3.047E-07	1.862E-07	1.259E-07	9.113E-08	6.928E-08	5.463E-08
W	2.107E-05	7.220E-06	3.785E-06	1.847E-06	7.007E-07	3.628E-07	2.215E-07	1.496E-07	1.083E-07	8.227E-08	6.486E-08
WNW	2.769E-05	9.320E-06	4.933E-06	2.425E-06	9.209E-07	4.772E-07	2.915E-07	1.971E-07	1.427E-07	1.085E-07	8.556E-08
NW	3.343E-05	1.136E-05	6.035E-06	2.969E-06	1.128E-06	5.843E-07	3.570E-07	2.414E-07	1.747E-07	1.329E-07	1.048E-07
NNW	6.042E-05	1.954E-05	1.025E-05	5.054E-06	1.970E-06	1.039E-06	6.441E-07	4.405E-07	3.220E-07	2.469E-07	1.962E-07
N	1.020E-04	3.066E-05	1.562E-05	7.677E-06	3.092E-06	1.668E-06	1.051E-06	7.286E-07	5.384E-07	4.166E-07	3.337E-07
NNE	6.397E-05	1.868E-05	9.319E-06	4.555E-06	1.865E-06	1.017E-06	6.459E-07	4.504E-07	3.345E-07	2.599E-07	2.089E-07
NE	2.950E-05	8.843E-06	4.517E-06	2.226E-06	8.959E-07	4.831E-07	3.042E-07	2.107E-07	1.557E-07	1.204E-07	9.642E-08
ENE	2.598E-05	7.604E-06	3.854E-06	1.900E-06	7.722E-07	4.189E-07	2.649E-07	1.841E-07	1.364E-07	1.057E-07	8.483E-08
E	3.701E-05	1.083E-05	5.399E-06	2.637E-06	1.079E-06	5.880E-07	3.732E-07	2.602E-07	1.932E-07	1.501E-07	1.206E-07
ESE	4.960E-05	1.477E-05	7.559E-06	3.733E-06	1.510E-06	8.166E-07	5.153E-07	3.576E-07	2.645E-07	2.048E-07	1.642E-07
SE	8.573E-05	2.520E-05	1.263E-05	6.185E-06	2.520E-06	1.370E-06	8.677E-07	6.038E-07	4.477E-07	3.474E-07	2.790E-07
SSE	8.279E-05	2.457E-05	1.247E-05	6.134E-06	2.477E-06	1.338E-06	8.439E-07	5.853E-07	4.327E-07	3.350E-07	2.684E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.141E-07	5.552E-08	3.426E-08	1.809E-08	1.141E-08	7.930E-09	5.860E-09	4.519E-09	3.594E-09	2.928E-09	2.430E-09
SSW	6.227E-08	3.013E-08	1.851E-08	9.723E-09	6.115E-09	4.241E-09	3.128E-09	2.409E-09	1.913E-09	1.557E-09	1.291E-09
SW	4.122E-08	1.955E-08	1.185E-08	6.112E-09	3.801E-09	2.614E-09	1.917E-09	1.469E-09	1.162E-09	9.427E-10	7.797E-10
WSW	4.432E-08	2.103E-08	1.275E-08	6.567E-09	4.073E-09	2.795E-09	2.046E-09	1.564E-09	1.236E-09	1.001E-09	8.264E-10
W	5.261E-08	2.496E-08	1.512E-08	7.795E-09	4.841E-09	3.327E-09	2.437E-09	1.866E-09	1.476E-09	1.197E-09	9.896E-10
WNW	6.944E-08	3.301E-08	2.004E-08	1.036E-08	6.449E-09	4.441E-09	3.259E-09	2.499E-09	1.979E-09	1.607E-09	1.330E-09
NW	8.504E-08	4.044E-08	2.455E-08	1.269E-08	7.903E-09	5.443E-09	3.996E-09	3.066E-09	2.430E-09	1.974E-09	1.635E-09
NNW	1.603E-07	7.815E-08	4.829E-08	2.556E-08	1.616E-08	1.126E-08	8.338E-09	6.443E-09	5.135E-09	4.191E-09	3.485E-09
N	2.745E-07	1.373E-07	8.630E-08	4.669E-08	2.993E-08	2.105E-08	1.569E-08	1.219E-08	9.751E-09	7.981E-09	6.651E-09
NNE	1.723E-07	8.712E-08	5.512E-08	3.007E-08	1.937E-08	1.366E-08	1.020E-08	7.934E-09	6.352E-09	5.201E-09	4.334E-09
NE	7.930E-08	3.960E-08	2.486E-08	1.266E-08	8.600E-09	6.042E-09	4.502E-09	3.494E-09	2.794E-09	2.285E-09	1.903E-09
ENE	6.988E-08	3.511E-08	2.213E-08	1.201E-08	7.714E-09	5.431E-09	4.053E-09	3.149E-09	2.520E-09	2.063E-09	1.719E-09
E	9.951E-08	5.029E-08	3.183E-08	1.738E-08	1.120E-08	7.907E-09	5.915E-09	4.604E-09	3.691E-09	3.026E-09	2.525E-09
ESE	1.351E-07	6.769E-08	4.259E-08	2.307E-08	1.479E-08	1.040E-08	7.758E-09	6.025E-09	4.820E-09	3.945E-09	3.288E-09
SE	2.300E-07	1.159E-07	7.317E-08	3.983E-08	2.562E-08	1.806E-08	1.350E-08	1.049E-08	8.405E-09	6.885E-09	5.741E-09
SSE	2.209E-07	1.105E-07	6.950E-08	3.761E-08	2.410E-08	1.694E-08	1.263E-08	9.798E-09	7.833E-09	6.406E-09	5.334E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.151E-06	1.598E-06	4.761E-07	2.331E-07	1.409E-07	5.908E-08	1.872E-08	8.030E-09	4.550E-09	2.941E-09
SSW	4.015E-06	8.901E-07	2.628E-07	1.280E-07	7.704E-08	3.211E-08	1.007E-08	4.296E-09	2.426E-09	1.564E-09
SW	2.867E-06	6.299E-07	1.804E-07	8.628E-08	5.129E-08	2.094E-08	6.360E-09	2.651E-09	1.480E-09	9.474E-10
WSW	3.090E-06	6.749E-07	1.937E-07	9.274E-08	5.515E-08	2.253E-08	6.832E-09	2.836E-09	1.577E-09	1.006E-09
W	3.687E-06	8.053E-07	2.304E-07	1.102E-07	6.548E-08	2.673E-08	8.111E-09	3.375E-09	1.881E-09	1.203E-09
WNW	4.793E-06	1.058E-06	3.033E-07	1.452E-07	8.639E-08	3.534E-08	1.077E-08	4.503E-09	2.518E-09	1.614E-09
NW	5.857E-06	1.295E-06	3.714E-07	1.778E-07	1.058E-07	4.329E-08	1.320E-08	5.520E-09	3.089E-09	1.983E-09
NNW	1.001E-05	2.242E-06	6.681E-07	3.273E-07	1.979E-07	8.313E-08	2.644E-08	1.140E-08	6.486E-09	4.209E-09
N	1.543E-05	3.478E-06	1.087E-06	5.464E-07	3.364E-07	1.451E-07	4.804E-08	2.127E-08	1.226E-08	8.013E-09
NNE	9.282E-06	2.086E-06	6.667E-07	3.392E-07	2.104E-07	9.184E-08	3.088E-08	1.380E-08	7.980E-09	5.221E-09
NE	4.460E-06	1.008E-06	3.145E-07	1.580E-07	9.719E-08	4.187E-08	1.382E-08	6.108E-09	3.515E-09	2.294E-09
ENE	3.819E-06	8.658E-07	2.737E-07	1.384E-07	8.549E-08	3.707E-08	1.235E-08	5.489E-09	3.167E-09	2.071E-09
E	5.379E-06	1.207E-06	3.853E-07	1.959E-07	1.215E-07	5.302E-08	1.784E-08	7.988E-09	4.631E-09	3.037E-09
ESE	7.461E-06	1.696E-06	5.325E-07	2.684E-07	1.655E-07	7.152E-08	2.373E-08	1.051E-08	6.061E-09	3.961E-09
SE	1.256E-05	2.823E-06	8.960E-07	4.541E-07	2.811E-07	1.222E-07	4.092E-08	1.825E-08	1.056E-08	6.912E-09
SSE	1.234E-05	2.783E-06	8.722E-07	4.391E-07	2.705E-07	1.168E-07	3.869E-08	1.712E-08	9.857E-09	6.432E-09

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VENTS GROUND LEVEL RELEASES - JUL-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.763E-07	5.963E-08	3.062E-08	1.456E-08	5.229E-09	2.593E-09	1.527E-09	9.998E-10	7.035E-10	5.213E-10	4.018E-10
SSW	8.909E-08	3.013E-08	1.547E-08	7.354E-09	2.642E-09	1.310E-09	7.714E-10	5.051E-10	3.554E-10	2.634E-10	2.030E-10
SW	6.190E-08	2.093E-08	1.075E-08	5.110E-09	1.835E-09	9.102E-10	5.360E-10	3.509E-10	2.469E-10	1.830E-10	1.410E-10
WSW	6.143E-08	2.077E-08	1.067E-08	5.071E-09	1.822E-09	9.033E-10	5.319E-10	3.483E-10	2.451E-10	1.816E-10	1.400E-10
W	8.471E-08	2.864E-08	1.471E-08	6.992E-09	2.512E-09	1.246E-09	7.334E-10	4.802E-10	3.379E-10	2.504E-10	1.930E-10
WNW	1.173E-07	3.967E-08	2.037E-08	9.684E-09	3.479E-09	1.725E-09	1.016E-09	6.651E-10	4.680E-10	3.468E-10	2.673E-10
NW	1.886E-07	6.377E-08	3.274E-08	1.557E-08	5.592E-09	2.773E-09	1.633E-09	1.069E-09	7.523E-10	5.575E-10	4.297E-10
NNW	3.183E-07	1.076E-07	5.526E-08	2.627E-08	9.438E-09	4.680E-09	2.756E-09	1.804E-09	1.270E-09	9.410E-10	7.251E-10
N	2.839E-07	9.600E-08	4.929E-08	2.343E-08	8.417E-09	4.174E-09	2.458E-09	1.609E-09	1.132E-09	8.393E-10	6.468E-10
NNE	1.207E-07	4.082E-08	2.096E-08	9.964E-09	3.579E-09	1.775E-09	1.045E-09	6.843E-10	4.815E-10	3.569E-10	2.750E-10
NE	7.428E-08	2.512E-08	1.290E-08	6.131E-09	2.202E-09	1.092E-09	6.431E-10	4.211E-10	2.963E-10	2.196E-10	1.692E-10
ENE	5.351E-08	1.809E-08	9.290E-09	4.417E-09	1.586E-09	7.868E-10	4.633E-10	3.033E-10	2.134E-10	1.582E-10	1.219E-10
E	6.918E-08	2.339E-08	1.201E-08	5.710E-09	2.051E-09	1.017E-09	5.989E-10	3.922E-10	2.760E-10	2.045E-10	1.576E-10
ESE	1.262E-07	4.268E-08	2.191E-08	1.042E-08	3.742E-09	1.856E-09	1.093E-09	7.155E-10	5.035E-10	3.731E-10	2.875E-10
SE	2.361E-07	7.984E-08	4.100E-08	1.949E-08	7.001E-09	3.472E-09	2.044E-09	1.339E-09	9.419E-10	6.980E-10	5.379E-10
SSE	2.544E-07	8.604E-08	4.418E-08	2.100E-08	7.544E-09	3.741E-09	2.203E-09	1.443E-09	1.015E-09	7.522E-10	5.797E-10
DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	3.192E-10	1.418E-10	8.589E-11	4.341E-11	2.628E-11	1.762E-11	1.262E-11	9.479E-12	7.370E-12	5.887E-12	4.805E-12
SSW	1.612E-10	7.163E-11	4.339E-11	2.193E-11	1.327E-11	8.900E-12	6.377E-12	4.789E-12	3.723E-12	2.974E-12	2.428E-12
SW	1.120E-10	4.977E-11	3.015E-11	1.524E-11	9.223E-12	6.184E-12	4.431E-12	3.327E-12	2.587E-12	2.067E-12	1.687E-12
WSW	1.112E-10	4.939E-11	2.992E-11	1.512E-11	9.154E-12	6.137E-12	4.398E-12	3.302E-12	2.568E-12	2.051E-12	1.674E-12
W	1.533E-10	6.811E-11	4.126E-11	2.085E-11	1.262E-11	8.462E-12	6.063E-12	4.553E-12	3.540E-12	2.828E-12	2.308E-12
WNW	2.123E-10	9.433E-11	5.714E-11	2.888E-11	1.748E-11	1.172E-11	8.398E-12	6.306E-12	4.903E-12	3.917E-12	3.197E-12
NW	3.413E-10	1.516E-10	9.185E-11	4.643E-11	2.810E-11	1.884E-11	1.350E-11	1.014E-11	7.882E-12	6.296E-12	5.139E-12
NNW	5.761E-10	2.559E-10	1.550E-10	7.836E-11	4.743E-11	3.180E-11	2.278E-11	1.711E-11	1.330E-11	1.063E-11	8.673E-12
N	5.138E-10	2.283E-10	1.383E-10	6.989E-11	4.230E-11	2.836E-11	2.032E-11	1.526E-11	1.186E-11	9.478E-12	7.736E-12
NNE	2.185E-10	9.705E-11	5.879E-11	2.972E-11	1.799E-11	1.206E-11	8.641E-12	6.488E-12	5.045E-12	4.030E-12	3.289E-12
NE	1.344E-10	5.972E-11	3.617E-11	1.828E-11	1.107E-11	7.420E-12	5.317E-12	3.992E-12	3.104E-12	2.480E-12	2.024E-12
ENE	9.684E-11	4.302E-11	2.606E-11	1.317E-11	7.972E-12	5.345E-12	3.830E-12	2.876E-12	2.236E-12	1.786E-12	1.458E-12
E	1.252E-10	5.562E-11	3.369E-11	1.703E-11	1.031E-11	6.911E-12	4.952E-12	3.718E-12	2.891E-12	2.309E-12	1.885E-12
ESE	2.284E-10	1.015E-10	6.147E-11	3.107E-11	1.881E-11	1.261E-11	9.035E-12	6.784E-12	5.275E-12	4.214E-12	3.439E-12
SE	4.273E-10	1.898E-10	1.150E-10	5.813E-11	3.518E-11	2.359E-11	1.690E-11	1.269E-11	9.868E-12	7.882E-12	6.434E-12
SSE	4.605E-10	2.046E-10	1.239E-10	6.264E-11	3.791E-11	2.542E-11	1.821E-11	1.368E-11	1.063E-11	8.494E-12	6.933E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.993E-08	6.130E-09	1.600E-09	7.187E-10	4.066E-10	1.564E-10	4.524E-11	1.793E-11	9.574E-12	5.926E-12
SSW	1.512E-08	3.097E-09	8.085E-10	3.631E-10	2.054E-10	7.900E-11	2.285E-11	9.058E-12	4.837E-12	2.994E-12
SW	1.051E-08	2.152E-09	5.618E-10	2.523E-10	1.427E-10	5.489E-11	1.588E-11	6.293E-12	3.361E-12	2.080E-12
WSW	1.043E-08	2.136E-09	5.575E-10	2.504E-10	1.416E-10	5.447E-11	1.576E-11	6.246E-12	3.335E-12	2.064E-12
W	1.438E-08	2.945E-09	7.687E-10	3.452E-10	1.953E-10	7.511E-11	2.173E-11	8.612E-12	4.599E-12	2.846E-12
WNW	1.991E-08	4.078E-09	1.065E-09	4.782E-10	2.705E-10	1.040E-10	3.009E-11	1.193E-11	6.369E-12	3.942E-12
NW	3.201E-08	6.556E-09	1.711E-09	7.686E-10	4.348E-10	1.672E-10	4.838E-11	1.917E-11	1.024E-11	6.337E-12
NNW	5.402E-08	1.106E-08	2.888E-09	1.297E-09	7.339E-10	2.822E-10	8.165E-11	3.236E-11	1.728E-11	1.070E-11
N	4.818E-08	9.869E-09	2.576E-09	1.157E-09	6.546E-10	2.517E-10	7.282E-11	2.886E-11	1.541E-11	9.540E-12
NNE	2.049E-08	4.196E-09	1.095E-09	4.920E-10	2.783E-10	1.070E-10	3.096E-11	1.227E-11	6.553E-12	4.056E-12
NE	1.261E-08	2.582E-09	6.740E-10	3.027E-10	1.713E-10	6.586E-11	1.905E-11	7.551E-12	4.032E-12	2.496E-12
ENE	9.080E-09	1.860E-09	4.856E-10	2.181E-10	1.234E-10	4.744E-11	1.372E-11	5.440E-12	2.905E-12	1.798E-12
E	1.174E-08	2.405E-09	6.278E-10	2.819E-10	1.595E-10	6.134E-11	1.774E-11	7.033E-12	3.756E-12	2.325E-12
ESE	2.142E-08	4.387E-09	1.145E-09	5.144E-10	2.910E-10	1.119E-10	3.238E-11	1.283E-11	6.852E-12	4.241E-12
SE	4.007E-08	8.208E-09	2.143E-09	9.623E-10	5.444E-10	2.094E-10	6.057E-11	2.400E-11	1.282E-11	7.934E-12
SSE	4.318E-08	8.845E-09	2.309E-09	1.037E-09	5.867E-10	2.256E-10	6.527E-11	2.587E-11	1.381E-11	8.550E-12

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VENTS GROUND LEVEL RELEASES - JUL-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

ID	LOCATION	DIRECTION	DIST. FROM SITE (MI)	X/Q		X/Q		D/Q	
				(SEC/M3)	NO	(SEC/M3)	2.26 DAY	(SEC/M3)	8.0 DAY
				DECAY	UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	7.1E-06	7.0E-06	6.3E-06	2.6E-08		
A	Site Boundary	SSW	.82	3.7E-06	3.7E-06	3.3E-06	1.2E-08		
A	Site Boundary	SW	.97	1.8E-06	1.7E-06	1.5E-06	5.5E-09		
A	Site Boundary	WSW	.93	2.1E-06	2.1E-06	1.9E-06	6.2E-09		
A	Site Boundary	W	.91	2.6E-06	2.6E-06	2.3E-06	8.9E-09		
A	Site Boundary	WNW	.94	3.2E-06	3.2E-06	2.8E-06	1.1E-08		
A	Site Boundary	NW	.81	5.6E-06	5.6E-06	5.0E-06	2.7E-08		
A	Site Boundary	NNW	.69	1.3E-05	1.3E-05	1.2E-05	6.4E-08		
A	Site Boundary	N	.67	2.1E-05	2.1E-05	1.9E-05	5.9E-08		
A	Site Boundary	NNE	.60	1.5E-05	1.5E-05	1.4E-05	3.0E-08		
A	Site Boundary	NE	.62	6.7E-06	6.7E-06	6.1E-06	1.8E-08		
A	Site Boundary	ENE	.59	6.4E-06	6.3E-06	5.8E-06	1.4E-08		
A	Site Boundary	E	.53	1.1E-05	1.1E-05	9.9E-06	2.2E-08		
A	Site Boundary	ESE	.54	1.4E-05	1.4E-05	1.3E-05	3.8E-08		
A	Site Boundary	SE	.65	1.8E-05	1.8E-05	1.6E-05	5.2E-08		
A	Site Boundary	SSE	.81	1.2E-05	1.1E-05	1.0E-05	3.6E-08		
A	Nearest Res	SSW	3.00	2.2E-07	2.1E-07	1.7E-07	5.1E-10		
A	Nearest Res	SW	1.30	9.0E-07	8.9E-07	7.7E-07	2.6E-09		
A	Nearest Res	WSW	1.90	4.1E-07	4.1E-07	3.4E-07	1.0E-09		
A	Nearest Res	W	1.00	2.1E-06	2.1E-06	1.8E-06	7.0E-09		
A	Nearest Res	WNW	1.70	8.2E-07	8.1E-07	6.9E-07	2.6E-09		
A	Nearest Res	NW	.90	4.4E-06	4.4E-06	3.9E-06	2.0E-08		
A	Nearest Res	NNW	1.90	1.4E-06	1.4E-06	1.2E-06	5.3E-09		
A	Nearest Res	N	2.50	1.3E-06	1.3E-06	1.1E-06	2.5E-09		
A	Nearest Res	NNE	1.70	1.7E-06	1.7E-06	1.4E-06	2.6E-09		
A	Nearest Res	ENE	1.70	7.1E-07	6.9E-07	5.9E-07	1.2E-09		
A	Nearest Res	E	2.20	5.9E-07	5.8E-07	4.8E-07	8.1E-10		
A	Nearest Res	ESE	2.80	5.2E-07	5.0E-07	4.1E-07	8.4E-10		
A	Nearest Res	SE	3.00	7.7E-07	7.4E-07	6.0E-07	1.3E-09		
A	Nearest Res	SSE	3.00	7.4E-07	7.2E-07	5.9E-07	1.4E-09		
A	Nearest Cow	NNW	3.50	4.2E-07	4.1E-07	3.2E-07	1.3E-09		
A	Nearest Garde	SSW	3.00	2.2E-07	2.1E-07	1.7E-07	5.1E-10		
A	Nearest Garde	SW	1.30	9.0E-07	8.9E-07	7.7E-07	2.6E-09		
A	Nearest Garde	WSW	1.90	4.1E-07	4.1E-07	3.4E-07	1.0E-09		
A	Nearest Garde	W	2.80	2.2E-07	2.1E-07	1.7E-07	5.6E-10		
A	Nearest Garde	WNW	1.70	8.2E-07	8.1E-07	6.9E-07	2.6E-09		
A	Nearest Garde	NW	1.90	7.9E-07	7.8E-07	6.6E-07	3.1E-09		
A	Nearest Garde	NNW	1.90	1.4E-06	1.4E-06	1.2E-06	5.3E-09		
A	Nearest Garde	ENE	1.70	7.1E-07	6.9E-07	5.9E-07	1.2E-09		
A	Nearest Garde	ESE	2.30	7.5E-07	7.3E-07	6.1E-07	1.3E-09		
A	Nearest Garde	SSE	3.00	7.4E-07	7.2E-07	5.9E-07	1.4E-09		

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Atmospheric Diffusion Estimates

Ground Level Releases

January-December 2014

VENTS GROUND LEVEL RELEASES - JAN-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.494E-05	1.500E-05	8.030E-06	4.026E-06	1.616E-06	8.747E-07	5.541E-07	3.866E-07	2.878E-07	2.244E-07	1.811E-07
SSW	2.261E-05	7.620E-06	4.068E-06	2.031E-06	8.064E-07	4.331E-07	2.727E-07	1.894E-07	1.404E-07	1.091E-07	8.784E-08
SW	1.529E-05	5.415E-06	2.935E-06	1.466E-06	5.718E-07	3.031E-07	1.890E-07	1.301E-07	9.579E-08	7.397E-08	5.919E-08
WSW	1.641E-05	5.716E-06	3.045E-06	1.512E-06	5.971E-07	3.194E-07	2.006E-07	1.389E-07	1.028E-07	7.975E-08	6.408E-08
W	1.603E-05	5.730E-06	3.094E-06	1.540E-06	5.999E-07	3.178E-07	1.980E-07	1.363E-07	1.003E-07	7.742E-08	6.194E-08
WNW	2.179E-05	7.652E-06	4.133E-06	2.061E-06	8.038E-07	4.262E-07	2.658E-07	1.831E-07	1.348E-07	1.041E-07	8.335E-08
NW	2.829E-05	9.894E-06	5.340E-06	2.665E-06	1.046E-06	5.577E-07	3.492E-07	2.413E-07	1.782E-07	1.380E-07	1.107E-07
NNW	5.951E-05	1.963E-05	1.041E-05	5.203E-06	2.108E-06	1.149E-06	7.315E-07	5.126E-07	3.830E-07	2.996E-07	2.425E-07
N	9.694E-05	3.018E-05	1.573E-05	7.865E-06	3.274E-06	1.816E-06	1.173E-06	8.305E-07	6.261E-07	4.935E-07	4.021E-07
NNE	5.480E-05	1.677E-05	8.682E-06	4.343E-06	1.822E-06	1.016E-06	6.581E-07	4.674E-07	3.532E-07	2.789E-07	2.276E-07
NE	2.828E-05	8.817E-06	4.640E-06	2.334E-06	9.662E-07	5.339E-07	3.436E-07	2.428E-07	1.827E-07	1.437E-07	1.169E-07
ENE	2.275E-05	7.051E-06	3.703E-06	1.863E-06	7.742E-07	4.288E-07	2.764E-07	1.956E-07	1.473E-07	1.160E-07	9.443E-08
E	2.894E-05	8.930E-06	4.629E-06	2.313E-06	9.667E-07	5.376E-07	3.476E-07	2.466E-07	1.861E-07	1.468E-07	1.197E-07
ESE	3.985E-05	1.242E-05	6.500E-06	3.260E-06	1.355E-06	7.508E-07	4.827E-07	3.427E-07	2.581E-07	2.033E-07	1.656E-07
SE	6.149E-05	1.919E-05	1.003E-05	5.025E-06	2.086E-06	1.155E-06	7.445E-07	5.267E-07	3.966E-07	3.123E-07	2.542E-07
SSE	6.485E-05	2.036E-05	1.063E-05	5.314E-06	2.195E-06	1.211E-06	7.786E-07	5.497E-07	4.133E-07	3.250E-07	2.643E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.502E-07	7.769E-08	5.059E-08	2.923E-08	1.989E-08	1.479E-08	1.163E-08	9.496E-09	7.973E-09	6.838E-09	5.962E-09
SSW	7.265E-08	3.723E-08	2.409E-08	1.380E-08	9.349E-09	6.927E-09	5.429E-09	4.423E-09	3.706E-09	3.173E-09	2.762E-09
SW	4.870E-08	2.446E-08	1.559E-08	8.736E-09	5.825E-09	4.262E-09	3.306E-09	2.669E-09	2.219E-09	1.886E-09	1.631E-09
WSW	5.292E-08	2.695E-08	1.736E-08	9.879E-09	6.653E-09	4.907E-09	3.833E-09	3.113E-09	2.601E-09	2.222E-09	1.930E-09
W	5.095E-08	2.556E-08	1.628E-08	9.113E-09	6.069E-09	4.437E-09	3.439E-09	2.775E-09	2.306E-09	1.959E-09	1.694E-09
WNW	6.860E-08	3.451E-08	2.203E-08	1.238E-08	8.277E-09	6.069E-09	4.716E-09	3.814E-09	3.175E-09	2.702E-09	2.340E-09
NW	9.130E-08	4.629E-08	2.972E-08	1.683E-08	1.130E-08	8.316E-09	6.480E-09	5.253E-09	4.383E-09	3.737E-09	3.242E-09
NNW	2.016E-07	1.054E-07	6.914E-08	4.035E-08	2.766E-08	2.068E-08	1.633E-08	1.338E-08	1.127E-08	9.695E-09	8.474E-09
N	3.362E-07	1.795E-07	1.195E-07	7.112E-08	4.941E-08	3.732E-08	2.970E-08	2.451E-08	2.077E-08	1.795E-08	1.576E-08
NNE	1.906E-07	1.023E-07	6.829E-08	4.083E-08	2.844E-08	2.153E-08	1.716E-08	1.418E-08	1.203E-08	1.041E-08	9.147E-09
NE	9.762E-08	5.184E-08	3.438E-08	2.036E-08	1.410E-08	1.062E-08	8.436E-09	6.950E-09	5.879E-09	5.074E-09	4.450E-09
ENE	7.889E-08	4.199E-08	2.789E-08	1.655E-08	1.147E-08	8.646E-09	6.873E-09	5.665E-09	4.794E-09	4.140E-09	3.632E-09
E	1.001E-07	5.360E-08	3.573E-08	2.131E-08	1.483E-08	1.121E-08	8.935E-09	7.379E-09	6.256E-09	5.410E-09	4.753E-09
ESE	1.384E-07	7.371E-08	4.898E-08	2.909E-08	2.018E-08	1.522E-08	1.210E-08	9.977E-09	8.446E-09	7.295E-09	6.401E-09
SE	2.124E-07	1.131E-07	7.510E-08	4.457E-08	3.090E-08	2.330E-08	1.852E-08	1.527E-08	1.292E-08	1.116E-08	9.794E-09
SSE	2.206E-07	1.170E-07	7.756E-08	4.591E-08	3.178E-08	2.394E-08	1.901E-08	1.566E-08	1.325E-08	1.144E-08	1.003E-08

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.799E-06	1.822E-06	5.726E-07	2.918E-07	1.825E-07	8.175E-08	2.983E-08	1.489E-08	9.525E-09	6.850E-09
SSW	3.952E-06	9.126E-07	2.822E-07	1.425E-07	8.852E-08	3.926E-08	1.411E-08	6.974E-09	4.438E-09	3.179E-09
SW	2.833E-06	6.511E-07	1.959E-07	9.729E-08	5.969E-08	2.590E-08	8.965E-09	4.296E-09	2.679E-09	1.890E-09
WSW	2.957E-06	6.769E-07	2.076E-07	1.044E-07	6.459E-08	2.846E-08	1.011E-08	4.943E-09	3.124E-09	2.226E-09
W	2.989E-06	6.834E-07	2.053E-07	1.019E-07	6.246E-08	2.708E-08	9.352E-09	4.473E-09	2.786E-09	1.964E-09
WNW	3.994E-06	9.154E-07	2.755E-07	1.369E-07	8.404E-08	3.654E-08	1.270E-08	6.117E-09	3.828E-09	2.708E-09
NW	5.163E-06	1.189E-06	3.616E-07	1.809E-07	1.116E-07	4.893E-08	1.724E-08	8.378E-09	5.272E-09	3.745E-09
NNW	1.015E-05	2.370E-06	7.552E-07	3.883E-07	2.443E-07	1.107E-07	4.111E-08	2.080E-08	1.342E-08	9.710E-09
N	1.544E-05	3.647E-06	1.207E-06	6.340E-07	4.048E-07	1.877E-07	7.222E-08	3.750E-08	2.457E-08	1.797E-08
NNE	8.551E-06	2.024E-06	6.772E-07	3.575E-07	2.291E-07	1.068E-07	4.143E-08	2.163E-08	1.421E-08	1.042E-08
NE	4.543E-06	1.078E-06	3.540E-07	1.850E-07	1.177E-07	5.426E-08	2.069E-08	1.067E-08	6.967E-09	5.082E-09
ENE	3.629E-06	8.627E-07	2.847E-07	1.492E-07	9.506E-08	4.392E-08	1.681E-08	8.689E-09	5.678E-09	4.146E-09
E	4.556E-06	1.075E-06	3.579E-07	1.884E-07	1.205E-07	5.600E-08	2.164E-08	1.127E-08	7.396E-09	5.417E-09
ESE	6.375E-06	1.510E-06	4.987E-07	2.614E-07	1.667E-07	7.709E-08	2.955E-08	1.529E-08	1.000E-08	7.305E-09
SE	9.840E-06	2.326E-06	7.669E-07	4.016E-07	2.559E-07	1.183E-07	4.528E-08	2.341E-08	1.531E-08	1.118E-08
SSE	1.043E-05	2.451E-06	8.024E-07	4.186E-07	2.661E-07	1.225E-07	4.666E-08	2.406E-08	1.570E-08	1.145E-08

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VENTS GROUND LEVEL RELEASES - JAN-DEC 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.486E-05	1.495E-05	7.989E-06	3.999E-06	1.599E-06	8.622E-07	5.440E-07	3.781E-07	2.803E-07	2.177E-07	1.750E-07
SSW	2.257E-05	7.595E-06	4.047E-06	2.017E-06	7.981E-07	4.270E-07	2.679E-07	1.853E-07	1.369E-07	1.060E-07	8.494E-08
SW	1.527E-05	5.400E-06	2.923E-06	1.458E-06	5.669E-07	2.996E-07	1.862E-07	1.278E-07	9.382E-08	7.222E-08	5.762E-08
WSW	1.638E-05	5.698E-06	3.030E-06	1.502E-06	5.911E-07	3.151E-07	1.971E-07	1.361E-07	1.003E-07	7.751E-08	6.204E-08
W	1.601E-05	5.715E-06	3.081E-06	1.531E-06	5.950E-07	3.143E-07	1.953E-07	1.340E-07	9.831E-08	7.567E-08	6.036E-08
WNW	2.176E-05	7.632E-06	4.116E-06	2.050E-06	7.971E-07	4.214E-07	2.620E-07	1.799E-07	1.321E-07	1.017E-07	8.118E-08
NW	2.825E-05	9.870E-06	5.320E-06	2.651E-06	1.039E-06	5.519E-07	3.446E-07	2.375E-07	1.749E-07	1.350E-07	1.080E-07
NNW	5.940E-05	1.956E-05	1.036E-05	5.168E-06	2.086E-06	1.132E-06	7.183E-07	5.014E-07	3.731E-07	2.907E-07	2.344E-07
N	9.669E-05	3.003E-05	1.562E-05	7.793E-06	3.228E-06	1.782E-06	1.145E-06	8.066E-07	6.050E-07	4.744E-07	3.846E-07
NNE	5.465E-05	1.668E-05	8.615E-06	4.298E-06	1.793E-06	9.943E-07	6.406E-07	4.525E-07	3.400E-07	2.669E-07	2.167E-07
NE	2.821E-05	8.776E-06	4.608E-06	2.312E-06	9.527E-07	5.239E-07	3.355E-07	2.358E-07	1.765E-07	1.382E-07	1.119E-07
ENE	2.269E-05	7.018E-06	3.678E-06	1.846E-06	7.636E-07	4.209E-07	2.700E-07	1.901E-07	1.425E-07	1.116E-07	9.044E-08
E	2.887E-05	8.887E-06	4.596E-06	2.292E-06	9.528E-07	5.271E-07	3.391E-07	2.393E-07	1.797E-07	1.410E-07	1.144E-07
ESE	3.975E-05	1.236E-05	6.455E-06	3.230E-06	1.336E-06	7.367E-07	4.727E-07	3.329E-07	2.495E-07	1.955E-07	1.584E-07
SE	6.134E-05	1.910E-05	9.960E-06	4.980E-06	2.058E-06	1.134E-06	7.269E-07	5.116E-07	3.833E-07	3.003E-07	2.433E-07
SSE	6.469E-05	2.027E-05	1.056E-05	5.267E-06	2.164E-06	1.188E-06	7.601E-07	5.339E-07	3.993E-07	3.124E-07	2.528E-07

SECTOR	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.446E-07	7.331E-08	4.679E-08	2.598E-08	1.702E-08	1.219E-08	9.235E-09	7.279E-09	5.905E-09	4.897E-09	4.133E-09
SSW	6.997E-08	3.516E-08	2.230E-08	1.228E-08	8.005E-09	5.711E-09	4.315E-09	3.392E-09	2.746E-09	2.272E-09	1.914E-09
SW	4.726E-08	2.337E-08	1.466E-08	7.970E-09	5.156E-09	3.663E-09	2.760E-09	2.166E-09	1.751E-09	1.449E-09	1.220E-09
WSW	5.104E-08	2.551E-08	1.612E-08	8.827E-09	5.725E-09	4.069E-09	3.065E-09	2.403E-09	1.940E-09	1.602E-09	1.346E-09
W	4.950E-08	2.446E-08	1.535E-08	8.339E-09	5.393E-09	3.830E-09	2.885E-09	2.264E-09	1.831E-09	1.514E-09	1.275E-09
WNW	6.661E-08	3.300E-08	2.075E-08	1.131E-08	7.340E-09	5.227E-09	3.947E-09	3.104E-09	2.514E-09	2.083E-09	1.757E-09
NW	8.884E-08	4.440E-08	2.809E-08	1.546E-08	1.009E-08	7.221E-09	5.478E-09	4.325E-09	3.516E-09	2.924E-09	2.475E-09
NNW	1.941E-07	9.944E-08	6.394E-08	3.586E-08	2.365E-08	1.703E-08	1.297E-08	1.026E-08	8.356E-09	6.953E-09	5.887E-09
N	3.200E-07	1.666E-07	1.081E-07	6.129E-08	4.060E-08	2.929E-08	2.230E-08	1.763E-08	1.433E-08	1.190E-08	1.005E-08
NNE	1.804E-07	9.415E-08	6.118E-08	3.467E-08	2.293E-08	1.650E-08	1.253E-08	9.884E-09	8.012E-09	6.636E-09	5.590E-09
NE	9.293E-08	4.814E-08	3.114E-08	1.757E-08	1.160E-08	8.349E-09	6.346E-09	5.010E-09	4.067E-09	3.374E-09	2.847E-09
ENE	7.519E-08	3.905E-08	2.532E-08	1.433E-08	9.484E-09	6.840E-09	5.209E-09	4.120E-09	3.351E-09	2.784E-09	2.354E-09
E	9.522E-08	4.967E-08	3.228E-08	1.832E-08	1.215E-08	8.772E-09	6.683E-09	5.286E-09	4.298E-09	3.571E-09	3.017E-09
ESE	1.317E-07	6.843E-08	4.436E-08	2.509E-08	1.659E-08	1.195E-08	9.094E-09	7.184E-09	5.836E-09	4.843E-09	4.089E-09
SE	2.022E-07	1.050E-07	6.800E-08	3.842E-08	2.540E-08	1.829E-08	1.391E-08	1.099E-08	8.922E-09	7.403E-09	6.249E-09
SSE	2.099E-07	1.085E-07	7.010E-08	3.945E-08	2.600E-08	1.868E-08	1.417E-08	1.117E-08	9.050E-09	7.495E-09	6.314E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.762E-06	1.805E-06	5.625E-07	2.844E-07	1.764E-07	7.736E-08	2.662E-08	1.229E-08	7.314E-09	4.913E-09
SSW	3.933E-06	9.041E-07	2.773E-07	1.389E-07	8.562E-08	3.718E-08	1.261E-08	5.765E-09	3.410E-09	2.280E-09
SW	2.822E-06	6.461E-07	1.931E-07	9.531E-08	5.811E-08	2.481E-08	8.207E-09	3.700E-09	2.178E-09	1.454E-09
WSW	2.944E-06	6.708E-07	2.042E-07	1.018E-07	6.255E-08	2.701E-08	9.068E-09	4.109E-09	2.416E-09	1.607E-09
W	2.978E-06	6.783E-07	2.025E-07	9.988E-08	6.087E-08	2.597E-08	8.587E-09	3.869E-09	2.277E-09	1.520E-09
WNW	3.979E-06	9.085E-07	2.717E-07	1.342E-07	8.187E-08	3.502E-08	1.164E-08	5.279E-09	3.120E-09	2.090E-09
NW	5.145E-06	1.181E-06	3.571E-07	1.776E-07	1.089E-07	4.703E-08	1.588E-08	7.289E-09	4.346E-09	2.933E-09
NNW	1.010E-05	2.347E-06	7.419E-07	3.784E-07	2.362E-07	1.047E-07	3.667E-08	1.717E-08	1.031E-08	6.974E-09
N	1.534E-05	3.600E-06	1.179E-06	6.129E-07	3.873E-07	1.747E-07	6.250E-08	2.951E-08	1.771E-08	1.194E-08
NNE	8.489E-06	1.995E-06	6.597E-07	3.443E-07	2.181E-07	9.866E-08	3.534E-08	1.663E-08	9.928E-09	6.656E-09
NE	4.514E-06	1.064E-06	3.459E-07	1.789E-07	1.127E-07	5.054E-08	1.793E-08	8.415E-09	5.033E-09	3.384E-09
ENE	3.606E-06	8.519E-07	2.783E-07	1.443E-07	9.107E-08	4.098E-08	1.462E-08	6.893E-09	4.138E-09	2.793E-09
E	4.525E-06	1.061E-06	3.493E-07	1.820E-07	1.152E-07	5.206E-08	1.868E-08	8.837E-09	5.309E-09	3.581E-09
ESE	6.334E-06	1.491E-06	4.872E-07	2.527E-07	1.595E-07	7.179E-08	2.559E-08	1.205E-08	7.216E-09	4.858E-09
SE	9.777E-06	2.296E-06	7.492E-07	3.884E-07	2.450E-07	1.101E-07	3.921E-08	1.844E-08	1.104E-08	7.426E-09
SSE	1.036E-05	2.420E-06	7.838E-07	4.047E-07	2.546E-07	1.140E-07	4.028E-08	1.883E-08	1.122E-08	7.518E-09

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VENTS GROUND LEVEL RELEASES - JAN-DEC 2014
8.000 DAY DECAY, DEPLETED
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.251E-05	1.368E-05	7.145E-06	3.517E-06	1.369E-06	7.213E-07	4.465E-07	3.051E-07	2.229E-07	1.708E-07	1.356E-07
SSW	2.138E-05	6.952E-06	3.620E-06	1.774E-06	6.828E-07	3.572E-07	2.198E-07	1.495E-07	1.088E-07	8.307E-08	6.578E-08
SW	1.446E-05	4.941E-06	2.613E-06	1.281E-06	4.844E-07	2.502E-07	1.524E-07	1.028E-07	7.430E-08	5.640E-08	4.441E-08
WSW	1.552E-05	5.215E-06	2.710E-06	1.321E-06	5.056E-07	2.635E-07	1.617E-07	1.097E-07	7.966E-08	6.072E-08	4.800E-08
W	1.516E-05	5.229E-06	2.754E-06	1.346E-06	5.083E-07	2.623E-07	1.598E-07	1.077E-07	7.782E-08	5.904E-08	4.649E-08
WNW	2.062E-05	6.983E-06	3.679E-06	1.801E-06	6.811E-07	3.518E-07	2.144E-07	1.447E-07	1.046E-07	7.939E-08	6.254E-08
NW	2.676E-05	9.029E-06	4.753E-06	2.329E-06	8.868E-07	4.604E-07	2.818E-07	1.908E-07	1.383E-07	1.053E-07	8.311E-08
NNW	5.629E-05	1.791E-05	9.268E-06	4.546E-06	1.785E-06	9.473E-07	5.895E-07	4.046E-07	2.967E-07	2.280E-07	1.816E-07
N	9.168E-05	2.752E-05	1.399E-05	6.867E-06	2.770E-06	1.496E-06	9.433E-07	6.542E-07	4.838E-07	3.746E-07	3.002E-07
NNE	5.182E-05	1.529E-05	7.720E-06	3.791E-06	1.541E-06	8.361E-07	5.290E-07	3.678E-07	2.726E-07	2.114E-07	1.697E-07
NE	2.674E-05	8.041E-06	4.127E-06	2.037E-06	8.173E-07	4.397E-07	2.764E-07	1.913E-07	1.411E-07	1.091E-07	8.729E-08
ENE	2.151E-05	6.430E-06	3.294E-06	1.627E-06	6.550E-07	3.532E-07	2.224E-07	1.541E-07	1.138E-07	8.806E-08	7.052E-08
E	2.737E-05	8.144E-06	4.117E-06	2.020E-06	8.176E-07	4.427E-07	2.796E-07	1.942E-07	1.437E-07	1.114E-07	8.934E-08
ESE	3.769E-05	1.133E-05	5.781E-06	2.846E-06	1.146E-06	6.184E-07	3.895E-07	2.699E-07	1.995E-07	1.543E-07	1.236E-07
SE	5.815E-05	1.750E-05	8.919E-06	4.387E-06	1.765E-06	9.514E-07	5.990E-07	4.149E-07	3.065E-07	2.371E-07	1.898E-07
SSE	6.133E-05	1.857E-05	9.454E-06	4.640E-06	1.857E-06	9.974E-07	6.264E-07	4.330E-07	3.193E-07	2.467E-07	1.973E-07

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.107E-07	5.385E-08	3.322E-08	1.755E-08	1.109E-08	7.716E-09	5.711E-09	4.411E-09	3.514E-09	2.868E-09	2.384E-09
SSW	5.357E-08	2.582E-08	1.583E-08	8.292E-09	5.212E-09	3.615E-09	2.668E-09	2.056E-09	1.635E-09	1.332E-09	1.105E-09
SW	3.599E-08	1.702E-08	1.029E-08	5.289E-09	3.282E-09	2.254E-09	1.651E-09	1.264E-09	1.000E-09	8.115E-10	6.713E-10
WSW	3.904E-08	1.870E-08	1.142E-08	5.943E-09	3.715E-09	2.566E-09	1.888E-09	1.451E-09	1.151E-09	9.355E-10	7.752E-10
W	3.767E-08	1.779E-08	1.075E-08	5.521E-09	3.423E-09	2.349E-09	1.720E-09	1.317E-09	1.042E-09	8.446E-10	6.985E-10
WNW	5.071E-08	2.402E-08	1.454E-08	7.497E-09	4.665E-09	3.211E-09	2.357E-09	1.808E-09	1.432E-09	1.163E-09	9.633E-10
NW	6.753E-08	3.224E-08	1.964E-08	1.020E-08	6.380E-09	4.409E-09	3.246E-09	2.497E-09	1.983E-09	1.614E-09	1.339E-09
NNW	1.487E-07	7.306E-08	4.540E-08	2.423E-08	1.541E-08	1.078E-08	8.016E-09	6.213E-09	4.966E-09	4.063E-09	3.387E-09
N	2.471E-07	1.238E-07	7.797E-08	4.232E-08	2.720E-08	1.918E-08	1.434E-08	1.116E-08	8.950E-09	7.342E-09	6.132E-09
NNE	1.398E-07	7.039E-08	4.444E-08	2.419E-08	1.557E-08	1.099E-08	8.218E-09	6.398E-09	5.131E-09	4.208E-09	3.514E-09
NE	7.175E-08	3.577E-08	2.244E-08	1.212E-08	7.766E-09	5.462E-09	4.075E-09	3.167E-09	2.536E-09	2.078E-09	1.734E-09
ENE	5.800E-08	2.899E-08	1.821E-08	9.859E-09	6.326E-09	4.454E-09	3.327E-09	2.588E-09	2.074E-09	1.701E-09	1.420E-09
E	7.358E-08	3.696E-08	2.331E-08	1.267E-08	8.158E-09	5.758E-09	4.308E-09	3.356E-09	2.693E-09	2.210E-09	1.847E-09
ESE	1.017E-07	5.086E-08	3.197E-08	1.731E-08	1.111E-08	7.823E-09	5.842E-09	4.544E-09	3.641E-09	2.985E-09	2.492E-09
SE	1.561E-07	7.801E-08	4.901E-08	2.652E-08	1.701E-08	1.197E-08	8.941E-09	6.952E-09	5.570E-09	4.566E-09	3.811E-09
SSE	1.621E-07	8.072E-08	5.059E-08	2.729E-08	1.747E-08	1.228E-08	9.157E-09	7.112E-09	5.692E-09	4.662E-09	3.887E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.986E-06	1.558E-06	4.632E-07	2.265E-07	1.368E-07	5.732E-08	1.816E-08	7.812E-09	4.441E-09	2.880E-09
SSW	3.540E-06	7.806E-07	2.283E-07	1.106E-07	6.638E-08	2.754E-08	8.597E-09	3.662E-09	2.070E-09	1.338E-09
SW	2.538E-06	5.574E-07	1.587E-07	7.563E-08	4.485E-08	1.824E-08	5.508E-09	2.287E-09	1.274E-09	8.155E-10
WSW	2.649E-06	5.792E-07	1.680E-07	8.103E-08	4.845E-08	1.998E-08	6.169E-09	2.601E-09	1.461E-09	9.399E-10
W	2.678E-06	5.851E-07	1.663E-07	7.921E-08	4.694E-08	1.908E-08	5.751E-09	2.384E-09	1.327E-09	8.488E-10
WNW	3.579E-06	7.837E-07	2.232E-07	1.064E-07	6.315E-08	2.574E-08	7.804E-09	3.257E-09	1.821E-09	1.169E-09
NW	4.626E-06	1.018E-06	2.930E-07	1.407E-07	8.391E-08	3.448E-08	1.060E-08	4.469E-09	2.515E-09	1.622E-09
NNW	9.090E-06	2.026E-06	6.109E-07	3.014E-07	1.832E-07	7.757E-08	2.501E-08	1.091E-08	6.253E-09	4.080E-09
N	1.383E-05	3.114E-06	9.750E-07	4.909E-07	3.025E-07	1.308E-07	4.352E-08	1.938E-08	1.123E-08	7.370E-09
NNE	7.656E-06	1.727E-06	5.464E-07	2.765E-07	1.710E-07	7.429E-08	2.486E-08	1.110E-08	6.435E-09	4.224E-09
NE	4.068E-06	9.206E-07	2.859E-07	1.433E-07	8.799E-08	3.784E-08	1.248E-08	5.521E-09	3.186E-09	2.086E-09
ENE	3.250E-06	7.368E-07	2.300E-07	1.155E-07	7.108E-07	3.065E-08	1.015E-08	4.502E-09	2.603E-09	1.708E-09
E	4.080E-06	9.181E-07	2.889E-07	1.458E-07	9.004E-08	3.903E-08	1.303E-08	5.818E-09	3.375E-09	2.218E-09
ESE	5.709E-06	1.289E-06	4.027E-07	2.024E-07	1.246E-07	5.376E-08	1.781E-08	7.907E-09	4.571E-09	2.997E-09
SE	8.811E-06	1.986E-06	6.193E-07	3.110E-07	1.913E-07	8.248E-08	2.729E-08	1.210E-08	6.994E-09	4.584E-09
SSE	9.340E-06	2.093E-06	6.480E-07	3.241E-07	1.989E-07	8.542E-08	2.811E-08	1.242E-08	7.155E-09	4.680E-09

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VENTS GROUND LEVEL RELEASES - JAN-DEC 2014
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.062E-07	6.974E-08	3.581E-08	1.702E-08	6.115E-09	3.033E-09	1.786E-09	1.169E-09	8.228E-10	6.097E-10	4.699E-10
SSW	1.017E-07	3.440E-08	1.766E-08	8.398E-09	3.016E-09	1.496E-09	8.808E-10	5.768E-10	4.058E-10	3.008E-10	2.318E-10
SW	6.809E-08	2.302E-08	1.182E-08	5.620E-09	2.019E-09	1.001E-09	5.895E-10	3.860E-10	2.716E-10	2.013E-10	1.551E-10
WSW	6.133E-08	2.074E-08	1.065E-08	5.062E-09	1.818E-09	9.017E-10	5.310E-10	3.477E-10	2.446E-10	1.813E-10	1.397E-10
W	6.964E-08	2.355E-08	1.209E-08	5.749E-09	2.065E-09	1.024E-09	6.030E-10	3.948E-10	2.778E-10	2.059E-10	1.587E-10
WNW	9.902E-08	3.348E-08	1.719E-08	8.173E-09	2.936E-09	1.456E-09	8.573E-10	5.614E-10	3.950E-10	2.927E-10	2.256E-10
NW	1.628E-07	5.506E-08	2.827E-08	1.344E-08	4.828E-09	2.394E-09	1.410E-09	9.231E-10	6.496E-10	4.814E-10	3.710E-10
NNW	2.946E-07	9.964E-08	5.116E-08	2.432E-08	8.736E-09	4.333E-09	2.551E-09	1.670E-09	1.175E-09	8.711E-10	6.713E-10
N	3.084E-07	1.043E-07	5.354E-08	2.545E-08	9.143E-09	4.534E-09	2.670E-09	1.748E-09	1.230E-09	9.116E-10	7.025E-10
NNE	1.309E-07	4.427E-08	2.273E-08	1.081E-08	3.882E-09	1.925E-09	1.133E-09	7.422E-10	5.223E-10	3.870E-10	2.983E-10
NE	7.976E-08	2.697E-08	1.385E-08	6.584E-09	2.365E-09	1.173E-09	6.906E-10	4.522E-10	3.182E-10	2.358E-10	1.817E-10
ENE	6.185E-08	2.092E-08	1.074E-08	5.106E-09	1.834E-09	9.095E-10	5.355E-10	3.507E-10	2.467E-10	1.829E-10	1.409E-10
E	6.865E-08	2.321E-08	1.192E-08	5.667E-09	2.035E-09	1.009E-09	5.944E-10	3.892E-10	2.738E-10	2.029E-10	1.564E-10
ESE	1.216E-07	4.111E-08	2.111E-08	1.004E-08	3.605E-09	1.788E-09	1.053E-09	6.893E-10	4.850E-10	3.594E-10	2.770E-10
SE	2.184E-07	7.386E-08	3.792E-08	1.803E-08	6.476E-09	3.212E-09	1.891E-09	1.238E-09	8.713E-10	6.457E-10	4.976E-10
SSE	2.629E-07	8.892E-08	4.565E-08	2.170E-08	7.796E-09	3.866E-09	2.277E-09	1.491E-09	1.049E-09	7.774E-10	5.990E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	3.733E-10	1.658E-10	1.005E-10	5.077E-11	3.073E-11	2.060E-11	1.476E-11	1.109E-11	8.620E-12	6.885E-12	5.620E-12
SSW	1.841E-10	8.180E-11	4.955E-11	2.504E-11	1.516E-11	1.016E-11	7.283E-12	5.468E-12	4.252E-12	3.396E-12	2.772E-12
SW	1.232E-10	5.474E-11	3.316E-11	1.676E-11	1.014E-11	6.802E-12	4.874E-12	3.660E-12	2.846E-12	2.273E-12	1.855E-12
WSW	1.110E-10	4.931E-11	2.987E-11	1.510E-11	9.137E-12	6.126E-12	4.390E-12	3.296E-12	2.563E-12	2.047E-12	1.671E-12
W	1.260E-10	5.599E-11	3.392E-11	1.714E-11	1.038E-11	6.957E-12	4.985E-12	3.743E-12	2.911E-12	2.325E-12	1.898E-12
WNW	1.792E-10	7.961E-11	4.823E-11	2.438E-11	1.475E-11	9.892E-12	7.088E-12	5.322E-12	4.138E-12	3.306E-12	2.698E-12
NW	2.947E-10	1.309E-10	7.931E-11	4.009E-11	2.426E-11	1.627E-11	1.166E-11	8.752E-12	6.805E-12	5.436E-12	4.437E-12
NNW	5.333E-10	2.369E-10	1.435E-10	7.253E-11	4.390E-11	2.944E-11	2.109E-11	1.584E-11	1.231E-11	9.837E-12	8.029E-12
N	5.581E-10	2.479E-10	1.502E-10	7.591E-11	4.594E-11	3.080E-11	2.207E-11	1.657E-11	1.289E-11	1.029E-11	8.402E-12
NNE	2.369E-10	1.053E-10	6.376E-11	3.223E-11	1.951E-11	1.308E-11	9.371E-12	7.037E-12	5.471E-12	4.371E-12	3.567E-12
NE	1.444E-10	6.413E-11	3.885E-11	1.964E-11	1.188E-11	7.968E-12	5.710E-12	4.287E-12	3.333E-12	2.663E-12	2.173E-12
ENE	1.119E-10	4.973E-11	3.012E-11	1.523E-11	9.216E-12	6.179E-12	4.428E-12	3.325E-12	2.585E-12	2.065E-12	1.685E-12
E	1.242E-10	5.520E-11	3.343E-11	1.690E-11	1.023E-11	6.858E-12	4.914E-12	3.690E-12	2.869E-12	2.292E-12	1.871E-12
ESE	2.200E-10	9.775E-11	5.921E-11	2.993E-11	1.811E-11	1.215E-11	8.703E-12	6.535E-12	5.081E-12	4.059E-12	3.313E-12
SE	3.953E-10	1.756E-10	1.064E-10	5.377E-11	3.255E-11	2.182E-11	1.564E-11	1.174E-11	9.129E-12	7.292E-12	5.952E-12
SSE	4.759E-10	2.114E-10	1.281E-10	6.473E-11	3.918E-11	2.627E-11	1.882E-11	1.413E-11	1.099E-11	8.778E-12	7.165E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.500E-08	7.170E-09	1.872E-09	8.406E-10	4.755E-10	1.829E-10	5.290E-11	2.097E-11	1.120E-11	6.931E-12
SSW	1.727E-08	3.537E-09	9.232E-10	4.146E-10	2.346E-10	9.021E-11	2.610E-11	1.034E-11	5.523E-12	3.419E-12
SW	1.155E-08	2.367E-09	6.179E-10	2.775E-10	1.570E-10	6.037E-11	1.746E-11	6.922E-12	3.696E-12	2.288E-12
WSW	1.041E-08	2.132E-09	5.565E-10	2.499E-10	1.414E-10	5.438E-11	1.573E-11	6.235E-12	3.329E-12	2.061E-12
W	1.182E-08	2.421E-09	6.320E-10	2.838E-10	1.606E-10	6.175E-11	1.786E-11	7.080E-12	3.781E-12	2.340E-12
WNW	1.680E-08	3.442E-09	8.986E-10	4.036E-10	2.283E-10	8.780E-11	2.540E-11	1.007E-11	5.376E-12	3.327E-12
NW	2.763E-08	5.660E-09	1.478E-09	6.637E-10	3.754E-10	1.444E-10	4.177E-11	1.655E-11	8.840E-12	5.472E-12
NNW	5.000E-08	1.024E-08	2.674E-09	1.201E-09	6.794E-10	2.613E-10	7.558E-11	2.996E-11	1.600E-11	9.901E-12
N	5.233E-08	1.072E-08	2.798E-09	1.257E-09	7.110E-10	2.734E-10	7.910E-11	3.135E-11	1.674E-11	1.036E-11
NNE	2.222E-08	4.551E-09	1.188E-09	5.336E-10	3.019E-10	1.161E-10	3.358E-11	1.331E-11	7.108E-12	4.399E-12
NE	1.354E-08	2.773E-09	7.238E-10	3.251E-10	1.839E-10	7.072E-11	2.046E-11	8.109E-12	4.330E-12	2.680E-12
ENE	1.050E-08	2.150E-09	5.613E-10	2.521E-10	1.426E-10	5.484E-11	1.587E-11	6.288E-12	3.358E-12	2.078E-12
E	1.165E-08	2.386E-09	6.230E-10	2.798E-10	1.583E-10	6.087E-11	1.761E-11	6.979E-12	3.727E-12	2.307E-12
ESE	2.063E-08	4.226E-09	1.103E-09	4.955E-10	2.803E-10	1.078E-10	3.119E-11	1.236E-11	6.601E-12	4.085E-12
SE	3.707E-08	7.593E-09	1.982E-09	8.903E-10	5.036E-10	1.937E-10	5.603E-11	2.221E-11	1.186E-11	7.340E-12
SSE	4.462E-08	9.140E-09	2.386E-09	1.072E-09	6.063E-10	2.331E-10	6.745E-11	2.673E-11	1.428E-11	8.836E-12

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VENTS GROUND LEVEL RELEASES - JAN-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

ID	LOCATION	DIST. FROM SITE (MI)	X/Q		X/Q		D/Q (PER SQ.METER)
			(SEC/M3) NO DECAY	(SEC/M3) 2.26 DAY DECAY	(SEC/M3) 8.0 DAY DECAY	(SEC/M3) 8.0 DAY DECAY	
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	6.9E-06	6.9E-06	6.1E-06	3.0E-08
A	Site Boundary	SSW	.82	3.2E-06	3.2E-06	2.9E-06	1.4E-08
A	Site Boundary	SW	.97	1.6E-06	1.5E-06	1.4E-06	6.0E-09
A	Site Boundary	WSW	.93	1.8E-06	1.8E-06	1.6E-06	6.2E-09
A	Site Boundary	W	.91	1.9E-06	1.9E-06	1.7E-06	7.3E-09
A	Site Boundary	WNW	.94	2.4E-06	2.4E-06	2.1E-06	9.7E-09
A	Site Boundary	NW	.81	4.4E-06	4.4E-06	3.9E-06	2.3E-08
A	Site Boundary	NNW	.69	1.2E-05	1.2E-05	1.1E-05	5.9E-08
A	Site Boundary	N	.67	1.9E-05	1.8E-05	1.7E-05	6.4E-08
A	Site Boundary	NNE	.60	1.2E-05	1.2E-05	1.1E-05	3.3E-08
A	Site Boundary	NE	.62	6.1E-06	6.1E-06	5.5E-06	1.9E-08
A	Site Boundary	ENE	.59	5.4E-06	5.4E-06	4.9E-06	1.6E-08
A	Site Boundary	E	.53	8.2E-06	8.2E-06	7.5E-06	2.1E-08
A	Site Boundary	ESE	.54	1.1E-05	1.1E-05	1.0E-05	3.7E-08
A	Site Boundary	SE	.65	1.3E-05	1.2E-05	1.1E-05	4.8E-08
A	Site Boundary	SSE	.81	8.8E-06	8.7E-06	7.8E-06	3.7E-08
A	Nearest Res	SSW	3.00	1.9E-07	1.9E-07	1.5E-07	5.8E-10
A	Nearest Res	SW	1.30	7.9E-07	7.9E-07	6.8E-07	2.9E-09
A	Nearest Res	WSW	1.90	3.6E-07	3.5E-07	3.0E-07	1.0E-09
A	Nearest Res	W	1.00	1.5E-06	1.5E-06	1.3E-06	5.8E-09
A	Nearest Res	WNW	1.70	6.1E-07	6.0E-07	5.1E-07	2.2E-09
A	Nearest Res	NW	.90	3.4E-06	3.4E-06	3.0E-06	1.8E-08
A	Nearest Res	NNW	1.90	1.3E-06	1.3E-06	1.1E-06	4.9E-09
A	Nearest Res	N	2.50	1.2E-06	1.1E-06	9.4E-07	2.7E-09
A	Nearest Res	NNE	1.70	1.4E-06	1.4E-06	1.2E-06	2.9E-09
A	Nearest Res	ENE	1.70	6.0E-07	5.9E-07	5.0E-07	1.3E-09
A	Nearest Res	E	2.20	4.5E-07	4.4E-07	3.6E-07	8.0E-10
A	Nearest Res	ESE	2.80	3.9E-07	3.8E-07	3.1E-07	8.1E-10
A	Nearest Res	SE	3.00	5.3E-07	5.1E-07	4.1E-07	1.2E-09
A	Nearest Res	SSE	3.00	5.5E-07	5.3E-07	4.3E-07	1.5E-09
A	Nearest Cow	NNW	3.50	3.8E-07	3.7E-07	3.0E-07	1.2E-09
A	Nearest Garde	SSW	3.00	1.9E-07	1.9E-07	1.5E-07	5.8E-10
A	Nearest Garde	SW	1.30	7.9E-07	7.9E-07	6.8E-07	2.9E-09
A	Nearest Garde	WSW	1.90	3.6E-07	3.5E-07	3.0E-07	1.0E-09
A	Nearest Garde	W	2.80	1.6E-07	1.5E-07	1.2E-07	4.6E-10
A	Nearest Garde	WNW	1.70	6.1E-07	6.0E-07	5.1E-07	2.2E-09
A	Nearest Garde	NW	1.90	6.2E-07	6.2E-07	5.2E-07	2.7E-09
A	Nearest Garde	NNW	1.90	1.3E-06	1.3E-06	1.1E-06	4.9E-09
A	Nearest Garde	ENE	1.70	6.0E-07	5.9E-07	5.0E-07	1.3E-09
A	Nearest Garde	ESE	2.30	5.7E-07	5.6E-07	4.6E-07	1.3E-09
A	Nearest Garde	SSE	3.00	5.5E-07	5.3E-07	4.3E-07	1.5E-09

B281

Atmospheric Diffusion Estimates

Elevated Releases

January-March 2014

ERP ELEVATED STACK RELEASES - JAN-MAR 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	6.167E-09	2.580E-08	6.644E-08	1.029E-07	1.200E-07	1.054E-07	8.752E-08	7.246E-08	6.065E-08	6.765E-08	7.064E-08
SSW	1.585E-09	1.845E-08	5.584E-08	8.106E-08	8.870E-08	7.569E-08	6.178E-08	6.317E-08	6.044E-08	5.093E-08	4.356E-08
SW	1.422E-09	7.002E-09	3.863E-08	8.744E-08	1.317E-07	8.710E-08	6.160E-08	4.600E-08	3.583E-08	2.885E-08	2.384E-08
WSW	6.701E-11	6.518E-09	4.285E-08	9.753E-08	1.518E-07	9.568E-08	6.610E-08	4.873E-08	3.767E-08	3.019E-08	2.487E-08
W	2.804E-10	2.814E-08	9.809E-08	1.209E-07	1.079E-07	6.629E-08	4.500E-08	3.277E-08	2.510E-08	1.998E-08	1.637E-08
WNW	7.921E-15	3.338E-09	5.434E-08	1.114E-07	1.502E-07	9.120E-08	6.145E-08	4.616E-08	3.612E-08	2.844E-08	2.311E-08
NW	4.016E-11	8.979E-09	7.428E-08	1.687E-07	2.626E-07	1.550E-07	1.031E-07	7.579E-08	5.862E-08	4.625E-08	3.766E-08
NNW	5.112E-11	4.079E-09	4.498E-08	9.954E-08	1.429E-07	1.284E-07	1.097E-07	9.248E-08	7.927E-08	6.207E-08	5.022E-08
N	9.860E-09	2.865E-08	5.242E-08	6.733E-08	7.377E-08	6.689E-08	5.723E-08	4.768E-08	4.017E-08	3.430E-08	2.968E-08
NNE	1.110E-10	1.010E-08	2.586E-08	3.247E-08	3.485E-08	3.139E-08	2.705E-08	2.318E-08	1.999E-08	1.741E-08	1.534E-08
NE	1.887E-09	1.156E-08	2.307E-08	2.918E-08	3.173E-08	2.830E-08	2.409E-08	2.043E-08	1.747E-08	1.512E-08	1.325E-08
ENE	6.989E-16	7.008E-10	1.188E-08	2.358E-08	3.032E-08	2.738E-08	2.309E-08	1.935E-08	1.638E-08	1.405E-08	1.223E-08
E	2.156E-11	1.415E-09	8.072E-09	1.448E-08	1.839E-08	1.681E-08	1.435E-08	1.216E-08	1.040E-08	9.008E-09	7.905E-09
ESE	1.033E-09	1.042E-08	2.751E-08	3.805E-08	4.115E-08	3.536E-08	2.910E-08	2.399E-08	2.003E-08	1.698E-08	1.461E-08
SE	1.242E-09	1.447E-08	4.571E-08	6.676E-08	7.349E-08	6.317E-08	5.190E-08	4.269E-08	3.558E-08	3.012E-08	2.587E-08
SSE	2.938E-09	1.957E-08	6.572E-08	1.023E-07	1.170E-07	1.016E-07	8.381E-08	6.902E-08	5.752E-08	4.864E-08	4.174E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.189E-08	3.808E-08	2.440E-08	1.372E-08	9.361E-09	6.941E-09	5.359E-09	4.310E-09	3.590E-09	3.054E-09	2.634E-09
SSW	3.841E-08	2.289E-08	1.442E-08	7.921E-09	5.256E-09	3.804E-09	2.912E-09	2.325E-09	1.914E-09	1.613E-09	1.384E-09
SW	2.113E-08	1.342E-08	8.609E-09	4.848E-09	3.308E-09	2.452E-09	1.917E-09	1.541E-09	1.276E-09	1.082E-09	9.331E-10
WSW	2.168E-08	1.303E-08	8.779E-09	5.120E-09	3.402E-09	2.483E-09	1.922E-09	1.549E-09	1.285E-09	1.091E-09	9.426E-10
W	1.373E-08	7.313E-08	5.046E-09	3.125E-09	2.228E-09	1.636E-09	1.270E-09	1.026E-09	8.535E-10	7.260E-10	6.284E-10
WNW	1.938E-08	1.031E-08	6.755E-09	3.884E-09	2.596E-09	1.900E-09	1.474E-09	1.189E-09	9.859E-10	8.358E-10	7.213E-10
NW	3.176E-08	1.734E-08	1.165E-08	6.924E-09	4.647E-09	3.419E-09	2.696E-09	2.189E-09	1.825E-09	1.555E-09	1.349E-09
NNW	4.237E-08	2.307E-08	1.481E-08	8.365E-09	5.598E-09	4.108E-09	3.215E-09	2.614E-09	2.200E-09	1.877E-09	1.625E-09
N	2.605E-08	1.595E-08	1.257E-08	9.714E-09	8.430E-09	7.164E-09	5.649E-09	4.604E-09	3.852E-09	3.293E-09	2.863E-09
NNE	1.708E-08	2.673E-08	1.745E-08	1.011E-08	6.901E-09	5.142E-09	4.050E-09	3.312E-09	2.785E-09	2.391E-09	2.087E-09
NE	1.458E-08	2.341E-08	1.528E-08	8.860E-09	6.046E-09	4.505E-09	3.591E-09	2.960E-09	2.507E-09	2.150E-09	1.875E-09
ENE	1.290E-08	2.129E-08	1.423E-08	8.473E-09	5.872E-09	4.422E-09	3.716E-09	3.167E-09	2.666E-09	2.291E-09	2.002E-09
E	8.578E-09	1.322E-08	8.742E-09	5.131E-09	3.521E-09	2.632E-09	2.077E-09	1.701E-09	1.474E-09	1.292E-09	1.126E-09
ESE	1.448E-08	1.256E-08	8.065E-09	4.543E-09	3.029E-09	2.214E-09	1.715E-09	1.382E-09	1.148E-09	9.739E-10	8.413E-10
SE	2.251E-08	1.337E-08	9.963E-09	6.826E-09	4.915E-09	3.832E-09	3.142E-09	2.665E-09	2.228E-09	1.904E-09	1.654E-09
SSE	4.225E-08	3.763E-08	2.386E-08	1.327E-08	8.780E-09	6.387E-09	4.931E-09	3.966E-09	3.286E-09	2.785E-09	2.403E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.361E-08	1.097E-07	8.626E-08	6.669E-08	6.651E-08	3.729E-08	1.416E-08	6.954E-09	4.336E-09	3.057E-09
SSW	5.874E-08	8.122E-08	6.604E-08	5.759E-08	4.383E-08	2.257E-08	8.180E-09	3.834E-09	2.336E-09	1.617E-09
SW	5.330E-08	1.020E-07	6.216E-08	3.608E-08	2.432E-08	1.299E-08	4.999E-09	2.466E-09	1.548E-09	1.084E-09
WSW	5.908E-08	1.148E-07	6.704E-08	3.798E-08	2.526E-08	1.306E-08	5.170E-09	2.504E-09	1.555E-09	1.094E-09
W	9.269E-08	9.232E-08	4.578E-08	2.534E-08	1.646E-08	7.731E-09	3.153E-09	1.648E-09	1.030E-09	7.276E-10
WNW	6.839E-08	1.154E-07	6.327E-08	3.606E-08	2.331E-08	1.075E-08	3.949E-09	1.915E-09	1.193E-09	8.379E-10
NW	1.017E-07	1.939E-07	1.060E-07	5.882E-08	3.802E-08	1.801E-08	6.962E-09	3.457E-09	2.195E-09	1.559E-09
NNW	6.014E-08	1.268E-07	1.078E-07	7.649E-08	5.082E-08	2.369E-08	8.567E-09	4.148E-09	2.628E-09	1.879E-09
N	5.377E-08	6.928E-08	5.599E-08	4.008E-08	2.971E-08	1.669E-08	9.778E-09	6.895E-09	4.616E-09	3.299E-09
NNE	2.530E-08	3.279E-08	2.666E-08	1.992E-08	1.660E-08	2.046E-08	1.031E-08	5.174E-09	3.322E-09	2.395E-09
NE	2.323E-08	2.964E-08	2.375E-08	1.742E-08	1.430E-08	1.783E-08	9.036E-09	4.550E-09	2.968E-09	2.154E-09
ENE	1.460E-08	2.751E-08	2.274E-08	1.634E-08	1.302E-08	1.629E-08	8.596E-09	4.526E-09	3.133E-09	2.295E-09
E	9.440E-09	1.682E-08	1.413E-08	1.037E-08	8.481E-09	1.020E-08	5.218E-09	2.647E-09	1.722E-09	1.284E-09
ESE	2.840E-08	3.789E-08	2.872E-08	2.000E-08	1.526E-08	1.099E-08	4.653E-09	2.232E-09	1.388E-09	9.762E-10
SE	4.812E-08	6.741E-08	5.122E-08	3.553E-08	2.588E-08	1.389E-08	6.674E-09	3.845E-09	2.635E-09	1.908E-09
SSE	7.174E-08	1.069E-07	8.265E-08	5.742E-08	4.397E-08	3.254E-08	1.363E-08	6.443E-09	3.983E-09	2.792E-09

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ERP ELEVATED STACK RELEASES - JAN-MAR 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE											
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
SECTOR												
S	6.165E-09	2.579E-08	6.638E-08	1.027E-07	1.197E-07	1.050E-07	8.716E-08	7.209E-08	6.028E-08	6.716E-08	7.001E-08	
SSW	1.584E-09	1.844E-08	5.579E-08	8.095E-08	8.852E-08	7.548E-08	6.156E-08	6.288E-08	6.010E-08	5.059E-08	4.323E-08	
SW	1.422E-09	6.998E-09	3.858E-08	8.728E-08	1.312E-07	8.666E-08	6.120E-08	4.563E-08	3.549E-08	2.853E-08	2.354E-08	
WSW	6.698E-11	6.512E-09	4.279E-08	9.732E-08	1.512E-07	9.516E-08	6.564E-08	4.832E-08	3.729E-08	2.983E-08	2.454E-08	
W	2.803E-10	2.812E-08	9.796E-08	1.207E-07	1.076E-07	6.604E-08	4.478E-08	3.258E-08	2.493E-08	1.982E-08	1.623E-08	
WNW	7.919E-15	3.336E-09	5.428E-08	1.113E-07	1.498E-07	9.086E-08	6.116E-08	4.589E-08	3.588E-08	2.822E-08	2.291E-08	
NW	4.013E-11	8.961E-09	7.415E-08	1.684E-07	2.619E-07	1.545E-07	1.026E-07	7.537E-08	5.825E-08	4.592E-08	3.735E-08	
NNW	5.111E-11	4.077E-09	4.493E-08	9.939E-08	1.425E-07	1.279E-07	1.092E-07	9.199E-08	7.878E-08	6.163E-08	4.982E-08	
N	9.859E-09	2.864E-08	5.238E-08	6.725E-08	7.361E-08	6.670E-08	5.701E-08	4.746E-08	3.995E-08	3.409E-08	2.947E-08	
NNE	1.110E-10	1.009E-08	2.583E-08	3.243E-08	3.478E-08	3.131E-08	2.696E-08	2.309E-08	1.990E-08	1.732E-08	1.524E-08	
NE	1.887E-09	1.155E-08	2.305E-08	2.914E-08	3.166E-08	2.820E-08	2.398E-08	2.032E-08	1.736E-08	1.501E-08	1.314E-08	
ENE	6.987E-16	7.004E-10	1.187E-08	2.354E-08	3.024E-08	2.728E-08	2.299E-08	1.925E-08	1.628E-08	1.396E-08	1.214E-08	
E	2.156E-11	1.414E-09	8.063E-09	1.445E-08	1.834E-08	1.674E-08	1.428E-08	1.210E-08	1.033E-08	8.942E-09	7.839E-09	
ESE	1.033E-09	1.041E-08	2.749E-08	3.801E-08	4.108E-08	3.528E-08	2.902E-08	2.391E-08	1.996E-08	1.691E-08	1.454E-08	
SE	1.242E-09	1.446E-08	4.568E-08	6.669E-08	7.338E-08	6.304E-08	5.175E-08	4.255E-08	3.544E-08	2.998E-08	2.573E-08	
SSE	2.938E-09	1.956E-08	6.567E-08	1.022E-07	1.168E-07	1.014E-07	8.353E-08	6.874E-08	5.724E-08	4.837E-08	4.148E-08	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES FROM THE SITE											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
SECTOR												
S	6.127E-08	3.746E-08	2.387E-08	1.327E-08	8.944E-09	6.552E-09	5.000E-09	3.974E-09	3.271E-09	2.749E-09	2.343E-09	
SSW	3.808E-08	2.256E-08	1.413E-08	7.685E-09	5.044E-09	3.611E-09	2.735E-09	2.160E-09	1.759E-09	1.466E-09	1.245E-09	
SW	2.083E-08	1.313E-08	8.363E-09	4.641E-09	3.122E-09	2.281E-09	1.758E-09	1.394E-09	1.139E-09	9.514E-10	8.093E-10	
WSW	2.135E-08	1.272E-08	8.498E-09	4.871E-09	3.183E-09	2.284E-09	1.739E-09	1.378E-09	1.124E-09	9.385E-10	7.974E-10	
W	1.359E-08	7.208E-09	4.950E-09	3.035E-09	2.142E-09	1.558E-09	1.198E-09	9.581E-10	7.894E-10	6.650E-10	5.700E-10	
WNW	1.919E-08	1.016E-08	6.623E-09	3.769E-09	2.494E-09	1.807E-09	1.388E-09	1.108E-09	9.098E-10	7.637E-10	6.525E-10	
NW	3.147E-08	1.710E-08	1.144E-08	6.744E-09	4.487E-09	3.273E-09	2.559E-09	2.060E-09	1.703E-09	1.440E-09	1.238E-09	
NNW	4.199E-08	2.276E-08	1.454E-08	8.145E-09	5.403E-09	3.930E-09	3.049E-09	2.458E-09	2.051E-09	1.735E-09	1.489E-09	
N	2.585E-08	1.576E-08	1.238E-08	9.491E-09	8.162E-09	6.869E-09	5.370E-09	4.340E-09	3.601E-09	3.053E-09	2.633E-09	
NNE	1.696E-08	2.644E-08	1.719E-08	9.895E-09	6.704E-09	4.960E-09	3.878E-09	3.149E-09	2.628E-09	2.241E-09	1.942E-09	
NE	1.445E-08	2.305E-08	1.497E-08	8.586E-09	5.797E-09	4.274E-09	3.371E-09	2.749E-09	2.303E-09	1.955E-09	1.687E-09	
ENE	1.280E-08	2.097E-08	1.393E-08	8.205E-09	5.622E-09	4.187E-09	3.472E-09	2.920E-09	2.430E-09	2.064E-09	1.783E-09	
E	8.502E-09	1.306E-08	8.596E-09	5.004E-09	3.405E-09	2.524E-09	1.975E-09	1.604E-09	1.378E-09	1.198E-09	1.036E-09	
ESE	1.440E-08	1.246E-08	7.981E-09	4.472E-09	2.966E-09	2.157E-09	1.662E-09	1.333E-09	1.101E-09	9.293E-10	7.986E-10	
SE	2.238E-08	1.325E-08	9.843E-09	6.694E-09	4.784E-09	3.701E-09	3.011E-09	2.533E-09	2.103E-09	1.783E-09	1.538E-09	
SSE	4.194E-08	3.712E-08	2.343E-08	1.290E-08	8.457E-09	6.093E-09	4.659E-09	3.711E-09	3.045E-09	2.556E-09	2.184E-09	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE										
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	7.352E-08	1.094E-07	8.590E-08	6.628E-08	6.593E-08	3.671E-08	1.370E-08	6.569E-09	3.999E-09	2.753E-09	
SSW	5.867E-08	8.104E-08	6.580E-08	5.727E-08	4.350E-08	2.226E-08	7.944E-09	3.642E-09	2.171E-09	1.471E-09	
SW	5.321E-08	1.016E-07	6.176E-08	3.574E-08	2.402E-08	1.272E-08	4.793E-09	2.296E-09	1.401E-09	9.542E-10	
WSW	5.896E-08	1.143E-07	6.658E-08	3.760E-08	2.493E-08	1.276E-08	4.927E-09	2.305E-09	1.384E-09	9.413E-10	
W	9.255E-08	9.205E-08	4.557E-08	2.517E-08	1.632E-08	7.624E-09	3.064E-09	1.570E-09	9.622E-10	6.667E-10	
WNW	6.828E-08	1.150E-07	6.298E-08	3.582E-08	2.311E-08	1.060E-08	3.836E-09	1.823E-09	1.113E-09	7.658E-10	
NW	1.016E-07	1.934E-07	1.055E-07	5.844E-08	3.771E-08	1.778E-08	6.785E-09	3.311E-09	2.067E-09	1.443E-09	
NNW	6.006E-08	1.265E-07	1.073E-07	7.602E-08	5.042E-08	2.338E-08	8.349E-09	3.971E-09	2.472E-09	1.738E-09	
N	5.372E-08	6.913E-08	5.577E-08	3.986E-08	2.950E-08	1.650E-08	9.542E-09	6.614E-09	4.353E-09	3.060E-09	
NNE	2.527E-08	3.272E-08	2.657E-08	1.983E-08	1.649E-08	2.022E-08	1.010E-08	4.992E-09	3.159E-09	2.245E-09	
NE	2.320E-08	2.956E-08	2.364E-08	1.731E-08	1.418E-08	1.754E-08	8.764E-09	4.319E-09	2.757E-09	1.959E-09	
ENE	1.458E-08	2.744E-08	2.264E-08	1.624E-08	1.292E-08	1.603E-08	8.330E-09	4.284E-09	2.891E-09	2.068E-09	
E	9.426E-09	1.677E-08	1.406E-08	1.031E-08	8.411E-09	1.006E-08	5.091E-09	2.540E-09	1.624E-09	1.191E-09	
ESE	2.837E-08	3.782E-08	2.865E-08	1.993E-08	1.519E-08	1.090E-08	4.582E-09	2.175E-09	1.338E-09	9.316E-10	
SE	4.808E-08	6.730E-08	5.108E-08	3.539E-08	2.575E-08	1.376E-08	6.545E-09	3.714E-09	2.506E-09	1.787E-09	
SSE	7.167E-08	1.067E-07	8.237E-08	5.715E-08	4.369E-08	3.211E-08	1.326E-08	6.150E-09	3.728E-09	2.563E-09	

B284

ERP ELEVATED STACK RELEASES - JAN-MAR 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	6.166E-09	2.559E-08	6.595E-08	1.024E-07	1.186E-07	1.033E-07	8.507E-08	6.988E-08	5.807E-08	6.457E-08	6.729E-08
SSW	1.585E-09	1.830E-08	5.533E-08	8.054E-08	8.756E-08	7.408E-08	5.995E-08	6.089E-08	5.792E-08	4.847E-08	4.121E-08
SW	1.422E-09	6.945E-09	3.845E-08	8.724E-08	1.299E-07	8.502E-08	5.960E-08	4.417E-08	3.418E-08	2.736E-08	2.249E-08
WSW	6.700E-11	6.463E-09	4.255E-08	9.707E-08	1.496E-07	9.334E-08	6.397E-08	4.684E-08	3.600E-08	2.870E-08	2.353E-08
W	2.804E-10	2.788E-08	9.720E-08	1.193E-07	1.057E-07	6.443E-08	4.346E-08	3.149E-08	2.401E-08	1.903E-08	1.554E-08
WNW	7.920E-15	3.337E-09	5.427E-08	1.106E-07	1.480E-07	8.919E-08	5.974E-08	4.468E-08	3.483E-08	2.729E-08	2.205E-08
NW	4.016E-11	8.901E-09	7.370E-08	1.674E-07	2.585E-07	1.512E-07	9.979E-08	7.295E-08	5.618E-08	4.408E-08	3.568E-08
NNW	5.112E-11	4.054E-09	4.486E-08	9.939E-08	1.413E-07	1.257E-07	1.067E-07	8.951E-08	7.647E-08	5.950E-08	4.783E-08
N	9.860E-09	2.840E-08	5.178E-08	6.673E-08	7.278E-08	6.556E-08	5.572E-08	4.614E-08	3.865E-08	3.284E-08	2.828E-08
NNE	1.110E-10	1.001E-08	2.550E-08	3.209E-08	3.434E-08	3.078E-08	2.641E-08	2.254E-08	1.937E-08	1.682E-08	1.477E-08
NE	1.887E-09	1.146E-08	2.277E-08	2.888E-08	3.128E-08	2.773E-08	2.346E-08	1.979E-08	1.684E-08	1.451E-08	1.267E-08
ENE	6.988E-16	7.007E-10	1.188E-08	2.357E-08	3.003E-08	2.687E-08	2.247E-08	1.869E-08	1.571E-08	1.340E-08	1.160E-08
E	2.156E-11	1.405E-09	8.036E-09	1.444E-08	1.820E-08	1.649E-08	1.397E-08	1.176E-08	9.998E-09	8.613E-09	7.522E-09
ESE	1.033E-09	1.033E-08	2.724E-08	3.778E-08	4.062E-08	3.464E-08	2.830E-08	2.316E-08	1.922E-08	1.620E-08	1.386E-08
SE	1.242E-09	1.436E-08	4.533E-08	6.638E-08	7.260E-08	6.190E-08	5.045E-08	4.120E-08	3.411E-08	2.869E-08	2.450E-08
SSE	2.938E-09	1.942E-08	6.529E-08	1.019E-07	1.157E-07	9.963E-08	8.147E-08	6.657E-08	5.508E-08	4.627E-08	3.946E-08

SECTOR	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.870E-08	3.533E-08	2.192E-08	1.158E-08	7.404E-09	5.186E-09	3.804E-09	2.921E-09	2.339E-09	1.927E-09	1.614E-09
SSW	3.616E-08	2.099E-08	1.280E-08	6.632E-09	4.145E-09	2.873E-09	2.119E-09	1.635E-09	1.305E-09	1.068E-09	8.917E-10
SW	1.986E-08	1.238E-08	7.684E-09	4.058E-09	2.587E-09	1.809E-09	1.356E-09	1.052E-09	8.429E-10	6.926E-10	5.803E-10
WSW	2.045E-08	1.200E-08	7.836E-09	4.323E-09	2.739E-09	1.919E-09	1.431E-09	1.115E-09	8.967E-10	7.391E-10	6.211E-10
W	1.299E-08	6.824E-09	4.636E-09	2.706E-09	1.817E-09	1.283E-09	9.617E-10	7.528E-10	6.083E-10	5.036E-10	4.250E-10
WNW	1.839E-08	9.468E-09	5.992E-09	3.213E-09	1.987E-09	1.371E-09	1.020E-09	7.937E-10	6.371E-10	5.239E-10	4.394E-10
NW	2.991E-08	1.583E-08	1.030E-08	5.753E-09	3.650E-09	2.560E-09	1.944E-09	1.527E-09	1.235E-09	1.023E-09	8.635E-10
NNW	4.010E-08	2.115E-08	1.312E-08	6.939E-09	4.319E-09	2.979E-09	2.211E-09	1.721E-09	1.398E-09	1.156E-09	9.720E-10
N	2.472E-08	1.489E-08	1.166E-08	8.994E-09	7.666E-09	6.238E-09	4.771E-09	3.782E-09	3.085E-09	2.575E-09	2.190E-09
NNE	1.648E-08	2.583E-08	1.628E-08	8.889E-09	5.742E-09	4.086E-09	3.090E-09	2.437E-09	1.982E-09	1.650E-09	1.399E-09
NE	1.396E-08	2.251E-08	1.419E-08	7.732E-09	4.973E-09	3.525E-09	2.693E-09	2.146E-09	1.763E-09	1.470E-09	1.249E-09
ENE	1.223E-08	2.044E-08	1.321E-08	7.337E-09	4.692E-09	3.301E-09	2.609E-09	2.120E-09	1.718E-09	1.426E-09	1.205E-09
E	8.173E-09	1.272E-08	8.129E-09	4.452E-09	2.821E-09	1.971E-09	1.466E-09	1.138E-09	9.390E-10	7.885E-10	6.634E-10
ESE	1.371E-08	1.180E-08	7.340E-09	3.890E-09	2.429E-09	1.679E-09	1.239E-09	9.556E-10	7.619E-10	6.229E-10	5.195E-10
SE	2.121E-08	1.233E-08	9.086E-09	6.147E-09	4.378E-09	3.389E-09	2.766E-09	2.327E-09	1.900E-09	1.588E-09	1.351E-09
SSE	3.982E-08	3.504E-08	2.145E-08	1.120E-08	6.996E-09	4.843E-09	3.579E-09	2.766E-09	2.210E-09	1.811E-09	1.514E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	7.320E-08	1.082E-07	8.385E-08	6.392E-08	6.330E-08	3.456E-08	1.202E-08	5.225E-09	2.952E-09	1.933E-09
SSW	5.831E-08	8.001E-08	6.409E-08	5.517E-08	4.149E-08	2.072E-08	6.898E-09	2.911E-09	1.647E-09	1.073E-09
SW	5.313E-08	1.005E-07	6.021E-08	3.444E-08	2.296E-08	1.195E-08	4.210E-09	1.835E-09	1.059E-09	6.955E-10
WSW	5.876E-08	1.129E-07	6.495E-08	3.632E-08	2.392E-08	1.203E-08	4.400E-09	1.943E-09	1.122E-09	7.421E-10
W	9.160E-08	9.036E-08	4.426E-08	2.425E-08	1.563E-08	7.221E-09	2.740E-09	1.297E-09	7.574E-10	5.055E-10
WNW	6.798E-08	1.135E-07	6.157E-08	3.477E-08	2.225E-08	9.905E-09	3.286E-09	1.395E-09	7.987E-10	5.261E-10
NW	1.010E-07	1.906E-07	1.028E-07	5.636E-08	3.603E-08	1.650E-08	5.828E-09	2.604E-09	1.535E-09	1.026E-09
NNW	6.003E-08	1.250E-07	1.049E-07	7.373E-08	4.843E-08	2.180E-08	7.149E-09	3.029E-09	1.738E-09	1.160E-09
N	5.323E-08	6.823E-08	5.451E-08	3.858E-08	2.831E-08	1.564E-08	8.995E-09	6.032E-09	3.799E-09	2.583E-09
NNE	2.499E-08	3.226E-08	2.603E-08	1.930E-08	1.601E-08	1.951E-08	9.133E-09	4.129E-09	2.450E-09	1.656E-09
NE	2.297E-08	2.917E-08	2.313E-08	1.680E-08	1.369E-08	1.691E-08	7.941E-09	3.578E-09	2.156E-09	1.475E-09
ENE	1.459E-08	2.719E-08	2.213E-08	1.568E-08	1.237E-08	1.540E-08	7.467E-09	3.395E-09	2.107E-09	1.431E-09
E	9.407E-09	1.660E-08	1.376E-08	9.975E-09	8.086E-09	9.667E-09	4.544E-09	1.996E-09	1.156E-09	7.868E-10
ESE	2.817E-08	3.733E-08	2.793E-08	1.920E-08	1.450E-08	1.024E-08	4.007E-09	1.703E-09	9.627E-10	6.258E-10
SE	4.780E-08	6.646E-08	4.981E-08	3.407E-08	2.452E-08	1.286E-08	6.014E-09	3.404E-09	2.290E-09	1.593E-09
SSE	7.138E-08	1.055E-07	8.035E-08	5.501E-08	4.161E-08	3.006E-08	1.161E-08	4.912E-09	2.787E-09	1.819E-09

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ERP ELEVATED STACK RELEASES - JAN-MAR 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES											
	25	50	75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	
S	2.051E-09	2.699E-09	3.820E-09	3.515E-09	2.075E-09	1.367E-09	9.577E-10	7.006E-10	5.296E-10	4.128E-10	3.950E-10	
SSW	2.273E-09	2.660E-09	3.462E-09	3.080E-09	1.786E-09	1.170E-09	8.175E-10	5.972E-10	5.666E-10	4.281E-10	3.350E-10	
SW	5.837E-10	7.574E-10	1.062E-09	9.738E-10	1.091E-09	5.936E-10	3.675E-10	2.493E-10	1.801E-10	1.362E-10	1.066E-10	
WSW	5.690E-10	6.691E-10	8.739E-10	1.504E-09	8.579E-10	4.652E-10	2.874E-10	1.948E-10	1.406E-10	1.062E-10	8.312E-11	
W	2.905E-10	1.893E-09	1.720E-09	1.121E-09	5.199E-10	2.821E-10	1.743E-10	1.181E-10	8.527E-11	6.444E-11	5.042E-11	
WNW	3.883E-11	2.330E-10	1.700E-09	1.343E-09	8.296E-10	4.197E-10	2.502E-10	1.674E-10	1.263E-10	9.788E-11	8.027E-11	
NW	5.931E-10	8.137E-10	1.182E-09	2.657E-09	1.739E-09	8.660E-10	5.113E-10	3.387E-10	2.443E-10	1.883E-10	1.534E-10	
NNW	6.399E-10	1.095E-09	1.781E-09	1.718E-09	2.011E-09	1.095E-09	6.831E-10	5.504E-10	3.917E-10	2.964E-10	2.362E-10	
N	4.315E-09	3.931E-09	3.964E-09	3.095E-09	1.658E-09	1.056E-09	7.281E-10	5.283E-10	3.977E-10	3.079E-10	2.438E-10	
NNE	1.110E-09	1.169E-09	1.389E-09	1.186E-09	6.719E-10	4.366E-10	3.039E-10	2.216E-10	1.672E-10	1.296E-10	1.026E-10	
NE	1.361E-09	1.307E-09	1.407E-09	1.141E-09	6.268E-10	4.029E-10	2.790E-10	2.029E-10	1.529E-10	1.184E-10	9.377E-11	
ENE	6.160E-11	3.695E-10	7.869E-10	8.150E-10	5.091E-10	3.414E-10	2.411E-10	1.771E-10	1.341E-10	1.041E-10	8.246E-11	
E	2.918E-10	3.787E-10	5.310E-10	4.869E-10	2.869E-10	1.889E-10	1.323E-10	9.679E-11	7.315E-11	5.673E-11	4.492E-11	
ESE	1.664E-09	1.750E-09	2.074E-09	1.770E-09	1.002E-09	6.512E-10	4.532E-10	3.305E-10	2.494E-10	1.933E-10	1.530E-10	
SE	2.023E-09	2.531E-09	3.461E-09	3.143E-09	1.843E-09	1.211E-09	8.476E-10	6.198E-10	4.683E-10	3.632E-10	2.876E-10	
SSE	2.375E-09	3.271E-09	4.762E-09	4.427E-09	2.628E-09	1.734E-09	1.216E-09	8.898E-10	6.727E-10	5.218E-10	4.132E-10	

DIRECTION FROM SITE	DISTANCES IN MILES											
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	
S	3.176E-10	1.737E-10	1.096E-10	5.889E-11	3.651E-11	3.195E-11	2.275E-11	1.697E-11	1.332E-11	1.059E-11	8.647E-12	
SSW	2.693E-10	1.357E-10	8.305E-11	4.325E-11	3.514E-11	2.446E-11	1.753E-11	1.316E-11	1.023E-11	8.176E-12	6.673E-12	
SW	8.600E-11	4.928E-11	3.160E-11	1.725E-11	1.075E-11	8.554E-12	6.449E-12	4.842E-12	3.765E-12	3.007E-12	2.455E-12	
WSW	6.683E-11	4.219E-11	2.793E-11	1.821E-11	1.102E-11	7.390E-12	5.415E-12	4.066E-12	3.162E-12	2.526E-12	2.061E-12	
W	4.054E-11	1.816E-11	2.368E-11	1.414E-11	8.953E-12	6.057E-12	4.340E-12	3.259E-12	2.534E-12	2.024E-12	1.652E-12	
WNW	6.999E-11	4.249E-11	3.041E-11	1.829E-11	1.175E-11	7.715E-12	5.494E-12	4.126E-12	3.208E-12	2.562E-12	2.092E-12	
NW	1.313E-10	7.713E-11	5.434E-11	3.342E-11	2.039E-11	1.368E-11	1.001E-11	7.527E-12	5.863E-12	4.683E-12	3.822E-12	
NNW	1.976E-10	1.073E-10	7.249E-11	4.154E-11	2.613E-11	1.740E-11	1.308E-11	1.038E-11	8.164E-12	6.522E-12	5.324E-12	
N	1.966E-10	9.346E-11	5.721E-11	3.037E-11	6.114E-11	3.904E-11	2.792E-11	2.097E-11	1.630E-11	1.302E-11	1.063E-11	
NNE	8.272E-11	1.578E-10	9.741E-11	5.038E-11	3.074E-11	2.060E-11	1.474E-11	1.105E-11	8.575E-12	6.842E-12	5.578E-12	
NE	7.561E-11	1.308E-10	8.053E-11	4.155E-11	2.532E-11	1.697E-11	1.221E-11	9.071E-12	7.054E-12	5.655E-12	4.615E-12	
ENE	6.641E-11	8.085E-11	5.927E-11	3.631E-11	2.317E-11	1.534E-11	1.076E-11	7.519E-12	5.847E-12	4.672E-12	3.816E-12	
E	3.620E-11	5.269E-11	3.976E-11	2.491E-11	1.599E-11	1.059E-11	7.418E-12	5.423E-12	4.123E-12	3.096E-12	2.520E-12	
ESE	1.234E-10	1.043E-10	7.102E-11	4.105E-11	2.594E-11	1.733E-11	1.231E-11	9.149E-12	7.057E-12	5.611E-12	4.565E-12	
SE	2.317E-10	1.099E-10	6.708E-11	3.538E-11	2.162E-11	1.487E-11	1.107E-11	1.821E-11	1.403E-11	1.115E-11	9.066E-12	
SSE	3.329E-10	3.109E-10	1.910E-10	9.819E-11	5.974E-11	4.000E-11	2.860E-11	2.143E-11	1.663E-11	1.326E-11	1.081E-11	

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.435E-09	2.080E-09	9.640E-10	5.340E-10	3.716E-10	1.772E-10	6.021E-11	2.949E-11	1.723E-11	1.068E-11
SSW	3.114E-09	1.800E-09	8.234E-10	5.226E-10	3.383E-10	1.420E-10	4.849E-11	2.454E-11	1.330E-11	8.229E-12
SW	9.552E-10	8.440E-10	3.805E-10	1.832E-10	1.077E-10	4.958E-11	1.755E-11	8.296E-12	4.891E-12	3.027E-12
WSW	1.109E-09	8.270E-10	2.977E-10	1.430E-10	8.394E-11	4.132E-11	1.717E-11	7.568E-12	4.107E-12	2.542E-12
W	1.492E-09	5.478E-10	1.806E-10	8.672E-11	5.091E-11	2.559E-11	1.395E-11	6.142E-12	3.291E-12	2.037E-12
WNW	1.215E-09	7.616E-10	2.623E-10	1.272E-10	8.168E-11	4.323E-11	1.808E-11	7.904E-12	4.167E-12	2.579E-12
NW	1.755E-09	1.555E-09	5.368E-10	2.499E-10	1.556E-10	7.904E-11	3.228E-11	1.400E-11	7.604E-12	4.714E-12
NNW	1.600E-09	1.539E-09	7.400E-10	4.007E-10	2.397E-10	1.119E-10	4.157E-11	1.800E-11	1.031E-11	6.565E-12
N	3.570E-09	1.710E-09	7.357E-10	4.008E-10	2.453E-10	1.003E-10	5.001E-11	4.048E-11	2.118E-11	1.311E-11
NNE	1.250E-09	6.815E-10	3.064E-10	1.684E-10	1.032E-10	1.143E-10	5.210E-11	2.096E-11	1.116E-11	6.888E-12
NE	1.266E-09	6.416E-10	2.816E-10	1.540E-10	9.435E-11	6.618E-11	4.300E-11	1.729E-11	9.199E-12	5.684E-12
ENE	7.066E-10	5.025E-10	2.422E-10	1.350E-10	8.293E-11	6.805E-11	3.557E-11	1.560E-11	7.809E-12	4.703E-12
E	4.776E-10	2.878E-10	1.332E-10	7.365E-11	4.519E-11	4.328E-11	2.425E-11	1.076E-11	5.498E-12	3.187E-12
ESE	1.867E-09	1.017E-09	4.569E-10	2.512E-10	1.540E-10	9.374E-11	4.099E-11	1.762E-11	9.255E-12	5.652E-12
SE	3.113E-09	1.851E-09	8.534E-10	4.715E-10	2.893E-10	1.179E-10	3.631E-11	1.515E-11	1.458E-11	1.123E-11
SSE	4.281E-09	2.630E-09	1.224E-09	6.772E-10	4.156E-10	2.625E-10	1.017E-10	4.071E-11	2.165E-11	1.335E-11

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ERP ELEVATED STACK RELEASES - JAN-MAR 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE TYPE	ID	DIRECTION	DIST. FROM SITE (MI)	X/Q			D/Q (PER SQ.METER)
				(SEC/M3) NO DECAY	(SEC/M3) 2.26 DAY DECAY	(SEC/M3) 8.0 DAY DECAY	
				UNDEPLETED	UNDEPLETED	DEPLETED	
A Site Boundary	S	.80	7.5E-08	7.5E-08	7.5E-08	3.9E-09	
A Site Boundary	SSW	.82	6.5E-08	6.5E-08	6.5E-08	3.4E-09	
A Site Boundary	SW	.97	8.3E-08	8.3E-08	8.3E-08	1.0E-09	
A Site Boundary	WSW	.93	8.2E-08	8.2E-08	8.2E-08	1.0E-09	
A Site Boundary	W	.91	1.2E-07	1.2E-07	1.2E-07	1.3E-09	
A Site Boundary	WNW	.94	9.9E-08	9.9E-08	9.8E-08	1.5E-09	
A Site Boundary	NW	.81	9.8E-08	9.8E-08	9.8E-08	1.2E-09	
A Site Boundary	NNW	.69	2.9E-08	2.9E-08	2.9E-08	1.6E-09	
A Site Boundary	N	.67	4.3E-08	4.3E-08	4.3E-08	3.9E-09	
A Site Boundary	NNE	.60	1.6E-08	1.6E-08	1.6E-08	1.2E-09	
A Site Boundary	NE	.62	1.7E-08	1.7E-08	1.6E-08	1.3E-09	
A Site Boundary	ENE	.59	2.9E-09	2.9E-09	2.9E-09	5.1E-10	
A Site Boundary	E	.53	1.7E-09	1.7E-09	1.7E-09	3.9E-10	
A Site Boundary	ESE	.54	1.2E-08	1.2E-08	1.2E-08	1.8E-09	
A Site Boundary	SE	.65	3.1E-08	3.0E-08	3.0E-08	3.1E-09	
A Site Boundary	SSE	.81	7.7E-08	7.7E-08	7.7E-08	4.8E-09	
A Nearest Res	SSW	3.00	6.3E-08	6.3E-08	6.1E-08	6.0E-10	
A Nearest Res	SW	1.30	1.2E-07	1.2E-07	1.2E-07	1.5E-09	
A Nearest Res	WSW	1.90	1.0E-07	1.0E-07	1.0E-07	5.2E-10	
A Nearest Res	W	1.00	1.2E-07	1.2E-07	1.2E-07	1.1E-09	
A Nearest Res	WNW	1.70	1.2E-07	1.2E-07	1.2E-07	6.2E-10	
A Nearest Res	NW	.90	1.3E-07	1.3E-07	1.3E-07	2.7E-09	
A Nearest Res	NNW	1.90	1.3E-07	1.3E-07	1.3E-07	1.2E-09	
A Nearest Res	N	2.50	5.7E-08	5.7E-08	5.6E-08	7.3E-10	
A Nearest Res	NNE	1.70	3.4E-08	3.4E-08	3.3E-08	5.6E-10	
A Nearest Res	ENE	1.70	3.0E-08	3.0E-08	2.9E-08	4.3E-10	
A Nearest Res	E	2.20	1.6E-08	1.6E-08	1.5E-08	1.6E-10	
A Nearest Res	ESE	2.80	2.6E-08	2.6E-08	2.5E-08	3.7E-10	
A Nearest Res	SE	3.00	4.3E-08	4.3E-08	4.1E-08	6.2E-10	
A Nearest Res	SSE	3.00	6.9E-08	6.9E-08	6.7E-08	8.9E-10	
A Nearest Cow	NNW	3.50	7.9E-08	7.9E-08	7.6E-08	3.9E-10	
A Nearest Garde	SSW	3.00	6.3E-08	6.3E-08	6.1E-08	6.0E-10	
A Nearest Garde	SW	1.30	1.2E-07	1.2E-07	1.2E-07	1.5E-09	
A Nearest Garde	WSW	1.90	1.0E-07	1.0E-07	1.0E-07	5.2E-10	
A Nearest Garde	W	2.80	3.7E-08	3.7E-08	3.6E-08	1.4E-10	
A Nearest Garde	WNW	1.70	1.2E-07	1.2E-07	1.2E-07	6.2E-10	
A Nearest Garde	NW	1.90	1.7E-07	1.7E-07	1.7E-07	9.8E-10	
A Nearest Garde	NNW	1.90	1.3E-07	1.3E-07	1.3E-07	1.2E-09	
A Nearest Garde	ENE	1.70	3.0E-08	3.0E-08	2.9E-08	4.3E-10	
A Nearest Garde	ESE	2.30	3.1E-08	3.1E-08	3.1E-08	5.2E-10	
A Nearest Garde	SSE	3.00	6.9E-08	6.9E-08	6.7E-08	8.9E-10	
A MAXIMUM CHI/Q	S	1.50	1.2E-07	1.2E-07	1.2E-07	2.1E-09	
A MAXIMUM CHI/Q	SSW	1.50	8.9E-08	8.9E-08	8.8E-08	1.8E-09	
A MAXIMUM CHI/Q	SW	1.50	1.3E-07	1.3E-07	1.3E-07	1.1E-09	
A MAXIMUM CHI/Q	WSW	1.50	1.5E-07	1.5E-07	1.5E-07	8.6E-10	
A MAXIMUM CHI/Q	W	1.00	1.2E-07	1.2E-07	1.2E-07	1.1E-09	
A MAXIMUM CHI/Q	WNW	1.50	1.5E-07	1.5E-07	1.5E-07	8.3E-10	
A MAXIMUM CHI/Q	NW	1.50	2.6E-07	2.6E-07	2.6E-07	1.7E-09	
A MAXIMUM CHI/Q	NNW	1.50	1.4E-07	1.4E-07	1.4E-07	2.0E-09	
A MAXIMUM CHI/Q	N	1.50	7.4E-08	7.4E-08	7.3E-08	1.7E-09	
A MAXIMUM CHI/Q	NNE	1.50	3.5E-08	3.5E-08	3.4E-08	6.7E-10	
A MAXIMUM CHI/Q	NE	1.50	3.2E-08	3.2E-08	3.1E-08	6.3E-10	
A MAXIMUM CHI/Q	ENE	1.50	3.0E-08	3.0E-08	3.0E-08	5.1E-10	
A MAXIMUM CHI/Q	E	1.50	1.8E-08	1.8E-08	1.8E-08	2.9E-10	
A MAXIMUM CHI/Q	ESE	1.50	4.1E-08	4.1E-08	4.1E-08	1.0E-09	
A MAXIMUM CHI/Q	SE	1.50	7.3E-08	7.3E-08	7.3E-08	1.8E-09	
A MAXIMUM CHI/Q	SSE	1.50	1.2E-07	1.2E-07	1.2E-07	2.6E-09	

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Atmospheric Diffusion Estimates

Elevated Releases

April-June 2014

ERP ELEVATED STACK RELEASES - APR-JUN 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.187E-09	2.189E-08	4.214E-08	5.253E-08	5.701E-08	5.095E-08	4.343E-08	3.685E-08	3.152E-08	3.849E-08	4.451E-08
SSW	5.476E-09	3.259E-08	4.817E-08	5.000E-08	4.719E-08	3.988E-08	3.293E-08	3.548E-08	3.674E-08	3.234E-08	2.888E-08
SW	2.785E-09	3.264E-08	7.999E-08	1.140E-07	1.475E-07	9.742E-08	6.948E-08	5.248E-08	4.137E-08	3.369E-08	2.814E-08
WSW	1.151E-09	1.077E-08	5.725E-08	1.269E-07	2.008E-07	1.279E-07	8.929E-08	6.649E-08	5.186E-08	4.189E-08	3.476E-08
W	9.774E-10	5.310E-08	1.781E-07	2.211E-07	2.094E-07	1.330E-07	9.252E-08	6.866E-08	5.338E-08	4.299E-08	3.558E-08
WNW	6.191E-10	3.840E-08	1.753E-07	2.836E-07	3.138E-07	1.863E-07	1.239E-07	9.188E-08	7.134E-08	5.597E-08	4.533E-08
NW	6.390E-09	4.450E-08	1.330E-07	2.597E-07	4.334E-07	2.551E-07	1.690E-07	1.235E-07	9.488E-08	7.464E-08	6.062E-08
NNW	1.719E-08	1.009E-07	1.682E-07	1.969E-07	2.336E-07	2.149E-07	1.889E-07	1.619E-07	1.402E-07	1.100E-07	8.923E-08
N	1.822E-08	1.023E-07	1.335E-07	1.193E-07	9.867E-08	8.280E-08	6.922E-08	5.733E-08	4.829E-08	4.134E-08	3.591E-08
NNE	2.162E-09	2.502E-08	4.358E-08	4.718E-08	4.533E-08	3.841E-08	3.169E-08	2.627E-08	2.207E-08	1.862E-08	1.628E-08
NE	5.845E-11	3.867E-09	1.543E-08	2.502E-08	2.995E-08	2.664E-08	2.229E-08	1.854E-08	1.557E-08	1.326E-08	1.144E-08
ENE	3.425E-11	2.843E-09	1.210E-08	1.960E-08	2.330E-08	2.066E-08	1.725E-08	1.434E-08	1.203E-08	1.023E-08	8.820E-09
E	9.772E-11	6.758E-09	1.702E-08	2.186E-08	2.282E-08	1.954E-08	1.613E-08	1.338E-08	1.125E-08	9.615E-09	8.343E-09
ESE	7.619E-11	9.721E-09	2.677E-08	3.247E-08	3.234E-08	2.762E-08	2.291E-08	1.910E-08	1.612E-08	1.380E-08	1.198E-08
SE	2.487E-09	1.095E-08	2.998E-08	4.510E-08	5.054E-08	4.359E-08	3.585E-08	2.951E-08	2.462E-08	2.085E-08	1.792E-08
SSE	1.032E-08	6.928E-08	1.022E-07	1.003E-07	8.722E-08	7.063E-08	5.682E-08	4.634E-08	3.849E-08	3.255E-08	2.797E-08

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.024E-08	2.759E-08	1.800E-08	1.037E-08	7.262E-09	5.483E-09	4.273E-09	3.463E-09	2.910E-09	2.493E-09	2.161E-09
SSW	2.694E-08	2.065E-08	1.340E-08	7.680E-09	5.413E-09	4.046E-09	3.151E-09	2.554E-09	2.131E-09	1.817E-09	1.576E-09
SW	2.581E-08	1.938E-08	1.274E-08	7.421E-09	5.315E-09	4.077E-09	3.282E-09	2.669E-09	2.233E-09	1.909E-09	1.660E-09
WSW	3.078E-08	1.989E-08	1.393E-08	8.458E-09	5.683E-09	4.184E-09	3.263E-09	2.645E-09	2.208E-09	1.883E-09	1.634E-09
W	3.009E-08	1.649E-08	1.170E-08	7.417E-09	5.325E-09	3.928E-09	3.058E-09	2.477E-09	2.065E-09	1.760E-09	1.526E-09
WNW	3.791E-08	2.003E-08	1.308E-08	7.516E-09	5.021E-09	3.674E-09	2.853E-09	2.301E-09	1.907E-09	1.616E-09	1.394E-09
NW	5.087E-08	2.720E-08	1.795E-08	1.041E-08	6.958E-09	5.100E-09	3.987E-09	3.227E-09	2.684E-09	2.282E-09	1.975E-09
NNW	7.552E-08	4.170E-08	2.693E-08	1.537E-08	1.038E-08	7.667E-09	6.039E-09	4.937E-09	4.179E-09	3.586E-09	3.113E-09
N	3.168E-08	1.986E-08	1.626E-08	1.294E-08	1.100E-08	9.212E-09	7.272E-09	5.937E-09	4.969E-09	4.250E-09	3.697E-09
NNE	1.708E-08	2.146E-08	1.386E-08	7.914E-09	5.349E-09	3.956E-09	3.096E-09	2.520E-09	2.109E-09	1.804E-09	1.569E-09
NE	1.179E-08	1.473E-08	9.524E-09	5.444E-09	3.678E-09	2.720E-09	2.153E-09	1.765E-09	1.486E-09	1.270E-09	1.104E-09
ENE	8.854E-09	1.023E-08	6.714E-09	3.906E-09	2.666E-09	1.986E-09	1.641E-09	1.382E-09	1.157E-09	9.901E-10	8.617E-10
E	8.713E-09	1.242E-08	8.214E-09	4.826E-09	3.316E-09	2.481E-09	1.959E-09	1.606E-09	1.399E-09	1.232E-09	1.074E-09
ESE	1.216E-08	1.217E-08	7.929E-09	4.557E-09	3.085E-09	2.280E-09	1.782E-09	1.448E-09	1.210E-09	1.033E-09	8.966E-10
SE	1.560E-08	9.289E-09	6.940E-09	4.770E-09	3.441E-09	2.689E-09	2.211E-09	1.881E-09	1.574E-09	1.345E-09	1.170E-09
SSE	2.885E-08	2.964E-08	1.893E-08	1.065E-08	7.120E-09	5.223E-09	4.060E-09	3.285E-09	2.736E-09	2.329E-09	2.018E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.226E-08	5.332E-08	4.280E-08	3.570E-08	4.115E-08	2.614E-08	1.068E-08	5.473E-09	3.484E-09	2.494E-09
SSW	4.552E-08	4.457E-08	3.581E-08	3.471E-08	2.919E-08	1.882E-08	7.943E-09	4.053E-09	2.564E-09	1.821E-09
SW	8.457E-08	1.178E-07	7.013E-08	4.162E-08	2.892E-08	1.786E-08	7.666E-09	4.089E-09	2.678E-09	1.913E-09
WSW	7.786E-08	1.519E-07	9.045E-08	5.224E-08	3.540E-08	1.966E-08	8.441E-09	4.215E-09	2.655E-09	1.887E-09
W	1.694E-07	1.780E-07	9.376E-08	5.379E-08	3.574E-08	1.738E-08	7.438E-09	3.952E-09	2.486E-09	1.764E-09
WNW	1.930E-07	2.504E-07	1.277E-07	7.135E-08	4.574E-08	2.091E-08	7.643E-09	3.705E-09	2.309E-09	1.620E-09
NW	1.696E-07	3.155E-07	1.738E-07	9.534E-08	6.116E-08	2.835E-08	1.055E-08	5.150E-09	3.237E-09	2.288E-09
NNW	1.660E-07	2.171E-07	1.850E-07	1.349E-07	9.031E-08	4.265E-08	1.572E-08	7.738E-09	4.963E-09	3.587E-09
N	1.203E-07	9.620E-08	6.808E-08	4.823E-08	3.595E-08	2.089E-08	1.282E-08	8.914E-09	5.950E-09	4.258E-09
NNE	4.106E-08	4.266E-08	3.131E-08	2.203E-08	1.733E-08	1.711E-08	8.095E-09	3.983E-09	2.528E-09	1.807E-09
NE	1.713E-08	2.739E-08	2.195E-08	1.554E-08	1.210E-08	1.176E-08	5.566E-09	2.749E-09	1.770E-09	1.273E-09
ENE	1.338E-08	2.130E-08	1.699E-08	1.200E-08	9.250E-09	8.361E-09	3.979E-09	2.029E-09	1.370E-09	9.921E-10
E	1.689E-08	2.115E-08	1.594E-08	1.124E-08	8.857E-09	9.727E-09	4.908E-09	2.495E-09	1.628E-09	1.223E-09
ESE	2.552E-08	3.027E-08	2.264E-08	1.609E-08	1.259E-08	1.028E-08	4.652E-09	2.296E-09	1.453E-09	1.035E-09
SE	3.247E-08	4.624E-08	3.538E-08	2.458E-08	1.793E-08	9.648E-09	4.662E-09	2.698E-09	1.858E-09	1.348E-09
SSE	9.405E-08	8.275E-08	5.631E-08	3.847E-08	2.965E-08	2.470E-08	1.092E-08	5.264E-09	3.297E-09	2.334E-09

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ERP ELEVATED STACK RELEASES - APR-JUN 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.186E-09	2.186E-08	4.206E-08	5.240E-08	5.680E-08	5.070E-08	4.316E-08	3.656E-08	3.123E-08	3.807E-08	4.394E-08											
SSW	5.475E-09	3.258E-08	4.813E-08	4.993E-08	4.708E-08	3.973E-08	3.278E-08	3.527E-08	3.647E-08	3.205E-08	2.858E-08											
SW	2.785E-09	3.262E-08	7.991E-08	1.138E-07	1.472E-07	9.710E-08	6.918E-08	5.220E-08	4.111E-08	3.344E-08	2.791E-08											
WSW	1.151E-09	1.076E-08	5.718E-08	1.267E-07	2.001E-07	1.273E-07	8.876E-08	6.600E-08	5.141E-08	4.146E-08	3.435E-08											
W	9.772E-10	5.306E-08	1.778E-07	2.207E-07	2.088E-07	1.324E-07	9.200E-08	6.818E-08	5.295E-08	4.259E-08	3.520E-08											
WNW	6.189E-10	3.837E-08	1.750E-07	2.831E-07	3.129E-07	1.856E-07	1.232E-07	9.128E-08	7.078E-08	5.546E-08	4.486E-08											
NW	6.388E-09	4.448E-08	1.329E-07	2.593E-07	4.324E-07	2.542E-07	1.683E-07	1.229E-07	9.430E-08	7.412E-08	6.013E-08											
NNW	1.719E-08	1.008E-07	1.681E-07	1.967E-07	2.331E-07	2.142E-07	1.881E-07	1.610E-07	1.392E-07	1.092E-07	8.844E-08											
N	1.822E-08	1.022E-07	1.334E-07	1.192E-07	9.851E-08	8.261E-08	6.901E-08	5.711E-08	4.808E-08	4.113E-08	3.570E-08											
NNE	2.161E-09	2.501E-08	4.355E-08	4.712E-08	4.522E-08	3.828E-08	3.155E-08	2.613E-08	2.193E-08	1.868E-08	1.614E-08											
NE	5.844E-11	3.866E-09	1.542E-08	2.498E-08	2.987E-08	2.654E-08	2.218E-08	1.843E-08	1.546E-08	1.314E-08	1.133E-08											
ENE	3.423E-11	2.841E-09	1.209E-08	1.957E-08	2.324E-08	2.058E-08	1.717E-08	1.426E-08	1.195E-08	1.015E-08	8.744E-09											
E	9.769E-11	6.754E-09	1.701E-08	2.183E-08	2.277E-08	1.947E-08	1.606E-08	1.330E-08	1.117E-08	9.537E-09	8.265E-09											
ESE	7.615E-11	9.705E-09	2.671E-08	3.239E-08	3.224E-08	2.750E-08	2.279E-08	1.897E-08	1.600E-08	1.368E-08	1.186E-08											
SE	2.486E-09	1.094E-08	2.996E-08	4.505E-08	5.046E-08	4.349E-08	3.575E-08	2.941E-08	2.452E-08	2.075E-08	1.782E-08											
SSE	1.031E-08	6.925E-08	1.022E-07	1.002E-07	8.705E-08	7.043E-08	5.660E-08	4.612E-08	3.827E-08	3.233E-08	2.775E-08											

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.967E-08	2.696E-08	1.745E-08	9.894E-09	6.815E-09	5.060E-09	3.881E-09	3.096E-09	2.559E-09	2.157E-09	1.841E-09											
SSW	2.663E-08	2.027E-08	1.307E-08	7.397E-09	5.148E-09	3.800E-09	2.924E-09	2.341E-09	1.930E-09	1.626E-09	1.393E-09											
SW	2.556E-08	1.905E-08	1.244E-08	7.160E-09	5.059E-09	3.828E-09	3.038E-09	2.439E-09	2.014E-09	1.699E-09	1.459E-09											
WSW	3.037E-08	1.947E-08	1.353E-08	8.087E-09	5.354E-09	3.883E-09	2.983E-09	2.384E-09	1.960E-09	1.648E-09	1.409E-09											
W	2.973E-08	1.619E-08	1.141E-08	7.143E-09	5.064E-09	3.690E-09	2.838E-09	2.272E-09	1.872E-09	1.576E-09	1.351E-09											
WNW	3.748E-08	1.967E-08	1.277E-08	7.245E-09	4.782E-09	3.458E-09	2.654E-09	2.115E-09	1.733E-09	1.452E-09	1.238E-09											
NW	5.042E-08	2.683E-08	1.762E-08	1.012E-08	6.701E-09	4.866E-09	3.768E-09	3.021E-09	2.490E-09	2.098E-09	1.799E-09											
NNW	7.477E-08	4.105E-08	2.636E-08	1.488E-08	9.940E-09	7.266E-09	5.660E-09	4.577E-09	3.831E-09	3.251E-09	2.793E-09											
N	3.146E-08	1.965E-08	1.602E-08	1.261E-08	1.059E-08	8.761E-09	6.846E-09	5.531E-09	4.584E-09	3.882E-09	3.343E-09											
NNE	1.692E-08	2.115E-08	1.359E-08	7.685E-09	5.145E-09	3.770E-09	2.924E-09	2.358E-09	1.957E-09	1.659E-09	1.431E-09											
NE	1.166E-08	1.452E-08	9.340E-09	5.289E-09	3.540E-09	2.594E-09	2.035E-09	1.654E-09	1.380E-09	1.169E-09	1.008E-09											
ENE	8.770E-09	1.008E-08	6.589E-09	3.798E-09	2.569E-09	1.896E-09	1.553E-09	1.296E-09	1.076E-09	9.130E-10	7.877E-10											
E	8.619E-09	1.220E-08	8.018E-09	4.653E-09	3.159E-09	2.336E-09	1.823E-09	1.477E-09	1.272E-09	1.107E-09	9.540E-10											
ESE	1.203E-08	1.197E-08	7.758E-09	4.412E-09	2.955E-09	2.162E-09	1.673E-09	1.346E-09	1.113E-09	9.412E-10	8.093E-10											
SE	1.551E-08	9.203E-09	6.851E-09	4.675E-09	3.347E-09	2.595E-09	2.117E-09	1.785E-09	1.482E-09	1.257E-09	1.085E-09											
SSE	2.859E-08	2.918E-08	1.853E-08	1.031E-08	6.826E-09	4.956E-09	3.813E-09	3.053E-09	2.517E-09	2.122E-09	1.820E-09											

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.217E-08	5.311E-08	4.253E-08	3.536E-08	4.062E-08	2.556E-08	1.021E-08	5.056E-09	3.116E-09	2.159E-09
SSW	4.548E-08	4.445E-08	3.563E-08	3.444E-08	2.889E-08	1.848E-08	7.658E-09	3.809E-09	2.351E-09	1.630E-09
SW	8.446E-08	1.175E-07	6.983E-08	4.135E-08	2.868E-08	1.756E-08	7.400E-09	3.840E-09	2.448E-09	1.703E-09
WSW	7.774E-08	1.514E-07	8.993E-08	5.179E-08	3.498E-08	1.925E-08	8.082E-09	3.915E-09	2.394E-09	1.652E-09
W	1.691E-07	1.775E-07	9.324E-08	5.335E-08	3.536E-08	1.708E-08	7.168E-09	3.716E-09	2.281E-09	1.580E-09
WNW	1.927E-07	2.497E-07	1.271E-07	7.080E-08	4.527E-08	2.056E-08	7.377E-09	3.489E-09	2.123E-09	1.456E-09
NW	1.694E-07	3.147E-07	1.730E-07	9.477E-08	6.068E-08	2.798E-08	1.027E-08	4.916E-09	3.032E-09	2.103E-09
NNW	1.659E-07	2.166E-07	1.842E-07	1.340E-07	8.951E-08	4.202E-08	1.524E-08	7.337E-09	4.602E-09	3.253E-09
N	1.202E-07	9.604E-08	6.788E-08	4.801E-08	3.574E-08	2.066E-08	1.247E-08	8.484E-09	5.546E-09	3.890E-09
NNE	4.102E-08	4.256E-08	3.117E-08	2.189E-08	1.718E-08	1.685E-08	7.868E-09	3.799E-09	2.367E-09	1.663E-09
NE	1.710E-08	2.730E-08	2.184E-08	1.543E-08	1.199E-08	1.158E-08	5.412E-09	2.623E-09	1.659E-09	1.172E-09
ENE	1.336E-08	2.124E-08	1.692E-08	1.193E-08	9.171E-09	8.239E-09	3.872E-09	1.939E-09	1.286E-09	9.150E-10
E	1.687E-08	2.110E-08	1.586E-08	1.116E-08	8.773E-09	9.545E-09	4.737E-09	2.350E-09	1.498E-09	1.099E-09
ESE	2.546E-08	3.017E-08	2.252E-08	1.596E-08	1.246E-08	1.011E-08	4.508E-09	2.178E-09	1.351E-09	9.433E-10
SE	3.244E-08	4.616E-08	3.528E-08	2.448E-08	1.783E-08	9.559E-09	4.569E-09	2.604E-09	1.764E-09	1.260E-09
SSE	9.397E-08	8.258E-08	5.610E-08	3.825E-08	2.942E-08	2.432E-08	1.059E-08	4.997E-09	3.066E-09	2.127E-09

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ERP ELEVATED STACK RELEASES - APR-JUN 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	4.186E-09	2.169E-08	4.150E-08	5.187E-08	5.608E-08	4.981E-08	4.219E-08	3.559E-08	3.028E-08	3.701E-08	4.289E-08
SSW	5.476E-09	3.230E-08	4.734E-08	4.920E-08	4.632E-08	3.890E-08	3.192E-08	3.428E-08	3.543E-08	3.107E-08	2.766E-08
SW	2.785E-09	3.235E-08	7.876E-08	1.127E-07	1.452E-07	9.510E-08	6.739E-08	5.063E-08	3.973E-08	3.222E-08	2.683E-08
WSW	1.151E-09	1.068E-08	5.685E-08	1.263E-07	1.980E-07	1.250E-07	8.669E-08	6.420E-08	4.984E-08	4.009E-08	3.315E-08
W	9.773E-10	5.254E-08	1.764E-07	2.181E-07	2.052E-07	1.294E-07	8.955E-08	6.614E-08	5.123E-08	4.111E-08	3.392E-08
WNW	6.190E-10	3.812E-08	1.741E-07	2.805E-07	3.075E-07	1.806E-07	1.190E-07	8.765E-08	6.765E-08	5.270E-08	4.239E-08
NW	6.390E-09	4.410E-08	1.314E-07	2.572E-07	4.278E-07	2.499E-07	1.647E-07	1.198E-07	9.172E-08	7.181E-08	5.800E-08
NNW	1.719E-08	9.995E-08	1.653E-07	1.941E-07	2.300E-07	2.106E-07	1.846E-07	1.578E-07	1.364E-07	1.065E-07	8.591E-08
N	1.822E-08	1.013E-07	1.309E-07	1.168E-07	9.646E-08	8.068E-08	6.719E-08	5.542E-08	4.651E-08	3.968E-08	3.436E-08
NNE	2.161E-09	2.480E-08	4.285E-08	4.645E-08	4.450E-08	3.747E-08	3.071E-08	2.530E-08	2.113E-08	1.792E-08	1.543E-08
NE	5.845E-11	3.838E-09	1.532E-08	2.490E-08	2.960E-08	2.610E-08	2.165E-08	1.788E-08	1.491E-08	1.260E-08	1.081E-08
ENE	3.424E-11	2.821E-09	1.202E-08	1.951E-08	2.302E-08	2.024E-08	1.677E-08	1.383E-08	1.152E-08	9.732E-09	8.339E-09
E	9.771E-11	6.700E-09	1.680E-08	2.163E-08	2.247E-08	1.909E-08	1.564E-08	1.288E-08	1.076E-08	9.143E-09	7.890E-09
ESE	7.618E-11	9.635E-09	2.635E-08	3.199E-08	3.174E-08	2.693E-08	2.221E-08	1.840E-08	1.544E-08	1.316E-08	1.137E-08
SE	2.487E-09	1.086E-08	2.978E-08	4.491E-08	4.998E-08	4.273E-08	3.486E-08	2.848E-08	2.359E-08	1.985E-08	1.696E-08
SSE	1.031E-08	6.866E-08	1.004E-07	9.853E-08	8.543E-08	6.876E-08	5.494E-08	4.452E-08	3.675E-08	3.089E-08	2.641E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.870E-08	2.607E-08	1.643E-08	8.832E-09	5.722E-09	4.043E-09	2.980E-09	2.296E-09	1.848E-09	1.530E-09	1.286E-09
SSW	2.577E-08	1.947E-08	1.221E-08	6.539E-09	4.285E-09	3.068E-09	2.302E-09	1.804E-09	1.458E-09	1.208E-09	1.019E-09
SW	2.458E-08	1.825E-08	1.160E-08	6.312E-09	4.181E-09	3.004E-09	2.320E-09	1.821E-09	1.474E-09	1.222E-09	1.032E-09
WSW	2.930E-08	1.854E-08	1.258E-08	7.217E-09	4.625E-09	3.269E-09	2.458E-09	1.928E-09	1.561E-09	1.294E-09	1.093E-09
W	2.860E-08	1.549E-08	1.082E-08	6.457E-09	4.357E-09	3.088E-09	2.320E-09	1.820E-09	1.473E-09	1.221E-09	1.032E-09
WNW	3.522E-08	1.798E-08	1.137E-08	6.127E-09	3.821E-09	2.651E-09	1.976E-09	1.538E-09	1.234E-09	1.013E-09	8.486E-10
NW	4.839E-08	2.505E-08	1.598E-08	8.675E-09	5.458E-09	3.801E-09	2.854E-09	2.233E-09	1.800E-09	1.487E-09	1.252E-09
NNW	7.231E-08	3.868E-08	2.412E-08	1.281E-08	7.979E-09	5.504E-09	4.087E-09	3.182E-09	2.594E-09	2.154E-09	1.814E-09
N	3.022E-08	1.874E-08	1.531E-08	1.217E-08	1.013E-08	8.107E-09	6.178E-09	4.901E-09	3.996E-09	3.335E-09	2.835E-09
NNE	1.618E-08	2.038E-08	1.272E-08	6.848E-09	4.387E-09	3.162E-09	2.333E-09	1.832E-09	1.484E-09	1.231E-09	1.041E-09
NE	1.111E-08	1.393E-08	8.708E-09	4.696E-09	3.007E-09	2.125E-09	1.621E-09	1.286E-09	1.051E-09	8.742E-10	7.408E-10
ENE	8.346E-09	9.669E-09	6.147E-09	3.353E-09	2.129E-09	1.491E-09	1.165E-09	9.388E-10	7.616E-10	6.327E-10	5.355E-10
E	8.237E-09	1.186E-08	7.587E-09	4.161E-09	2.644E-09	1.851E-09	1.378E-09	1.071E-09	8.879E-10	7.480E-10	6.278E-10
ESE	1.153E-08	1.153E-08	7.272E-09	3.915E-09	2.464E-09	1.712E-09	1.267E-09	9.796E-10	7.821E-10	6.401E-10	5.341E-10
SE	1.469E-08	8.564E-09	6.322E-09	4.292E-09	3.063E-09	2.378E-09	1.946E-09	1.648E-09	1.353E-09	1.137E-09	9.722E-10
SSE	2.721E-08	2.786E-08	1.718E-08	9.076E-09	5.720E-09	3.989E-09	2.966E-09	2.305E-09	1.850E-09	1.522E-09	1.277E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.171E-08	5.236E-08	4.158E-08	3.436E-08	3.960E-08	2.459E-08	9.140E-09	4.066E-09	2.321E-09	1.534E-09
SSW	4.483E-08	4.366E-08	3.472E-08	3.344E-08	2.797E-08	1.764E-08	6.798E-09	3.086E-09	1.815E-09	1.212E-09
SW	8.352E-08	1.157E-07	6.807E-08	3.998E-08	2.760E-08	1.670E-08	6.541E-09	3.045E-09	1.831E-09	1.226E-09
WSW	7.744E-08	1.496E-07	8.791E-08	5.023E-08	3.378E-08	1.828E-08	7.257E-09	3.307E-09	1.940E-09	1.298E-09
W	1.674E-07	1.744E-07	9.081E-08	5.164E-08	3.408E-08	1.633E-08	6.494E-09	3.119E-09	1.831E-09	1.226E-09
WNW	1.912E-07	2.451E-07	1.229E-07	6.767E-08	4.279E-08	1.887E-08	6.266E-09	2.693E-09	1.547E-09	1.018E-09
NW	1.679E-07	3.108E-07	1.695E-07	9.216E-08	5.853E-08	2.620E-08	8.868E-09	3.864E-09	2.246E-09	1.493E-09
NNW	1.636E-07	2.134E-07	1.808E-07	1.311E-07	8.698E-08	3.968E-08	1.318E-08	5.597E-09	3.217E-09	2.159E-09
N	1.181E-07	9.398E-08	6.608E-08	4.645E-08	3.440E-08	1.977E-08	1.196E-08	7.864E-09	4.921E-09	3.346E-09
NNE	4.044E-08	4.181E-08	3.035E-08	2.110E-08	1.644E-08	1.604E-08	7.058E-09	3.137E-09	1.843E-09	1.236E-09
NE	1.703E-08	2.700E-08	2.133E-08	1.488E-08	1.145E-08	1.098E-08	4.837E-09	2.159E-09	1.292E-09	8.773E-10
ENE	1.330E-08	2.101E-08	1.652E-08	1.150E-08	8.754E-09	7.810E-09	3.430E-09	1.531E-09	9.360E-10	6.349E-10
E	1.670E-08	2.078E-08	1.546E-08	1.075E-08	8.390E-09	9.156E-09	4.248E-09	1.873E-09	1.089E-09	7.449E-10
ESE	2.514E-08	2.966E-08	2.194E-08	1.542E-08	1.196E-08	9.637E-09	4.016E-09	1.734E-09	9.865E-10	6.429E-10
SE	3.230E-08	4.563E-08	3.441E-08	2.357E-08	1.698E-08	8.929E-09	4.197E-09	2.388E-09	1.621E-09	1.140E-09
SSE	9.252E-08	8.093E-08	5.446E-08	3.674E-08	2.804E-08	2.297E-08	9.384E-09	4.041E-09	2.320E-09	1.528E-09

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ERP ELEVATED STACK RELEASES - APR-JUN 2014
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.621E-09	1.581E-09	1.732E-09	1.419E-09	7.844E-10	5.054E-10	3.503E-10	2.549E-10	1.921E-10	1.515E-10	1.420E-10
SSW	3.669E-09	3.012E-09	2.600E-09	1.819E-09	8.980E-10	5.541E-10	3.758E-10	2.703E-10	2.466E-10	1.865E-10	1.460E-10
SW	3.407E-09	2.796E-09	2.413E-09	1.687E-09	1.393E-09	7.493E-10	4.620E-10	3.129E-10	2.258E-10	1.707E-10	1.337E-10
WSW	1.102E-09	1.181E-09	1.425E-09	2.403E-09	1.306E-09	7.074E-10	4.369E-10	2.961E-10	2.137E-10	1.615E-10	1.264E-10
W	1.339E-09	4.076E-09	3.385E-09	2.176E-09	1.064E-09	5.625E-10	3.429E-10	2.303E-10	1.654E-10	1.248E-10	9.780E-11
WNW	1.904E-09	1.924E-09	5.548E-09	3.984E-09	2.429E-09	1.226E-09	7.283E-10	4.822E-10	3.528E-10	2.670E-10	2.126E-10
NW	4.218E-09	3.594E-09	3.295E-09	4.734E-09	2.874E-09	1.432E-09	8.494E-10	5.667E-10	4.129E-10	3.224E-10	2.662E-10
NNW	1.122E-08	8.956E-09	7.360E-09	4.937E-09	3.820E-09	2.050E-09	1.270E-09	9.982E-10	7.213E-10	5.560E-10	4.518E-10
N	1.431E-08	1.119E-08	8.857E-09	5.739E-09	2.649E-09	1.588E-09	1.060E-09	7.564E-10	5.646E-10	4.356E-10	3.448E-10
NNE	4.441E-09	3.571E-09	2.975E-09	2.019E-09	9.722E-10	5.936E-10	4.003E-10	2.872E-10	2.149E-10	1.660E-10	1.314E-10
NE	5.694E-10	7.017E-10	9.495E-10	8.585E-10	5.023E-10	3.299E-10	2.308E-10	1.687E-10	1.275E-10	9.886E-11	7.828E-11
ENE	3.019E-10	4.543E-10	6.949E-10	6.574E-10	3.936E-10	2.605E-10	1.829E-10	1.339E-10	1.013E-10	7.857E-11	6.222E-11
E	8.130E-10	8.061E-10	8.995E-10	7.443E-10	4.139E-10	2.672E-10	1.854E-10	1.350E-10	1.018E-10	7.885E-11	6.244E-11
ESE	8.316E-10	9.176E-10	1.137E-09	9.902E-10	5.675E-10	3.702E-10	2.582E-10	1.884E-10	1.422E-10	1.103E-10	8.731E-11
SE	1.172E-09	1.602E-09	2.321E-09	2.154E-09	1.277E-09	8.428E-10	5.909E-10	4.324E-10	3.269E-10	2.535E-10	2.008E-10
SSE	8.127E-09	6.686E-09	5.794E-09	4.065E-09	2.012E-09	1.243E-09	8.433E-10	6.069E-10	4.549E-10	3.516E-10	2.784E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.142E-10	8.614E-11	5.981E-11	3.516E-11	2.234E-11	1.565E-11	1.114E-11	8.294E-12	6.554E-12	5.160E-12	4.216E-12
SSW	1.181E-10	8.242E-11	5.634E-11	3.280E-11	2.127E-11	1.472E-11	1.055E-11	7.921E-12	6.208E-12	4.959E-12	4.048E-12
SW	1.079E-10	8.270E-11	5.782E-11	3.430E-11	2.195E-11	1.501E-11	1.066E-11	8.001E-12	6.221E-12	4.969E-12	4.056E-12
WSW	1.020E-10	7.367E-11	5.066E-11	3.229E-11	1.954E-11	1.310E-11	9.467E-12	7.109E-12	5.527E-12	4.415E-12	3.604E-12
W	7.912E-11	3.672E-11	5.009E-11	3.097E-11	1.872E-11	1.271E-11	9.108E-12	6.839E-12	5.318E-12	4.248E-12	3.467E-12
WNW	1.775E-10	9.541E-11	6.410E-11	3.665E-11	2.436E-11	1.661E-11	1.222E-11	9.179E-12	7.233E-12	5.778E-12	4.716E-12
NW	2.306E-10	1.406E-10	1.009E-10	6.287E-11	3.835E-11	2.568E-11	1.818E-11	1.365E-11	1.064E-11	8.498E-12	6.936E-12
NNW	3.846E-10	2.214E-10	1.546E-10	9.173E-11	5.882E-11	3.965E-11	2.931E-11	2.156E-11	1.652E-11	1.320E-11	1.078E-11
N	2.787E-10	1.332E-10	8.204E-11	4.470E-11	8.283E-11	5.222E-11	3.736E-11	2.806E-11	2.182E-11	1.743E-11	1.423E-11
NNE	1.061E-10	1.300E-10	7.970E-11	4.092E-11	2.489E-11	1.667E-11	1.193E-11	8.938E-12	6.941E-12	5.539E-12	4.519E-12
NE	6.308E-11	7.538E-11	4.599E-11	2.351E-11	1.428E-11	9.570E-12	7.301E-12	5.451E-12	4.239E-12	3.406E-12	2.780E-12
ENE	5.013E-11	4.448E-11	3.058E-11	1.780E-11	1.124E-11	7.483E-12	5.296E-12	4.144E-12	3.226E-12	2.581E-12	2.110E-12
E	5.034E-11	5.013E-11	3.551E-11	2.122E-11	1.352E-11	9.008E-12	6.371E-12	4.709E-12	3.615E-12	3.041E-12	2.476E-12
ESE	7.038E-11	6.447E-11	4.476E-11	2.629E-11	1.666E-11	1.111E-11	7.865E-12	5.822E-12	4.477E-12	3.548E-12	2.879E-12
SE	1.618E-10	7.668E-11	4.679E-11	2.466E-11	1.504E-11	1.030E-11	7.618E-12	9.158E-12	7.149E-12	5.752E-12	4.741E-12
SSE	2.248E-10	2.172E-10	1.336E-10	6.884E-11	4.191E-11	2.806E-11	2.006E-11	1.502E-11	1.165E-11	9.291E-12	7.572E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.559E-09	8.014E-10	3.535E-10	1.946E-10	1.345E-10	8.068E-11	3.494E-11	1.563E-11	8.444E-12	5.223E-12
SSW	2.344E-09	9.498E-10	3.812E-10	2.305E-10	1.477E-10	7.876E-11	3.291E-11	1.480E-11	8.019E-12	4.991E-12
SW	2.175E-09	1.172E-09	4.790E-10	2.297E-10	1.351E-10	7.724E-11	3.404E-11	1.512E-11	8.081E-12	5.002E-12
WSW	1.805E-09	1.284E-09	4.527E-10	2.173E-10	1.277E-10	6.974E-11	3.070E-11	1.336E-11	7.180E-12	4.444E-12
W	3.001E-09	1.088E-09	3.564E-10	1.685E-10	9.888E-11	5.208E-11	2.977E-11	1.287E-11	6.908E-12	4.276E-12
WNW	4.048E-09	2.240E-09	7.627E-10	3.571E-10	2.157E-10	9.973E-11	3.729E-11	1.692E-11	9.306E-12	5.816E-12
NW	4.001E-09	2.647E-09	8.918E-10	4.224E-10	2.697E-10	1.430E-10	6.044E-11	2.606E-11	1.380E-11	8.554E-12
NNW	6.638E-09	3.282E-09	1.369E-09	7.374E-10	4.578E-10	2.280E-10	9.107E-11	4.063E-11	2.186E-11	1.329E-11
N	7.991E-09	2.864E-09	1.079E-09	5.702E-10	3.472E-10	1.428E-10	6.978E-11	5.444E-11	2.834E-11	1.754E-11
NNE	2.683E-09	1.037E-09	4.066E-10	2.169E-10	1.323E-10	1.023E-10	4.241E-11	1.696E-11	9.031E-12	5.577E-12
NE	8.540E-10	5.048E-10	2.324E-10	1.284E-10	7.875E-11	5.959E-11	2.440E-11	9.919E-12	5.518E-12	3.421E-12
ENE	6.248E-10	3.930E-10	1.840E-10	1.020E-10	6.258E-11	3.956E-11	1.773E-11	7.610E-12	4.124E-12	2.598E-12
E	8.098E-10	4.221E-10	1.871E-10	1.025E-10	6.282E-11	4.368E-11	2.097E-11	9.156E-12	4.767E-12	3.002E-12
ESE	1.023E-09	5.737E-10	2.601E-10	1.433E-10	8.784E-11	5.703E-11	2.612E-11	1.129E-11	5.893E-12	3.576E-12
SE	2.087E-09	1.279E-09	5.947E-10	3.291E-10	2.020E-10	8.231E-11	2.530E-11	1.049E-11	7.953E-12	5.792E-12
SSE	5.224E-09	2.127E-09	8.553E-10	4.590E-10	2.802E-10	1.817E-10	7.127E-11	2.855E-11	1.518E-11	9.354E-12

ERP ELEVATED STACK RELEASES - APR-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF DIRECTION DIST. X/Q X/Q X/Q D/Q
ID LOCATION FROM SITE (MI) (SEC/M3) (SEC/M3) (SEC/M3) (PER SQ.METER)

ID	LOCATION	DIRECTION	DIST. (MI)	X/Q			D/Q
				(SEC/M3)	(SEC/M3)	(SEC/M3)	
				NO	2.26 DAY	8.0 DAY	
				DECAY	DECAY	DECAY	
				UNDEPLETED	UNDEPLETED	DEPLETED	
A	Site Boundary	S	.80	4.5E-08	4.5E-08	4.4E-08	1.7E-09
A	Site Boundary	SSW	.82	4.9E-08	4.9E-08	4.8E-08	2.3E-09
A	Site Boundary	SW	.97	1.1E-07	1.1E-07	1.1E-07	1.8E-09
A	Site Boundary	WSW	.93	1.1E-07	1.1E-07	1.1E-07	2.3E-09
A	Site Boundary	W	.91	2.1E-07	2.1E-07	2.1E-07	2.5E-09
A	Site Boundary	WNW	.94	2.6E-07	2.6E-07	2.6E-07	4.5E-09
A	Site Boundary	NW	.81	1.6E-07	1.6E-07	1.6E-07	3.1E-09
A	Site Boundary	NNW	.69	1.5E-07	1.5E-07	1.5E-07	7.6E-09
A	Site Boundary	N	.67	1.3E-07	1.3E-07	1.2E-07	9.4E-09
A	Site Boundary	NNE	.60	3.3E-08	3.3E-08	3.2E-08	3.3E-09
A	Site Boundary	NE	.62	8.3E-09	8.3E-09	8.3E-09	8.2E-10
A	Site Boundary	ENE	.59	5.1E-09	5.1E-09	5.1E-09	5.3E-10
A	Site Boundary	E	.53	7.7E-09	7.6E-09	7.6E-09	8.1E-10
A	Site Boundary	ESE	.54	1.2E-08	1.2E-08	1.2E-08	9.4E-10
A	Site Boundary	SE	.65	2.0E-08	2.0E-08	2.0E-08	2.0E-09
A	Site Boundary	SSE	.81	1.0E-07	1.0E-07	1.0E-07	5.3E-09
A	Nearest Res	SSW	3.00	3.5E-08	3.5E-08	3.4E-08	2.7E-10
A	Nearest Res	SW	1.30	1.4E-07	1.4E-07	1.4E-07	1.9E-09
A	Nearest Res	WSW	1.90	1.4E-07	1.4E-07	1.4E-07	7.9E-10
A	Nearest Res	W	1.00	2.2E-07	2.2E-07	2.2E-07	2.2E-09
A	Nearest Res	WNW	1.70	2.5E-07	2.5E-07	2.4E-07	1.8E-09
A	Nearest Res	NW	.90	2.1E-07	2.1E-07	2.0E-07	5.4E-09
A	Nearest Res	NNW	1.90	2.2E-07	2.2E-07	2.2E-07	2.3E-09
A	Nearest Res	N	2.50	6.9E-08	6.9E-08	6.7E-08	1.1E-09
A	Nearest Res	NNE	1.70	4.3E-08	4.3E-08	4.2E-08	7.7E-10
A	Nearest Res	ENE	1.70	2.3E-08	2.2E-08	2.2E-08	3.3E-10
A	Nearest Res	E	2.20	1.8E-08	1.8E-08	1.8E-08	2.3E-10
A	Nearest Res	ESE	2.80	2.1E-08	2.0E-08	2.0E-08	2.1E-10
A	Nearest Res	SE	3.00	3.0E-08	2.9E-08	2.8E-08	4.3E-10
A	Nearest Res	SSE	3.00	4.6E-08	4.6E-08	4.5E-08	6.1E-10
A	Nearest Cow	NNW	3.50	1.4E-07	1.4E-07	1.4E-07	7.2E-10
A	Nearest Garde	SSW	3.00	3.5E-08	3.5E-08	3.4E-08	2.7E-10
A	Nearest Garde	SW	1.30	1.4E-07	1.4E-07	1.4E-07	1.9E-09
A	Nearest Garde	WSW	1.90	1.4E-07	1.4E-07	1.4E-07	7.9E-10
A	Nearest Garde	W	2.80	7.7E-08	7.6E-08	7.4E-08	2.7E-10
A	Nearest Garde	WNW	1.70	2.5E-07	2.5E-07	2.4E-07	1.8E-09
A	Nearest Garde	NW	1.90	2.8E-07	2.8E-07	2.8E-07	1.6E-09
A	Nearest Garde	NNW	1.90	2.2E-07	2.2E-07	2.2E-07	2.3E-09
A	Nearest Garde	ENE	1.70	2.3E-08	2.2E-08	2.2E-08	3.3E-10
A	Nearest Garde	ESE	2.30	2.5E-08	2.5E-08	2.4E-08	3.0E-10
A	Nearest Garde	SSE	3.00	4.6E-08	4.6E-08	4.5E-08	6.1E-10
A	MAXIMUM CHI/Q	S	1.50	5.7E-08	5.7E-08	5.6E-08	7.8E-10
A	MAXIMUM CHI/Q	SSW	1.00	5.0E-08	5.0E-08	4.9E-08	1.8E-09
A	MAXIMUM CHI/Q	SW	1.50	1.5E-07	1.5E-07	1.5E-07	1.4E-09
A	MAXIMUM CHI/Q	WSW	1.50	2.0E-07	2.0E-07	2.0E-07	1.3E-09
A	MAXIMUM CHI/Q	W	1.00	2.2E-07	2.2E-07	2.2E-07	2.2E-09
A	MAXIMUM CHI/Q	WNW	1.50	3.1E-07	3.1E-07	3.1E-07	2.4E-09
A	MAXIMUM CHI/Q	NW	1.50	4.3E-07	4.3E-07	4.3E-07	2.9E-09
A	MAXIMUM CHI/Q	NNW	1.50	2.3E-07	2.3E-07	2.3E-07	3.8E-09
A	MAXIMUM CHI/Q	N	.75	1.3E-07	1.3E-07	1.3E-07	8.9E-09
A	MAXIMUM CHI/Q	NNE	1.00	4.7E-08	4.7E-08	4.6E-08	2.0E-09
A	MAXIMUM CHI/Q	NE	1.50	3.0E-08	3.0E-08	3.0E-08	5.0E-10
A	MAXIMUM CHI/Q	ENE	1.50	2.3E-08	2.3E-08	2.3E-08	3.9E-10
A	MAXIMUM CHI/Q	E	1.50	2.3E-08	2.3E-08	2.2E-08	4.1E-10
A	MAXIMUM CHI/Q	ESE	1.00	3.2E-08	3.2E-08	3.2E-08	9.9E-10
A	MAXIMUM CHI/Q	SE	1.50	5.1E-08	5.0E-08	5.0E-08	1.3E-09
A	MAXIMUM CHI/Q	SSE	.75	1.0E-07	1.0E-07	1.0E-07	5.8E-09

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Atmospheric Diffusion Estimates

Elevated Releases

January-June 2014

ERP ELEVATED STACK RELEASES - JAN-JUN 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.171E-09	2.383E-08	5.422E-08	7.757E-08	8.830E-08	7.801E-08	6.535E-08	5.455E-08	4.599E-08	5.298E-08	5.748E-08
SSW	3.541E-09	2.556E-08	5.199E-08	6.544E-08	6.783E-08	5.768E-08	4.727E-08	4.923E-08	4.850E-08	4.156E-08	3.615E-08
SW	2.108E-09	1.989E-08	5.942E-08	1.008E-07	1.396E-07	9.230E-08	6.557E-08	4.927E-08	3.863E-08	3.129E-08	2.601E-08
WSW	6.122E-10	8.656E-09	5.009E-08	1.123E-07	1.765E-07	1.119E-07	7.781E-08	5.771E-08	4.486E-08	3.612E-08	2.988E-08
W	6.308E-10	4.069E-08	1.383E-07	1.713E-07	1.590E-07	9.979E-08	6.886E-08	5.078E-08	3.930E-08	3.153E-08	2.601E-08
WNW	3.113E-10	2.097E-08	1.151E-07	1.980E-07	2.324E-07	1.389E-07	9.276E-08	6.906E-08	5.374E-08	4.221E-08	3.421E-08
NW	3.233E-09	2.684E-08	1.038E-07	2.145E-07	3.485E-07	2.053E-07	1.363E-07	9.979E-08	7.687E-08	6.054E-08	4.921E-08
NNW	8.669E-09	5.273E-08	1.070E-07	1.485E-07	1.885E-07	1.719E-07	1.495E-07	1.274E-07	1.099E-07	8.618E-08	6.984E-08
N	1.407E-08	6.566E-08	9.320E-08	9.346E-08	8.629E-08	7.490E-08	6.327E-08	5.255E-08	4.427E-08	3.786E-08	3.283E-08
NNE	1.142E-09	1.760E-08	3.477E-08	3.987E-08	4.012E-08	3.491E-08	2.938E-08	2.472E-08	2.103E-08	1.811E-08	1.580E-08
NE	9.676E-10	7.692E-09	1.923E-08	2.709E-08	3.084E-08	2.747E-08	2.319E-08	1.948E-08	1.652E-08	1.419E-08	1.234E-08
ENE	1.722E-11	1.778E-09	1.199E-08	2.158E-08	2.679E-08	2.400E-08	2.016E-08	1.683E-08	1.420E-08	1.214E-08	1.052E-08
E	5.985E-11	4.101E-09	1.257E-08	1.819E-08	2.062E-08	1.818E-08	1.525E-08	1.278E-08	1.083E-08	9.317E-09	8.129E-09
ESE	5.522E-10	1.007E-08	2.714E-08	3.525E-08	3.672E-08	3.146E-08	2.598E-08	2.152E-08	1.805E-08	1.537E-08	1.328E-08
SE	1.868E-09	1.270E-08	3.780E-08	5.587E-08	6.196E-08	5.333E-08	4.383E-08	3.607E-08	3.008E-08	2.547E-08	2.188E-08
SSE	6.647E-09	4.456E-08	8.408E-08	1.013E-07	1.020E-07	8.605E-08	7.025E-08	5.763E-08	4.797E-08	4.056E-08	3.483E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.099E-08	3.279E-08	2.118E-08	1.203E-08	8.302E-09	6.205E-09	4.811E-09	3.883E-09	3.247E-09	2.771E-09	2.395E-09
SSW	3.262E-08	2.174E-08	1.389E-08	7.791E-09	5.329E-09	3.921E-09	3.029E-09	2.437E-09	2.021E-09	1.714E-09	1.479E-09
SW	2.349E-08	1.642E-08	1.069E-08	6.144E-09	4.319E-09	3.270E-09	2.604E-09	2.109E-09	1.758E-09	1.498E-09	1.299E-09
WSW	2.629E-08	1.651E-08	1.139E-08	6.810E-09	4.557E-09	3.344E-09	2.601E-09	2.104E-09	1.752E-09	1.492E-09	1.292E-09
W	2.194E-08	1.192E-08	8.381E-09	5.277E-09	3.781E-09	2.786E-09	2.167E-09	1.754E-09	1.461E-09	1.245E-09	1.079E-09
WNW	2.864E-08	1.516E-08	9.907E-09	5.693E-09	3.804E-09	2.784E-09	2.161E-09	1.743E-09	1.445E-09	1.224E-09	1.056E-09
NW	4.138E-08	2.230E-08	1.482E-08	8.680E-09	5.811E-09	4.265E-09	3.346E-09	2.712E-09	2.258E-09	1.921E-09	1.664E-09
NNW	5.904E-08	3.244E-08	2.090E-08	1.189E-08	8.002E-09	5.898E-09	4.635E-09	3.782E-09	3.195E-09	2.737E-09	2.374E-09
N	2.890E-08	1.793E-08	1.444E-08	1.134E-08	9.731E-09	8.199E-09	6.470E-09	5.278E-09	4.417E-09	3.777E-09	3.285E-09
NNE	1.706E-08	2.406E-08	1.563E-08	8.999E-09	6.115E-09	4.542E-09	3.567E-09	2.911E-09	2.443E-09	2.094E-09	1.825E-09
NE	1.318E-08	1.905E-08	1.239E-08	7.146E-09	4.857E-09	3.609E-09	2.869E-09	2.360E-09	1.995E-09	1.709E-09	1.488E-09
ENE	1.087E-08	1.574E-08	1.046E-08	6.180E-09	4.262E-09	3.199E-09	2.674E-09	2.270E-09	1.908E-09	1.638E-09	1.429E-09
E	8.651E-09	1.283E-08	8.481E-09	4.980E-09	3.420E-09	2.558E-09	2.019E-09	1.654E-09	1.437E-09	1.262E-09	1.100E-09
ESE	1.330E-08	1.235E-08	7.983E-09	4.542E-09	3.052E-09	2.243E-09	1.746E-09	1.413E-09	1.177E-09	1.002E-09	8.676E-10
SE	1.905E-08	1.133E-08	8.451E-09	5.798E-09	4.178E-09	3.260E-09	2.676E-09	2.272E-09	1.901E-09	1.624E-09	1.412E-09
SSE	3.553E-08	3.363E-08	2.140E-08	1.196E-08	7.951E-09	5.806E-09	4.496E-09	3.626E-09	3.011E-09	2.557E-09	2.211E-09

DIRECTION FROM SITE	CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.785E-08	8.134E-08	6.441E-08	5.110E-08	5.374E-08	3.167E-08	1.241E-08	6.206E-09	3.906E-09	2.773E-09
SSW	5.209E-08	6.279E-08	5.083E-08	4.607E-08	3.645E-08	2.067E-08	8.052E-09	3.940E-09	2.448E-09	1.718E-09
SW	6.902E-08	1.100E-07	6.618E-08	3.887E-08	2.664E-08	1.544E-08	6.343E-09	3.283E-09	2.117E-09	1.501E-09
WSW	6.852E-08	1.335E-07	7.886E-08	4.520E-08	3.040E-08	1.641E-08	6.827E-09	3.370E-09	2.112E-09	1.495E-09
W	1.313E-07	1.354E-07	6.988E-08	3.962E-08	2.613E-08	1.257E-08	5.302E-09	2.803E-09	1.760E-09	1.247E-09
WNW	1.310E-07	1.832E-07	9.559E-08	5.372E-08	3.452E-08	1.582E-08	5.790E-09	2.807E-09	1.749E-09	1.228E-09
NW	1.359E-07	2.551E-07	1.401E-07	7.720E-08	4.967E-08	2.322E-08	8.770E-09	4.310E-09	2.720E-09	1.926E-09
NNW	1.134E-07	1.722E-07	1.466E-07	1.059E-07	7.068E-08	3.322E-08	1.216E-08	5.954E-09	3.802E-09	2.738E-09
N	8.719E-08	8.282E-08	6.208E-08	4.419E-08	3.287E-08	1.882E-08	1.132E-08	7.916E-09	5.290E-09	3.784E-09
NNE	3.322E-08	3.775E-08	2.899E-08	2.097E-08	1.695E-08	1.876E-08	9.190E-09	4.571E-09	2.920E-09	2.098E-09
NE	2.016E-08	2.851E-08	2.285E-08	1.648E-08	1.320E-08	1.479E-08	7.294E-09	3.646E-09	2.366E-09	1.712E-09
ENE	1.398E-08	2.439E-08	1.985E-08	1.416E-08	1.113E-08	1.231E-08	6.278E-09	3.272E-09	2.248E-09	1.641E-09
E	1.319E-08	1.900E-08	1.504E-08	1.081E-08	8.674E-09	9.967E-09	5.065E-09	2.572E-09	1.675E-09	1.254E-09
ESE	2.695E-08	3.406E-08	2.566E-08	1.802E-08	1.390E-08	1.062E-08	4.644E-09	2.260E-09	1.418E-09	1.004E-09
SE	4.025E-08	5.677E-08	4.326E-08	3.004E-08	2.189E-08	1.176E-08	5.668E-09	3.272E-09	2.246E-09	1.628E-09
SSE	8.296E-08	9.477E-08	6.941E-08	4.791E-08	3.679E-08	2.862E-08	1.227E-08	5.854E-09	3.640E-09	2.563E-09

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ERP ELEVATED STACK RELEASES - JAN-JUN 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.170E-09	2.382E-08	5.415E-08	7.743E-08	8.806E-08	7.772E-08	6.503E-08	5.422E-08	4.567E-08	5.252E-08	5.689E-08
SSW	3.540E-09	2.555E-08	5.194E-08	6.536E-08	6.768E-08	5.750E-08	4.708E-08	4.898E-08	4.820E-08	4.125E-08	3.584E-08
SW	2.107E-09	1.988E-08	5.936E-08	1.006E-07	1.392E-07	9.192E-08	6.522E-08	4.894E-08	3.832E-08	3.101E-08	2.574E-08
WSW	6.121E-10	8.650E-09	5.003E-08	1.121E-07	1.758E-07	1.114E-07	7.731E-08	5.726E-08	4.444E-08	3.572E-08	2.951E-08
W	6.306E-10	4.066E-08	1.381E-07	1.710E-07	1.585E-07	9.938E-08	6.850E-08	5.045E-08	3.900E-08	3.125E-08	2.575E-08
WNW	3.112E-10	2.095E-08	1.150E-07	1.977E-07	2.317E-07	1.384E-07	9.229E-08	6.863E-08	5.335E-08	4.185E-08	3.389E-08
NW	3.232E-09	2.682E-08	1.037E-07	2.141E-07	3.476E-07	2.046E-07	1.357E-07	9.926E-08	7.639E-08	6.011E-08	4.882E-08
NNW	8.667E-09	5.271E-08	1.069E-07	1.483E-07	1.881E-07	1.713E-07	1.489E-07	1.267E-07	1.092E-07	8.553E-08	6.924E-08
N	1.406E-08	6.563E-08	9.314E-08	9.336E-08	8.613E-08	7.470E-08	6.306E-08	5.233E-08	4.405E-08	3.765E-08	3.262E-08
NNE	1.142E-09	1.759E-08	3.474E-08	3.982E-08	4.003E-08	3.481E-08	2.926E-08	2.461E-08	2.091E-08	1.799E-08	1.568E-08
NE	9.675E-10	7.688E-09	1.921E-08	2.705E-08	3.076E-08	2.737E-08	2.308E-08	1.937E-08	1.641E-08	1.408E-08	1.223E-08
ENE	1.721E-11	1.776E-09	1.198E-08	2.155E-08	2.672E-08	2.392E-08	2.007E-08	1.674E-08	1.411E-08	1.205E-08	1.044E-08
E	5.984E-11	4.099E-09	1.256E-08	1.816E-08	2.057E-08	1.812E-08	1.518E-08	1.270E-08	1.076E-08	9.245E-09	8.057E-09
ESE	5.521E-10	1.006E-08	2.710E-08	3.519E-08	3.663E-08	3.136E-08	2.588E-08	2.142E-08	1.795E-08	1.527E-08	1.318E-08
SE	1.868E-09	1.269E-08	3.777E-08	5.581E-08	6.186E-08	5.321E-08	4.371E-08	3.595E-08	2.996E-08	2.535E-08	2.176E-08
SSE	6.646E-09	4.454E-08	8.401E-08	1.012E-07	1.018E-07	8.582E-08	7.000E-08	5.738E-08	4.772E-08	4.032E-08	3.459E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.039E-08	3.217E-08	2.064E-08	1.157E-08	7.871E-09	5.801E-09	4.436E-09	3.532E-09	2.912E-09	2.451E-09	2.090E-09
SSW	3.230E-08	2.139E-08	1.359E-08	7.534E-09	5.093E-09	3.704E-09	2.828E-09	2.250E-09	1.844E-09	1.546E-09	1.319E-09
SW	2.322E-08	1.611E-08	1.042E-08	5.909E-09	4.097E-09	3.060E-09	2.402E-09	1.919E-09	1.579E-09	1.328E-09	1.136E-09
WSW	2.592E-08	1.614E-08	1.104E-08	6.497E-09	4.279E-09	3.091E-09	2.367E-09	1.885E-09	1.546E-09	1.296E-09	1.106E-09
W	2.169E-08	1.172E-08	8.191E-09	5.097E-09	3.609E-09	2.628E-09	2.021E-09	1.618E-09	1.333E-09	1.123E-09	9.624E-10
WNW	2.833E-08	1.491E-08	9.690E-09	5.505E-09	3.637E-09	2.633E-09	2.021E-09	1.612E-09	1.322E-09	1.108E-09	9.460E-10
NW	4.101E-08	2.200E-08	1.455E-08	8.444E-09	5.602E-09	4.075E-09	3.167E-09	2.544E-09	2.099E-09	1.771E-09	1.520E-09
NNW	5.847E-08	3.196E-08	2.049E-08	1.153E-08	7.685E-09	5.607E-09	4.362E-09	3.524E-09	2.946E-09	2.498E-09	2.145E-09
N	2.869E-08	1.773E-08	1.422E-08	1.106E-08	9.389E-09	7.823E-09	6.114E-09	4.941E-09	4.096E-09	3.470E-09	2.991E-09
NNE	1.692E-08	2.376E-08	1.537E-08	8.778E-09	5.917E-09	4.360E-09	3.397E-09	2.750E-09	2.290E-09	1.948E-09	1.684E-09
NE	1.305E-08	1.876E-08	1.214E-08	6.930E-09	4.663E-09	3.430E-09	2.700E-09	2.199E-09	1.839E-09	1.560E-09	1.346E-09
ENE	1.078E-08	1.550E-08	1.024E-08	5.991E-09	4.088E-09	3.036E-09	2.508E-09	2.104E-09	1.749E-09	1.486E-09	1.283E-09
E	8.565E-09	1.263E-08	8.308E-09	4.829E-09	3.283E-09	2.430E-09	1.899E-09	1.540E-09	1.325E-09	1.152E-09	9.947E-10
ESE	1.319E-08	1.220E-08	7.859E-09	4.436E-09	2.957E-09	2.157E-09	1.666E-09	1.338E-09	1.106E-09	9.347E-10	8.036E-10
SE	1.894E-08	1.122E-08	8.345E-09	5.683E-09	4.064E-09	3.147E-09	2.562E-09	2.158E-09	1.791E-09	1.519E-09	1.310E-09
SSE	3.524E-08	3.314E-08	2.098E-08	1.160E-08	7.640E-09	5.523E-09	4.235E-09	3.381E-09	2.780E-09	2.338E-09	2.002E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.776E-08	8.110E-08	6.409E-08	5.072E-08	5.319E-08	3.110E-08	1.194E-08	5.807E-09	3.554E-09	2.454E-09
SSW	5.204E-08	6.264E-08	5.062E-08	4.577E-08	3.613E-08	2.035E-08	7.794E-09	3.724E-09	2.260E-09	1.550E-09
SW	6.892E-08	1.096E-07	6.583E-08	3.857E-08	2.637E-08	1.516E-08	6.105E-09	3.073E-09	1.928E-09	1.331E-09
WSW	6.840E-08	1.330E-07	7.837E-08	4.478E-08	3.002E-08	1.605E-08	6.521E-09	3.118E-09	1.893E-09	1.299E-09
W	1.311E-07	1.350E-07	6.951E-08	3.932E-08	2.587E-08	1.237E-08	5.123E-09	2.647E-09	1.625E-09	1.126E-09
WNW	1.308E-07	1.827E-07	9.512E-08	5.333E-08	3.419E-08	1.557E-08	5.605E-09	2.656E-09	1.619E-09	1.112E-09
NW	1.357E-07	2.544E-07	1.395E-07	7.672E-08	4.927E-08	2.291E-08	8.538E-09	4.119E-09	2.553E-09	1.775E-09
NNW	1.133E-07	1.718E-07	1.460E-07	1.052E-07	7.008E-08	3.275E-08	1.181E-08	5.663E-09	3.543E-09	2.500E-09
N	8.713E-08	8.266E-08	6.187E-08	4.398E-08	3.265E-08	1.861E-08	1.102E-08	7.557E-09	4.954E-09	3.478E-09
NNE	3.319E-08	3.766E-08	2.888E-08	2.085E-08	1.683E-08	1.851E-08	8.971E-09	4.390E-09	2.760E-09	1.952E-09
NE	2.014E-08	2.843E-08	2.274E-08	1.637E-08	1.308E-08	1.455E-08	7.081E-09	3.467E-09	2.205E-09	1.564E-09
ENE	1.396E-08	2.432E-08	1.976E-08	1.408E-08	1.104E-08	1.212E-08	6.091E-09	3.105E-09	2.084E-09	1.489E-09
E	1.317E-08	1.894E-08	1.497E-08	1.074E-08	8.597E-09	9.809E-09	4.915E-09	2.445E-09	1.561E-09	1.145E-09
ESE	2.691E-08	3.397E-08	2.556E-08	1.792E-08	1.381E-08	1.046E-08	4.540E-09	2.174E-09	1.344E-09	9.370E-10
SE	4.022E-08	5.667E-08	4.314E-08	2.992E-08	2.178E-08	1.166E-08	5.555E-09	3.158E-09	2.134E-09	1.522E-09
SSE	8.288E-08	9.458E-08	6.917E-08	4.766E-08	3.653E-08	2.820E-08	1.193E-08	5.572E-09	3.396E-09	2.345E-09

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ERP ELEVATED STACK RELEASES - JAN-JUN 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	DISTANCE IN MILES FROM THE SITE										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.171E-09	2.363E-08	5.366E-08	7.702E-08	8.716E-08	7.640E-08	6.351E-08	5.263E-08	4.409E-08	5.071E-08	5.501E-08
SSW	3.541E-09	2.534E-08	5.131E-08	6.478E-08	6.682E-08	5.639E-08	4.585E-08	4.750E-08	4.659E-08	3.970E-08	3.438E-08
SW	2.108E-09	1.972E-08	5.872E-08	1.000E-07	1.376E-07	9.009E-08	6.352E-08	4.743E-08	3.698E-08	2.981E-08	2.468E-08
WSW	6.122E-10	8.583E-09	4.974E-08	1.117E-07	1.739E-07	1.093E-07	7.545E-08	5.562E-08	4.301E-08	3.447E-08	2.841E-08
W	6.308E-10	4.028E-08	1.370E-07	1.690E-07	1.557E-07	9.707E-08	6.661E-08	4.889E-08	3.767E-08	3.011E-08	2.476E-08
WNW	3.112E-10	2.083E-08	1.145E-07	1.960E-07	2.281E-07	1.351E-07	8.946E-08	6.620E-08	5.125E-08	4.000E-08	3.222E-08
NW	3.232E-09	2.660E-08	1.027E-07	2.126E-07	3.437E-07	2.008E-07	1.324E-07	9.652E-08	7.406E-08	5.803E-08	4.691E-08
NNW	8.668E-09	5.227E-08	1.054E-07	1.470E-07	1.859E-07	1.684E-07	1.458E-07	1.238E-07	1.066E-07	8.314E-08	6.698E-08
N	1.406E-08	6.507E-08	9.157E-08	9.193E-08	8.469E-08	7.317E-08	6.150E-08	5.082E-08	4.262E-08	3.630E-08	3.135E-08
NNE	1.142E-09	1.745E-08	3.422E-08	3.931E-08	3.944E-08	3.414E-08	2.857E-08	2.392E-08	2.025E-08	1.736E-08	1.509E-08
NE	9.676E-10	7.628E-09	1.902E-08	2.688E-08	3.044E-08	2.691E-08	2.255E-08	1.883E-08	1.587E-08	1.356E-08	1.174E-08
ENE	1.722E-11	1.767E-09	1.195E-08	2.153E-08	2.651E-08	2.354E-08	1.960E-08	1.625E-08	1.361E-08	1.156E-08	9.964E-09
E	5.985E-11	4.068E-09	1.244E-08	1.805E-08	2.035E-08	1.780E-08	1.482E-08	1.233E-08	1.039E-08	8.883E-09	7.711E-09
ESE	5.522E-10	9.981E-09	2.679E-08	3.487E-08	3.615E-08	3.076E-08	2.523E-08	2.076E-08	1.731E-08	1.466E-08	1.260E-08
SE	1.868E-09	1.260E-08	3.751E-08	5.559E-08	6.123E-08	5.227E-08	4.262E-08	3.481E-08	2.883E-08	2.426E-08	2.072E-08
SSE	6.647E-09	4.417E-08	8.294E-08	1.002E-07	1.005E-07	8.411E-08	6.814E-08	5.550E-08	4.588E-08	3.855E-08	3.291E-08

SECTOR	DISTANCE IN MILES FROM THE SITE										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.863E-08	3.066E-08	1.915E-08	1.020E-08	6.556E-09	4.610E-09	3.388E-09	2.606E-09	2.091E-09	1.727E-09	1.449E-09
SSW	3.092E-08	2.021E-08	1.249E-08	6.579E-09	4.212E-09	2.969E-09	2.209E-09	1.718E-09	1.381E-09	1.137E-09	9.549E-10
SW	2.224E-08	1.534E-08	9.658E-09	5.193E-09	3.390E-09	2.411E-09	1.841E-09	1.439E-09	1.161E-09	9.590E-10	8.078E-10
WSW	2.494E-08	1.532E-08	1.024E-08	5.787E-09	3.693E-09	2.602E-09	1.951E-09	1.526E-09	1.232E-09	1.019E-09	8.592E-10
W	2.082E-08	1.117E-08	7.739E-09	4.588E-09	3.091E-09	2.189E-09	1.643E-09	1.288E-09	1.042E-09	8.637E-10	7.295E-10
WNW	2.680E-08	1.372E-08	8.672E-09	4.665E-09	2.901E-09	2.009E-09	1.497E-09	1.165E-09	9.347E-10	7.681E-10	6.437E-10
NW	3.921E-08	2.047E-08	1.315E-08	7.224E-09	4.561E-09	3.185E-09	2.402E-09	1.882E-09	1.519E-09	1.256E-09	1.059E-09
NNW	5.630E-08	2.996E-08	1.865E-08	9.892E-09	6.160E-09	4.249E-09	3.154E-09	2.456E-09	1.999E-09	1.658E-09	1.396E-09
N	2.750E-08	1.684E-08	1.350E-08	1.060E-08	8.910E-09	7.166E-09	5.481E-09	4.347E-09	3.544E-09	2.959E-09	2.516E-09
NNE	1.631E-08	2.307E-08	1.448E-08	7.856E-09	5.057E-09	3.588E-09	2.707E-09	2.131E-09	1.730E-09	1.439E-09	1.219E-09
NE	1.253E-08	1.820E-08	1.144E-08	6.208E-09	3.986E-09	2.822E-09	2.155E-09	1.714E-09	1.405E-09	1.171E-09	9.936E-10
ENE	1.028E-08	1.503E-08	9.663E-09	5.336E-09	3.405E-09	2.391E-09	1.884E-09	1.527E-09	1.238E-09	1.027E-09	8.688E-10
E	8.210E-09	1.229E-08	7.860E-09	4.308E-09	2.733E-09	1.911E-09	1.422E-09	1.105E-09	9.136E-10	7.685E-10	6.457E-10
ESE	1.260E-08	1.165E-08	7.295E-09	3.896E-09	2.443E-09	1.693E-09	1.251E-09	9.663E-10	7.710E-10	6.307E-10	5.262E-10
SE	1.794E-08	1.045E-08	7.702E-09	5.218E-09	3.720E-09	2.883E-09	2.355E-09	1.987E-09	1.626E-09	1.362E-09	1.161E-09
SSE	3.350E-08	3.145E-08	1.931E-08	1.014E-08	6.358E-09	4.416E-09	3.272E-09	2.536E-09	2.030E-09	1.666E-09	1.395E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.737E-08	8.012E-08	6.259E-08	4.905E-08	5.137E-08	2.954E-08	1.057E-08	4.640E-09	2.633E-09	1.732E-09
SSW	5.153E-08	6.173E-08	4.932E-08	4.423E-08	3.467E-08	1.916E-08	6.841E-09	2.996E-09	1.730E-09	1.142E-09
SW	6.841E-08	1.081E-07	6.417E-08	3.723E-08	2.530E-08	1.435E-08	5.384E-09	2.444E-09	1.448E-09	9.627E-10
WSW	6.815E-08	1.314E-07	7.654E-08	4.336E-08	2.892E-08	1.520E-08	5.846E-09	2.632E-09	1.535E-09	1.023E-09
W	1.297E-07	1.326E-07	6.764E-08	3.800E-08	2.489E-08	1.179E-08	4.623E-09	2.211E-09	1.296E-09	8.669E-10
WNW	1.299E-07	1.796E-07	9.232E-08	5.124E-08	3.251E-08	1.438E-08	4.772E-09	2.042E-09	1.172E-09	7.714E-10
NW	1.346E-07	2.510E-07	1.363E-07	7.437E-08	4.735E-08	2.138E-08	7.358E-09	3.239E-09	1.892E-09	1.261E-09
NNW	1.121E-07	1.694E-07	1.430E-07	1.026E-07	6.781E-08	3.079E-08	1.018E-08	4.321E-09	2.481E-09	1.662E-09
N	8.584E-08	8.118E-08	6.034E-08	4.255E-08	3.139E-08	1.773E-08	1.049E-08	6.957E-09	4.365E-09	2.968E-09
NNE	3.276E-08	3.706E-08	2.819E-08	2.020E-08	1.621E-08	1.775E-08	8.084E-09	3.628E-09	2.143E-09	1.444E-09
NE	1.998E-08	2.808E-08	2.223E-08	1.584E-08	1.257E-08	1.394E-08	6.383E-09	2.865E-09	1.722E-09	1.175E-09
ENE	1.394E-08	2.408E-08	1.931E-08	1.358E-08	1.055E-08	1.159E-08	5.439E-09	2.458E-09	1.519E-09	1.031E-09
E	1.308E-08	1.871E-08	1.462E-08	1.037E-08	8.243E-09	9.415E-09	4.397E-09	1.935E-09	1.123E-09	7.660E-10
ESE	2.664E-08	3.347E-08	2.492E-08	1.728E-08	1.321E-08	9.924E-09	4.006E-09	1.716E-09	9.732E-10	6.335E-10
SE	4.001E-08	5.599E-08	4.207E-08	2.880E-08	2.074E-08	1.089E-08	5.104E-09	2.895E-09	1.954E-09	1.366E-09
SSE	8.201E-08	9.315E-08	6.734E-08	4.584E-08	3.480E-08	2.651E-08	1.050E-08	4.477E-09	2.554E-09	1.674E-09

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ERP ELEVATED STACK RELEASES - JAN-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.835E-09	2.137E-09	2.770E-09	2.461E-09	1.426E-09	9.338E-10	6.523E-10	4.765E-10	3.599E-10	2.814E-10	2.678E-10
SSW	2.975E-09	2.837E-09	3.028E-09	2.446E-09	1.340E-09	8.603E-10	5.953E-10	4.328E-10	4.057E-10	3.066E-10	2.400E-10
SW	2.003E-09	1.782E-09	1.741E-09	1.332E-09	1.243E-09	6.719E-10	4.150E-10	2.813E-10	2.031E-10	1.536E-10	1.202E-10
WSW	8.368E-10	9.266E-10	1.151E-09	1.956E-09	1.083E-09	5.871E-10	3.627E-10	2.458E-10	1.774E-10	1.341E-10	1.049E-10
W	8.175E-10	2.990E-09	2.557E-09	1.651E-09	7.935E-10	4.230E-10	2.590E-10	1.745E-10	1.255E-10	9.476E-11	7.423E-11
WNW	9.766E-10	1.083E-09	3.634E-09	2.671E-09	1.633E-09	8.251E-10	4.905E-10	3.256E-10	2.401E-10	1.829E-10	1.467E-10
NW	2.416E-09	2.211E-09	2.244E-09	3.701E-09	2.310E-09	1.151E-09	6.813E-10	4.533E-10	3.291E-10	2.557E-10	2.101E-10
NNW	5.959E-09	5.047E-09	4.586E-09	3.337E-09	2.921E-09	1.575E-09	9.780E-10	7.756E-10	5.574E-10	4.269E-10	3.446E-10
N	9.339E-09	7.583E-09	6.424E-09	4.425E-09	2.157E-09	1.324E-09	8.952E-10	6.431E-10	4.816E-10	3.721E-10	2.946E-10
NNE	2.784E-09	2.377E-09	2.186E-09	1.605E-09	8.228E-10	5.155E-10	3.523E-10	2.545E-10	1.912E-10	1.479E-10	1.171E-10
NE	9.632E-10	1.003E-09	1.177E-09	9.991E-10	5.642E-10	3.663E-10	2.548E-10	1.857E-10	1.401E-10	1.086E-10	8.599E-11
ENE	1.824E-10	4.122E-10	7.407E-10	7.358E-10	4.511E-10	3.007E-10	2.119E-10	1.554E-10	1.176E-10	9.128E-11	7.229E-11
E	5.539E-10	5.936E-10	7.163E-10	6.164E-10	3.508E-10	2.283E-10	1.590E-10	1.160E-10	8.756E-11	6.786E-11	5.374E-11
ESE	1.245E-09	1.331E-09	1.603E-09	1.378E-09	7.835E-10	5.099E-10	3.551E-10	2.590E-10	1.955E-10	1.515E-10	1.200E-10
SE	1.595E-09	2.064E-09	2.888E-09	2.646E-09	1.559E-09	1.026E-09	7.186E-10	5.256E-10	3.973E-10	3.081E-10	2.440E-10
SSE	5.267E-09	4.988E-09	5.281E-09	4.245E-09	2.318E-09	1.487E-09	1.029E-09	7.476E-10	5.633E-10	4.362E-10	3.454E-10

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	2.153E-10	1.297E-10	8.456E-11	4.696E-11	2.938E-11	2.375E-11	1.691E-11	1.261E-11	9.919E-12	7.861E-12	6.419E-12
SSW	1.933E-10	1.089E-10	6.961E-11	3.799E-11	2.817E-11	1.956E-11	1.402E-11	1.053E-11	8.210E-12	6.558E-12	5.353E-12
SW	9.700E-11	6.608E-11	4.478E-11	2.583E-11	1.638E-11	1.180E-11	8.564E-12	6.431E-12	5.000E-12	3.994E-12	3.260E-12
WSW	8.453E-11	5.803E-11	3.936E-11	2.529E-11	1.531E-11	1.026E-11	7.454E-12	5.597E-12	4.352E-12	3.476E-12	2.837E-12
W	5.992E-11	2.749E-11	3.696E-11	2.260E-11	1.386E-11	9.402E-12	6.737E-12	5.059E-12	3.933E-12	3.142E-12	2.565E-12
WNW	1.240E-10	6.908E-11	4.734E-11	2.751E-11	1.809E-11	1.219E-11	8.774E-12	6.665E-12	5.231E-12	4.178E-12	3.410E-12
NW	1.812E-10	1.090E-10	7.777E-11	4.823E-11	2.942E-11	1.972E-11	1.412E-11	1.061E-11	8.264E-12	6.601E-12	5.388E-12
NNW	2.917E-10	1.647E-10	1.138E-10	6.677E-11	4.256E-11	2.859E-11	2.124E-11	1.600E-11	1.237E-11	9.880E-12	8.065E-12
N	2.379E-10	1.135E-10	6.970E-11	3.733E-11	7.205E-11	4.567E-11	3.267E-11	2.453E-11	1.908E-11	1.524E-11	1.244E-11
NNE	9.448E-11	1.438E-10	8.850E-11	4.562E-11	2.780E-11	1.862E-11	1.333E-11	9.987E-12	7.753E-12	6.187E-12	5.045E-12
NE	6.932E-11	1.029E-10	6.317E-11	3.248E-11	1.977E-11	1.325E-11	9.741E-12	7.251E-12	5.639E-12	4.524E-12	3.693E-12
ENE	5.823E-11	6.257E-11	4.485E-11	2.701E-11	1.718E-11	1.139E-11	8.014E-12	5.822E-12	4.530E-12	3.621E-12	2.958E-12
E	4.331E-11	5.140E-11	3.762E-11	2.306E-11	1.475E-11	9.793E-12	6.892E-12	5.065E-12	3.868E-12	3.069E-12	2.498E-12
ESE	9.670E-11	8.426E-11	5.781E-11	3.363E-11	2.127E-11	1.420E-11	1.007E-11	7.475E-12	5.759E-12	4.573E-12	3.717E-12
SE	1.966E-10	9.320E-11	5.688E-11	3.000E-11	1.831E-11	1.257E-11	9.334E-12	1.366E-11	1.057E-11	8.435E-12	6.892E-12
SSE	2.786E-10	2.638E-10	1.622E-10	8.344E-11	5.077E-11	3.400E-11	2.431E-11	1.821E-11	1.413E-11	1.127E-11	9.182E-12

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***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.492E-09	1.437E-09	6.570E-10	3.633E-10	2.524E-10	1.287E-10	4.750E-11	2.252E-11	1.281E-11	7.937E-12
SSW	2.727E-09	1.372E-09	6.010E-10	3.757E-10	2.424E-10	1.102E-10	4.065E-11	1.964E-11	1.064E-11	6.601E-12
SW	1.569E-09	1.009E-09	4.300E-10	2.066E-10	1.215E-10	6.349E-11	2.584E-11	1.173E-11	6.495E-12	4.020E-12
WSW	1.459E-09	1.057E-09	3.757E-10	1.804E-10	1.060E-10	5.562E-11	2.398E-11	1.048E-11	5.653E-12	3.499E-12
W	2.251E-09	8.195E-10	2.689E-10	1.278E-10	7.501E-11	3.890E-11	2.191E-11	9.525E-12	5.109E-12	3.163E-12
WNW	2.639E-09	1.505E-09	5.138E-10	2.427E-10	1.490E-10	7.162E-11	2.773E-11	1.244E-11	6.750E-12	4.206E-12
NW	2.884E-09	2.104E-09	7.153E-10	3.366E-10	2.129E-10	1.112E-10	4.644E-11	2.007E-11	1.072E-11	6.645E-12
NNW	4.133E-09	2.415E-09	1.056E-09	5.700E-10	3.494E-10	1.703E-10	6.646E-11	2.938E-11	1.611E-11	9.945E-12
N	5.793E-09	2.290E-09	9.086E-10	4.860E-10	2.966E-10	1.217E-10	5.995E-11	4.750E-11	2.478E-11	1.534E-11
NNE	1.970E-09	8.599E-10	3.567E-10	1.928E-10	1.178E-10	1.083E-10	4.723E-11	1.895E-11	1.009E-11	6.228E-12
NE	1.059E-09	5.729E-10	2.569E-10	1.411E-10	8.651E-11	7.779E-11	3.365E-11	1.359E-11	7.348E-12	4.546E-12
ENE	6.655E-10	4.475E-10	2.130E-10	1.184E-10	7.271E-11	5.373E-11	2.660E-11	1.158E-11	5.956E-12	3.645E-12
E	6.446E-10	3.554E-10	1.603E-10	8.818E-11	5.406E-11	4.348E-11	2.260E-11	9.954E-12	5.131E-12	3.094E-12
ESE	1.442E-09	7.939E-10	3.579E-10	1.969E-10	1.207E-10	7.527E-11	3.351E-11	1.444E-11	7.564E-12	4.608E-12
SE	2.597E-09	1.563E-09	7.234E-10	4.000E-10	2.454E-10	1.000E-10	3.078E-11	1.281E-11	1.125E-11	8.497E-12
SSE	4.756E-09	2.377E-09	1.039E-09	5.676E-10	3.476E-10	2.219E-10	8.642E-11	3.460E-11	1.840E-11	1.134E-11

ERP ELEVATED STACK RELEASES - JAN-JUN 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF DIRECTION DIST. X/Q X/Q X/Q D/Q
ID LOCATION FROM SITE (MI) (SEC/M3) (SEC/M3) (SEC/M3) (PER SQ.METER)

ID	LOCATION	DIST. (MI)	X/Q			D/Q (PER SQ.METER)	
			(SEC/M3)	(SEC/M3)	(SEC/M3)		
			NO	2.26 DAY	8.0 DAY		
			DECAY	DECAY	DECAY		
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	6.0E-08	6.0E-08	5.9E-08	2.8E-09
A	Site Boundary	SSW	.82	5.7E-08	5.7E-08	5.6E-08	2.9E-09
A	Site Boundary	SW	.97	9.7E-08	9.7E-08	9.6E-08	1.4E-09
A	Site Boundary	WSW	.93	9.4E-08	9.4E-08	9.4E-08	1.7E-09
A	Site Boundary	W	.91	1.7E-07	1.6E-07	1.6E-07	1.9E-09
A	Site Boundary	WNW	.94	1.8E-07	1.8E-07	1.8E-07	3.0E-09
A	Site Boundary	NW	.81	1.3E-07	1.3E-07	1.3E-07	2.1E-09
A	Site Boundary	NNW	.69	9.0E-08	9.0E-08	8.9E-08	4.6E-09
A	Site Boundary	N	.67	8.5E-08	8.5E-08	8.4E-08	6.7E-09
A	Site Boundary	NNE	.60	2.4E-08	2.4E-08	2.4E-08	2.3E-09
A	Site Boundary	NE	.62	1.2E-08	1.2E-08	1.2E-08	1.1E-09
A	Site Boundary	ENE	.59	4.0E-09	4.0E-09	4.0E-09	5.2E-10
A	Site Boundary	E	.53	4.7E-09	4.7E-09	4.7E-09	6.0E-10
A	Site Boundary	ESE	.54	1.2E-08	1.2E-08	1.2E-08	1.4E-09
A	Site Boundary	SE	.65	2.5E-08	2.5E-08	2.5E-08	2.5E-09
A	Site Boundary	SSE	.81	9.0E-08	9.0E-08	8.9E-08	5.1E-09
A	Nearest Res	SSW	3.00	4.9E-08	4.9E-08	4.7E-08	4.3E-10
A	Nearest Res	SW	1.30	1.3E-07	1.3E-07	1.3E-07	1.7E-09
A	Nearest Res	WSW	1.90	1.2E-07	1.2E-07	1.2E-07	6.6E-10
A	Nearest Res	W	1.00	1.7E-07	1.7E-07	1.7E-07	1.7E-09
A	Nearest Res	WNW	1.70	1.9E-07	1.9E-07	1.8E-07	1.2E-09
A	Nearest Res	NW	.90	1.7E-07	1.7E-07	1.7E-07	4.1E-09
A	Nearest Res	NNW	1.90	1.8E-07	1.8E-07	1.7E-07	1.8E-09
A	Nearest Res	N	2.50	6.3E-08	6.3E-08	6.2E-08	9.0E-10
A	Nearest Res	NNE	1.70	3.8E-08	3.8E-08	3.8E-08	6.6E-10
A	Nearest Res	ENE	1.70	2.6E-08	2.6E-08	2.6E-08	3.8E-10
A	Nearest Res	E	2.20	1.7E-08	1.7E-08	1.7E-08	2.0E-10
A	Nearest Res	ESE	2.80	2.3E-08	2.3E-08	2.2E-08	2.9E-10
A	Nearest Res	SE	3.00	3.6E-08	3.6E-08	3.5E-08	5.3E-10
A	Nearest Res	SSE	3.00	5.8E-08	5.7E-08	5.5E-08	7.5E-10
A	Nearest Cow	NNW	3.50	1.1E-07	1.1E-07	1.1E-07	5.6E-10
A	Nearest Garde	SSW	3.00	4.9E-08	4.9E-08	4.7E-08	4.3E-10
A	Nearest Garde	SW	1.30	1.3E-07	1.3E-07	1.3E-07	1.7E-09
A	Nearest Garde	WSW	1.90	1.2E-07	1.2E-07	1.2E-07	6.6E-10
A	Nearest Garde	W	2.80	5.7E-08	5.7E-08	5.5E-08	2.0E-10
A	Nearest Garde	WNW	1.70	1.9E-07	1.9E-07	1.8E-07	1.2E-09
A	Nearest Garde	NW	1.90	2.3E-07	2.2E-07	2.2E-07	1.3E-09
A	Nearest Garde	NNW	1.90	1.8E-07	1.8E-07	1.7E-07	1.8E-09
A	Nearest Garde	ENE	1.70	2.6E-08	2.6E-08	2.6E-08	3.8E-10
A	Nearest Garde	ESE	2.30	2.8E-08	2.8E-08	2.7E-08	4.1E-10
A	Nearest Garde	SSE	3.00	5.8E-08	5.7E-08	5.5E-08	7.5E-10
A	MAXIMUM CHI/Q	S	1.50	8.8E-08	8.8E-08	8.7E-08	1.4E-09
A	MAXIMUM CHI/Q	SSW	1.50	6.8E-08	6.8E-08	6.7E-08	1.3E-09
A	MAXIMUM CHI/Q	SW	1.50	1.4E-07	1.4E-07	1.4E-07	1.2E-09
A	MAXIMUM CHI/Q	WSW	1.50	1.8E-07	1.8E-07	1.7E-07	1.1E-09
A	MAXIMUM CHI/Q	W	1.00	1.7E-07	1.7E-07	1.7E-07	1.7E-09
A	MAXIMUM CHI/Q	WNW	1.50	2.3E-07	2.3E-07	2.3E-07	1.6E-09
A	MAXIMUM CHI/Q	NW	1.50	3.5E-07	3.5E-07	3.4E-07	2.3E-09
A	MAXIMUM CHI/Q	NNW	1.50	1.9E-07	1.9E-07	1.9E-07	2.9E-09
A	MAXIMUM CHI/Q	N	1.00	9.3E-08	9.3E-08	9.2E-08	4.4E-09
A	MAXIMUM CHI/Q	NNE	1.50	4.0E-08	4.0E-08	3.9E-08	8.2E-10
A	MAXIMUM CHI/Q	NE	1.50	3.1E-08	3.1E-08	3.0E-08	5.6E-10
A	MAXIMUM CHI/Q	ENE	1.50	2.7E-08	2.7E-08	2.7E-08	4.5E-10
A	MAXIMUM CHI/Q	E	1.50	2.1E-08	2.1E-08	2.0E-08	3.5E-10
A	MAXIMUM CHI/Q	ESE	1.50	3.7E-08	3.7E-08	3.6E-08	7.8E-10
A	MAXIMUM CHI/Q	SE	1.50	6.2E-08	6.2E-08	6.1E-08	1.6E-09
A	MAXIMUM CHI/Q	SSE	1.50	1.0E-07	1.0E-07	1.0E-07	2.3E-09

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Atmospheric Diffusion Estimates

Elevated Releases

July-September 2014

ERP ELEVATED STACK RELEASES - JUL-SEP 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	8.677E-11	6.172E-09	3.255E-08	5.881E-08	7.644E-08	7.077E-08	6.075E-08	5.149E-08	4.389E-08	5.235E-08	5.937E-08
SSW	3.389E-11	3.736E-09	2.970E-08	5.647E-08	7.337E-08	6.724E-08	5.728E-08	6.283E-08	6.493E-08	5.697E-08	5.068E-08
SW	1.853E-16	4.806E-10	2.418E-08	7.023E-08	1.208E-07	8.388E-08	6.175E-08	4.774E-08	3.834E-08	3.171E-08	2.686E-08
WSW	2.278E-16	6.003E-10	3.827E-08	1.194E-07	2.174E-07	1.416E-07	1.004E-07	7.568E-08	5.967E-08	4.865E-08	4.072E-08
W	8.933E-11	6.906E-08	3.133E-07	3.982E-07	3.549E-07	2.189E-07	1.491E-07	1.090E-07	8.375E-08	6.685E-08	5.494E-08
WNW	3.049E-09	2.685E-08	2.259E-07	4.253E-07	5.359E-07	3.284E-07	2.235E-07	1.710E-07	1.365E-07	1.084E-07	8.876E-08
NW	2.016E-10	2.148E-08	1.453E-07	3.631E-07	6.739E-07	4.066E-07	2.746E-07	2.051E-07	1.608E-07	1.279E-07	1.049E-07
NNW	1.594E-09	5.325E-08	1.545E-07	2.379E-07	3.322E-07	3.231E-07	2.993E-07	2.687E-07	2.421E-07	1.911E-07	1.558E-07
N	5.240E-09	4.099E-08	7.369E-08	8.555E-08	8.832E-08	7.970E-08	6.862E-08	5.766E-08	4.901E-08	4.223E-08	3.687E-08
NNE	1.786E-09	6.113E-09	1.305E-08	2.004E-08	2.512E-08	2.351E-08	2.048E-08	1.761E-08	1.520E-08	1.324E-08	1.167E-08
NE	2.171E-16	3.366E-10	7.528E-09	1.762E-08	2.705E-08	2.670E-08	2.368E-08	2.047E-08	1.768E-08	1.537E-08	1.349E-08
ENE	1.869E-16	2.886E-10	6.414E-09	1.497E-08	2.295E-08	2.269E-08	2.021E-08	1.758E-08	1.528E-08	1.339E-08	1.184E-08
E	8.004E-17	1.819E-10	4.013E-09	9.046E-09	1.319E-08	1.267E-08	1.110E-08	9.565E-09	8.277E-09	7.236E-09	6.401E-09
ESE	2.223E-16	2.334E-10	4.156E-09	8.775E-09	1.280E-08	1.274E-08	1.154E-08	1.021E-08	9.023E-09	8.014E-09	7.177E-09
SE	9.229E-16	7.681E-10	1.251E-08	2.481E-08	3.272E-08	3.033E-08	2.610E-08	2.222E-08	1.903E-08	1.649E-08	1.445E-08
SSE	2.463E-10	1.624E-08	4.283E-08	5.701E-08	6.147E-08	5.345E-08	4.450E-08	3.706E-08	3.125E-08	2.673E-08	2.319E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.342E-08	3.589E-08	2.332E-08	1.334E-08	9.258E-09	6.939E-09	5.391E-09	4.358E-09	3.649E-09	3.117E-09	2.698E-09
SSW	4.704E-08	3.588E-08	2.327E-08	1.332E-08	9.387E-09	7.009E-09	5.452E-09	4.413E-09	3.678E-09	3.133E-09	2.716E-09
SW	2.553E-08	2.386E-08	1.609E-08	9.687E-09	7.303E-09	5.800E-09	4.798E-09	3.925E-09	3.301E-09	2.835E-09	2.475E-09
WSW	3.684E-08	2.697E-08	2.027E-08	1.326E-08	9.029E-09	6.717E-09	5.283E-09	4.313E-09	3.621E-09	3.105E-09	2.707E-09
W	4.620E-08	2.489E-08	1.760E-08	1.143E-08	8.513E-09	6.303E-09	4.910E-09	3.980E-09	3.320E-09	2.832E-09	2.457E-09
WNW	7.526E-08	4.198E-08	2.848E-08	1.726E-08	1.182E-08	8.815E-09	6.965E-09	5.690E-09	4.759E-09	4.058E-09	3.520E-09
NW	8.921E-08	5.042E-08	3.478E-08	2.145E-08	1.453E-08	1.077E-08	8.614E-09	7.059E-09	5.908E-09	5.052E-09	4.393E-09
NNW	1.329E-07	7.535E-08	4.900E-08	2.822E-08	1.916E-08	1.422E-08	1.125E-08	9.233E-09	7.847E-09	6.746E-09	5.867E-09
N	3.264E-08	2.075E-08	1.734E-08	1.400E-08	1.160E-08	9.465E-09	7.439E-09	6.055E-09	5.059E-09	4.320E-09	3.752E-09
NNE	1.304E-08	1.900E-08	1.233E-08	7.092E-09	4.808E-09	3.564E-09	2.794E-09	2.276E-09	1.907E-09	1.633E-09	1.421E-09
NE	1.456E-08	2.114E-08	1.377E-08	7.947E-09	5.399E-09	4.009E-09	3.192E-09	2.630E-09	2.234E-09	1.913E-09	1.665E-09
ENE	1.290E-08	2.079E-08	1.382E-08	8.167E-09	5.624E-09	4.215E-09	3.485E-09	2.937E-09	2.466E-09	2.114E-09	1.843E-09
E	7.103E-09	1.259E-08	8.372E-09	4.947E-09	3.408E-09	2.555E-09	2.020E-09	1.657E-09	1.439E-09	1.263E-09	1.101E-09
ESE	7.950E-09	1.307E-08	8.874E-09	5.371E-09	3.753E-09	2.840E-09	2.262E-09	1.866E-09	1.579E-09	1.363E-09	1.196E-09
SE	1.281E-08	8.156E-09	6.640E-09	5.178E-09	3.904E-09	3.126E-09	2.602E-09	2.222E-09	1.868E-09	1.603E-09	1.397E-09
SSE	2.476E-08	2.966E-08	1.906E-08	1.081E-08	7.262E-09	5.345E-09	4.166E-09	3.378E-09	2.819E-09	2.404E-09	2.086E-09

DIRECTION FROM SITE	CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.836E-08	7.000E-08	5.972E-08	4.929E-08	5.509E-08	3.420E-08	1.374E-08	6.938E-09	4.383E-09	3.119E-09
SSW	3.583E-08	6.689E-08	6.216E-08	6.129E-08	5.120E-08	3.276E-08	1.378E-08	7.020E-09	4.430E-09	3.140E-09
SW	3.938E-08	9.316E-08	6.205E-08	3.850E-08	2.780E-08	2.078E-08	1.005E-08	5.800E-09	3.937E-09	2.839E-09
WSW	6.598E-08	1.619E-07	1.015E-07	6.004E-08	4.163E-08	2.618E-08	1.294E-08	6.760E-09	4.326E-09	3.110E-09
W	2.967E-07	3.041E-07	1.517E-07	8.452E-08	5.523E-08	2.639E-08	1.151E-08	6.335E-09	3.994E-09	2.838E-09
WNW	2.703E-07	4.191E-07	2.304E-07	1.357E-07	8.959E-08	4.338E-08	1.734E-08	8.876E-09	5.700E-09	4.067E-09
NW	2.146E-07	4.861E-07	2.820E-07	1.609E-07	1.059E-07	5.209E-08	2.134E-08	1.091E-08	7.065E-09	5.062E-09
NNW	1.691E-07	3.072E-07	2.934E-07	2.303E-07	1.578E-07	7.643E-08	2.881E-08	1.435E-08	9.281E-09	6.747E-09
N	7.170E-08	8.387E-08	6.719E-08	4.890E-08	3.689E-08	2.188E-08	1.368E-08	9.224E-09	6.071E-09	4.328E-09
NNE	1.461E-08	2.327E-08	2.014E-08	1.514E-08	1.264E-08	1.471E-08	7.242E-09	3.587E-09	2.284E-09	1.636E-09
NE	1.042E-08	2.480E-08	2.320E-08	1.760E-08	1.444E-08	1.640E-08	8.109E-09	4.053E-09	2.640E-09	1.916E-09
ENE	8.857E-09	2.106E-08	1.982E-08	1.522E-08	1.269E-08	1.594E-08	8.294E-09	4.299E-09	2.914E-09	2.118E-09
E	5.398E-09	1.204E-08	1.090E-08	8.248E-09	6.909E-09	9.496E-09	5.024E-09	2.568E-09	1.677E-09	1.255E-09
ESE	5.337E-09	1.188E-08	1.133E-08	8.979E-09	7.712E-09	1.007E-08	5.430E-09	2.852E-09	1.870E-09	1.365E-09
SE	1.536E-08	2.990E-08	2.567E-08	1.897E-08	1.445E-08	8.516E-09	4.937E-09	3.124E-09	2.196E-09	1.605E-09
SSE	4.322E-08	5.691E-08	4.391E-08	3.119E-08	2.482E-08	2.386E-08	1.107E-08	5.385E-09	3.390E-09	2.409E-09

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ERP ELEVATED STACK RELEASES - JUL-SEP 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	8.675E-11	6.169E-09	3.251E-08	5.869E-08	7.619E-08	7.045E-08	6.040E-08	5.113E-08	4.354E-08	5.185E-08	5.869E-08
SSW	3.388E-11	3.733E-09	2.966E-08	5.636E-08	7.315E-08	6.696E-08	5.698E-08	6.241E-08	6.442E-08	5.646E-08	5.016E-08
SW	1.852E-16	4.801E-10	2.414E-08	7.004E-08	1.203E-07	8.343E-08	6.133E-08	4.735E-08	3.797E-08	3.136E-08	2.653E-08
WSW	2.277E-16	5.997E-10	3.820E-08	1.191E-07	2.165E-07	1.408E-07	9.968E-08	7.503E-08	5.906E-08	4.808E-08	4.018E-08
W	8.921E-11	6.896E-08	3.127E-07	3.972E-07	3.536E-07	2.178E-07	1.481E-07	1.081E-07	8.297E-08	6.614E-08	5.427E-08
WNW	3.048E-09	2.683E-08	2.256E-07	4.245E-07	5.342E-07	3.270E-07	2.222E-07	1.698E-07	1.354E-07	1.074E-07	8.779E-08
NW	2.015E-10	2.145E-08	1.451E-07	3.624E-07	6.717E-07	4.048E-07	2.731E-07	2.037E-07	1.595E-07	1.267E-07	1.038E-07
NNW	1.594E-09	5.321E-08	1.543E-07	2.375E-07	3.314E-07	3.221E-07	2.981E-07	2.674E-07	2.407E-07	1.899E-07	1.546E-07
N	5.240E-09	4.098E-08	7.364E-08	8.545E-08	8.814E-08	7.947E-08	6.838E-08	5.741E-08	4.876E-08	4.199E-08	3.662E-08
NNE	1.786E-09	6.112E-09	1.304E-08	2.001E-08	2.506E-08	2.343E-08	2.039E-08	1.752E-08	1.511E-08	1.316E-08	1.158E-08
NE	2.170E-16	3.362E-10	7.513E-09	1.757E-08	2.692E-08	2.651E-08	2.347E-08	2.026E-08	1.746E-08	1.515E-08	1.327E-08
ENE	1.869E-16	2.883E-10	6.401E-09	1.493E-08	2.284E-08	2.253E-08	2.003E-08	1.739E-08	1.509E-08	1.319E-08	1.164E-08
E	8.001E-17	1.817E-10	4.005E-09	9.022E-09	1.313E-08	1.260E-08	1.102E-08	9.483E-09	8.195E-09	7.154E-09	6.320E-09
ESE	2.222E-16	2.332E-10	4.151E-09	8.758E-09	1.276E-08	1.269E-08	1.148E-08	1.014E-08	8.947E-09	7.936E-09	7.097E-09
SE	9.227E-16	7.676E-10	1.249E-08	2.477E-08	3.264E-08	3.022E-08	2.598E-08	2.210E-08	1.891E-08	1.637E-08	1.434E-08
SSE	2.462E-10	1.623E-08	4.279E-08	5.693E-08	6.133E-08	5.328E-08	4.432E-08	3.688E-08	3.107E-08	2.655E-08	2.302E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.272E-08	3.513E-08	2.265E-08	1.277E-08	8.726E-09	6.441E-09	4.929E-09	3.926E-09	3.237E-09	2.724E-09	2.322E-09
SSW	4.651E-08	3.526E-08	2.273E-08	1.285E-08	8.953E-09	6.606E-09	5.079E-09	4.063E-09	3.347E-09	2.818E-09	2.414E-09
SW	2.517E-08	2.333E-08	1.562E-08	9.255E-09	6.865E-09	5.363E-09	4.364E-09	3.514E-09	2.909E-09	2.459E-09	2.114E-09
WSW	3.629E-08	2.633E-08	1.961E-08	1.261E-08	8.441E-09	6.174E-09	4.774E-09	3.832E-09	3.164E-09	2.668E-09	2.288E-09
W	4.557E-08	2.439E-08	1.712E-08	1.095E-08	8.027E-09	5.855E-09	4.494E-09	3.589E-09	2.951E-09	2.480E-09	2.121E-09
WNW	7.434E-08	4.117E-08	2.772E-08	1.655E-08	1.116E-08	8.199E-09	6.379E-09	5.132E-09	4.228E-09	3.551E-09	3.035E-09
NW	8.818E-08	4.953E-08	3.396E-08	2.068E-08	1.384E-08	1.013E-08	8.003E-09	6.477E-09	5.355E-09	4.523E-09	3.887E-09
NNW	1.318E-07	7.438E-08	4.816E-08	2.749E-08	1.850E-08	1.361E-08	1.067E-08	8.681E-09	7.310E-09	6.227E-09	5.368E-09
N	3.240E-08	2.051E-08	1.707E-08	1.364E-08	1.117E-08	9.008E-09	7.008E-09	5.647E-09	4.671E-09	3.949E-09	3.396E-09
NNE	1.293E-08	1.872E-08	1.209E-08	6.884E-09	4.621E-09	3.391E-09	2.632E-09	2.124E-09	1.762E-09	1.494E-09	1.288E-09
NE	1.430E-08	2.054E-08	1.325E-08	7.497E-09	4.995E-09	3.637E-09	2.839E-09	2.293E-09	1.909E-09	1.603E-09	1.368E-09
ENE	1.266E-08	2.025E-08	1.335E-08	7.753E-09	5.250E-09	3.869E-09	3.148E-09	2.612E-09	2.158E-09	1.820E-09	1.562E-09
E	7.006E-09	1.235E-08	8.164E-09	4.765E-09	3.244E-09	2.402E-09	1.877E-09	1.522E-09	1.306E-09	1.134E-09	9.775E-10
ESE	7.847E-09	1.278E-08	8.611E-09	5.134E-09	3.534E-09	2.636E-09	2.068E-09	1.682E-09	1.403E-09	1.194E-09	1.032E-09
SE	1.269E-08	8.045E-09	6.517E-09	5.031E-09	3.755E-09	2.977E-09	2.452E-09	2.073E-09	1.726E-09	1.466E-09	1.266E-09
SSE	2.455E-08	2.924E-08	1.870E-08	1.050E-08	6.988E-09	5.094E-09	3.932E-09	3.158E-09	2.610E-09	2.205E-09	1.895E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.829E-08	6.975E-08	5.937E-08	4.887E-08	5.445E-08	3.349E-08	1.317E-08	6.446E-09	3.950E-09	2.727E-09
SSW	3.577E-08	6.667E-08	6.181E-08	6.081E-08	5.067E-08	3.219E-08	1.331E-08	6.621E-09	4.080E-09	2.825E-09
SW	3.928E-08	9.275E-08	6.163E-08	3.813E-08	2.746E-08	2.031E-08	9.606E-09	5.364E-09	3.526E-09	2.464E-09
WSW	6.582E-08	1.612E-07	1.008E-07	5.944E-08	4.108E-08	2.556E-08	1.231E-08	6.218E-09	3.847E-09	2.674E-09
W	2.961E-07	3.029E-07	1.507E-07	8.374E-08	5.457E-08	2.586E-08	1.102E-08	5.890E-09	3.605E-09	2.487E-09
WNW	2.698E-07	4.177E-07	2.292E-07	1.345E-07	8.861E-08	4.257E-08	1.664E-08	8.261E-09	5.144E-09	3.560E-09
NW	2.142E-07	4.844E-07	2.805E-07	1.597E-07	1.048E-07	5.120E-08	2.059E-08	1.027E-08	6.485E-09	4.534E-09
NNW	1.688E-07	3.064E-07	2.922E-07	2.290E-07	1.566E-07	7.549E-08	2.809E-08	1.374E-08	8.728E-09	6.230E-09
N	7.163E-08	8.369E-08	6.695E-08	4.865E-08	3.665E-08	2.163E-08	1.331E-08	8.785E-09	5.664E-09	3.958E-09
NNE	1.460E-08	2.321E-08	2.005E-08	1.505E-08	1.255E-08	1.449E-08	7.036E-09	3.415E-09	2.131E-09	1.497E-09
NE	1.039E-08	2.466E-08	2.300E-08	1.738E-08	1.421E-08	1.591E-08	7.663E-09	3.680E-09	2.303E-09	1.607E-09
ENE	8.833E-09	2.094E-08	1.964E-08	1.502E-08	1.248E-08	1.550E-08	7.884E-09	3.949E-09	2.592E-09	1.824E-09
E	5.385E-09	1.198E-08	1.083E-08	8.166E-09	6.821E-09	9.303E-09	4.844E-09	2.417E-09	1.541E-09	1.127E-09
ESE	5.328E-09	1.184E-08	1.127E-08	8.904E-09	7.624E-09	9.832E-09	5.196E-09	2.648E-09	1.686E-09	1.196E-09
SE	1.534E-08	2.981E-08	2.556E-08	1.885E-08	1.433E-08	8.399E-09	4.794E-09	2.975E-09	2.049E-09	1.469E-09
SSE	4.317E-08	5.677E-08	4.373E-08	3.101E-08	2.463E-08	2.351E-08	1.076E-08	5.134E-09	3.170E-09	2.210E-09

B302

ERP ELEVATED STACK RELEASES - JUL-SEP 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	8.676E-11	6.128E-09	3.238E-08	5.861E-08	7.561E-08	6.942E-08	5.912E-08	4.975E-08	4.214E-08	5.022E-08	5.701E-08
SSW	3.389E-11	3.715E-09	2.961E-08	5.636E-08	7.261E-08	6.597E-08	5.573E-08	6.080E-08	6.263E-08	5.470E-08	4.849E-08
SW	1.852E-16	4.805E-10	2.417E-08	7.018E-08	1.194E-07	8.209E-08	5.997E-08	4.608E-08	3.681E-08	3.032E-08	2.558E-08
WSW	2.278E-16	6.001E-10	3.825E-08	1.193E-07	2.147E-07	1.386E-07	9.755E-08	7.312E-08	5.738E-08	4.659E-08	3.886E-08
W	8.930E-11	6.888E-08	3.110E-07	3.928E-07	3.468E-07	2.120E-07	1.434E-07	1.041E-07	7.963E-08	6.327E-08	5.177E-08
WNW	3.049E-09	2.671E-08	2.254E-07	4.218E-07	5.266E-07	3.199E-07	2.162E-07	1.646E-07	1.310E-07	1.034E-07	8.418E-08
NW	2.016E-10	2.129E-08	1.442E-07	3.607E-07	6.657E-07	3.987E-07	2.677E-07	1.991E-07	1.556E-07	1.232E-07	1.005E-07
NNW	1.594E-09	5.278E-08	1.524E-07	2.357E-07	3.281E-07	3.175E-07	2.933E-07	2.629E-07	2.367E-07	1.860E-07	1.508E-07
N	5.240E-09	4.064E-08	7.258E-08	8.447E-08	8.694E-08	7.803E-08	6.683E-08	5.587E-08	4.727E-08	4.057E-08	3.528E-08
NNE	1.786E-09	6.063E-09	1.294E-08	1.995E-08	2.486E-08	2.310E-08	2.000E-08	1.711E-08	1.470E-08	1.275E-08	1.119E-08
NE	2.171E-16	3.365E-10	7.524E-09	1.761E-08	2.678E-08	2.619E-08	2.304E-08	1.977E-08	1.695E-08	1.465E-08	1.278E-08
ENE	1.869E-16	2.885E-10	6.411E-09	1.496E-08	2.272E-08	2.226E-08	1.967E-08	1.698E-08	1.467E-08	1.277E-08	1.124E-08
E	8.004E-17	1.819E-10	4.010E-09	9.039E-09	1.306E-08	1.243E-08	1.080E-08	9.240E-09	7.945E-09	6.908E-09	6.081E-09
ESE	2.223E-16	2.333E-10	4.155E-09	8.770E-09	1.269E-08	1.255E-08	1.130E-08	9.951E-09	8.755E-09	7.749E-09	6.919E-09
SE	9.229E-16	7.679E-10	1.250E-08	2.480E-08	3.242E-08	2.979E-08	2.545E-08	2.152E-08	1.833E-08	1.580E-08	1.379E-08
SSE	2.463E-10	1.610E-08	4.230E-08	5.646E-08	6.058E-08	5.229E-08	4.322E-08	3.576E-08	2.997E-08	2.549E-08	2.201E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.116E-08	3.373E-08	2.119E-08	1.134E-08	7.305E-09	5.139E-09	3.781E-09	2.910E-09	2.336E-09	1.931E-09	1.622E-09
SSW	4.492E-08	3.376E-08	2.117E-08	1.133E-08	7.439E-09	5.326E-09	3.992E-09	3.124E-09	2.524E-09	2.089E-09	1.761E-09
SW	2.431E-08	2.261E-08	1.475E-08	8.273E-09	5.752E-09	4.261E-09	3.378E-09	2.665E-09	2.167E-09	1.803E-09	1.529E-09
WSW	3.512E-08	2.528E-08	1.842E-08	1.140E-08	7.406E-09	5.289E-09	4.011E-09	3.167E-09	2.578E-09	2.148E-09	1.822E-09
W	4.337E-08	2.300E-08	1.606E-08	9.878E-09	6.929E-09	4.927E-09	3.702E-09	2.904E-09	2.350E-09	1.948E-09	1.646E-09
WNW	7.097E-08	3.835E-08	2.517E-08	1.424E-08	9.008E-09	6.311E-09	4.762E-09	3.747E-09	3.028E-09	2.500E-09	2.104E-09
NW	8.501E-08	4.657E-08	3.106E-08	1.788E-08	1.132E-08	7.915E-09	6.065E-09	4.796E-09	3.884E-09	3.221E-09	2.722E-09
NNW	1.280E-07	7.033E-08	4.416E-08	2.365E-08	1.478E-08	1.022E-08	7.612E-09	5.956E-09	4.883E-09	4.066E-09	3.432E-09
N	3.114E-08	1.956E-08	1.632E-08	1.317E-08	1.067E-08	8.289E-09	6.315E-09	4.997E-09	4.067E-09	3.390E-09	2.878E-09
NNE	1.253E-08	1.826E-08	1.145E-08	6.181E-09	3.939E-09	2.771E-09	2.075E-09	1.623E-09	1.310E-09	1.083E-09	9.126E-10
NE	1.379E-08	2.008E-08	1.263E-08	6.808E-09	4.298E-09	2.997E-09	2.263E-09	1.793E-09	1.472E-09	1.220E-09	1.030E-09
ENE	1.225E-08	1.993E-08	1.280E-08	7.041E-09	4.468E-09	3.122E-09	2.427E-09	1.942E-09	1.567E-09	1.295E-09	1.091E-09
E	6.758E-09	1.213E-08	7.792E-09	4.288E-09	2.721E-09	1.903E-09	1.415E-09	1.099E-09	9.070E-10	7.608E-10	6.384E-10
ESE	7.674E-09	1.271E-08	8.331E-09	4.684E-09	3.005E-09	2.116E-09	1.581E-09	1.232E-09	9.896E-10	8.138E-10	6.819E-10
SE	1.217E-08	7.635E-09	6.188E-09	4.816E-09	3.612E-09	2.882E-09	2.391E-09	2.031E-09	1.670E-09	1.405E-09	1.202E-09
SSE	2.351E-08	2.816E-08	1.748E-08	9.309E-09	5.882E-09	4.110E-09	3.060E-09	2.381E-09	1.913E-09	1.575E-09	1.322E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.820E-08	6.908E-08	5.812E-08	4.740E-08	5.283E-08	3.203E-08	1.174E-08	5.173E-09	2.940E-09	1.937E-09
SSW	3.574E-08	6.604E-08	6.049E-08	5.909E-08	4.901E-08	3.064E-08	1.179E-08	5.356E-09	3.143E-09	2.096E-09
SW	3.935E-08	9.188E-08	6.031E-08	3.699E-08	2.654E-08	1.949E-08	8.591E-09	4.305E-09	2.679E-09	1.809E-09
WSW	6.592E-08	1.597E-07	9.872E-08	5.777E-08	3.977E-08	2.442E-08	1.119E-08	5.342E-09	3.183E-09	2.155E-09
W	2.935E-07	2.971E-07	1.460E-07	8.040E-08	5.207E-08	2.444E-08	9.941E-09	4.971E-09	2.921E-09	1.955E-09
WNW	2.685E-07	4.115E-07	2.232E-07	1.301E-07	8.499E-08	3.974E-08	1.434E-08	6.411E-09	3.763E-09	2.510E-09
NW	2.131E-07	4.792E-07	2.752E-07	1.557E-07	1.015E-07	4.822E-08	1.789E-08	8.082E-09	4.811E-09	3.233E-09
NNW	1.673E-07	3.028E-07	2.876E-07	2.249E-07	1.528E-07	1.151E-08	2.426E-08	1.039E-08	6.020E-09	4.073E-09
N	7.077E-08	8.243E-08	6.543E-08	4.717E-08	3.531E-08	2.069E-08	1.276E-08	8.134E-09	5.020E-09	3.401E-09
NNE	1.453E-08	2.299E-08	1.967E-08	1.464E-08	1.215E-08	1.396E-08	6.355E-09	2.804E-09	1.633E-09	1.087E-09
NE	1.041E-08	2.448E-08	2.257E-08	1.688E-08	1.371E-08	1.537E-08	6.987E-09	3.050E-09	1.805E-09	1.224E-09
ENE	8.850E-09	2.079E-08	1.928E-08	1.460E-08	1.207E-08	1.505E-08	7.177E-09	3.203E-09	1.938E-09	1.300E-09
E	5.395E-09	1.189E-08	1.061E-08	7.920E-09	6.577E-09	9.007E-09	4.370E-09	1.926E-09	1.116E-09	7.588E-10
ESE	5.334E-09	1.175E-08	1.109E-08	8.714E-09	7.444E-09	9.645E-09	4.748E-09	2.139E-09	1.239E-09	8.170E-10
SE	1.536E-08	2.956E-08	2.504E-08	1.828E-08	1.378E-08	7.999E-09	4.586E-09	2.880E-09	1.996E-09	1.408E-09
SSE	4.277E-08	5.598E-08	4.266E-08	2.992E-08	2.360E-08	2.238E-08	9.601E-09	4.162E-09	2.396E-09	1.581E-09

B303

ERP ELEVATED STACK RELEASES - JUL-SEP 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	8.805E-10	1.253E-09	1.861E-09	1.742E-09	1.037E-09	6.855E-10	4.809E-10	3.520E-10	2.662E-10	2.106E-10	1.987E-10
SSW	3.747E-10	9.053E-10	1.658E-09	1.656E-09	1.017E-09	6.788E-10	4.783E-10	3.510E-10	3.330E-10	2.519E-10	1.971E-10
SW	4.194E-11	2.516E-10	5.357E-10	5.549E-10	6.471E-10	3.575E-10	2.237E-10	1.528E-10	1.109E-10	8.402E-11	6.581E-11
WSW	5.242E-11	3.145E-10	6.697E-10	9.491E-10	8.609E-10	4.683E-10	2.897E-10	1.964E-10	1.418E-10	1.072E-10	8.384E-11
W	3.420E-10	4.775E-09	4.592E-09	3.083E-09	1.441E-09	7.832E-10	4.847E-10	3.292E-10	2.383E-10	1.807E-10	1.421E-10
WNW	8.988E-10	1.364E-09	5.023E-09	4.848E-09	2.764E-09	1.425E-09	8.590E-10	5.784E-10	4.484E-10	3.447E-10	2.800E-10
NW	1.905E-09	2.029E-09	2.433E-09	4.663E-09	3.029E-09	1.515E-09	9.028E-10	6.078E-10	4.486E-10	3.559E-10	2.992E-10
NNW	6.555E-09	5.752E-09	5.510E-09	4.162E-09	3.833E-09	2.071E-09	1.285E-09	1.060E-09	7.845E-10	6.239E-10	5.257E-10
N	6.263E-09	5.342E-09	4.907E-09	3.599E-09	1.844E-09	1.155E-09	7.893E-10	5.702E-10	4.282E-10	3.312E-10	2.623E-10
NNE	8.097E-10	8.289E-10	9.565E-10	8.053E-10	4.526E-10	2.933E-10	2.038E-10	1.485E-10	1.120E-10	8.682E-11	6.875E-11
NE	3.538E-11	2.123E-10	4.520E-10	4.682E-10	2.924E-10	1.961E-10	1.385E-10	1.017E-10	7.706E-11	5.981E-11	4.737E-11
ENE	3.014E-11	1.808E-10	3.851E-10	3.988E-10	2.491E-10	1.670E-10	1.180E-10	8.667E-11	6.565E-11	5.095E-11	4.035E-11
E	1.704E-11	1.022E-10	2.176E-10	2.254E-10	1.408E-10	9.442E-11	6.669E-11	4.899E-11	3.710E-11	2.880E-11	2.281E-11
ESE	2.097E-11	1.258E-10	2.679E-10	2.775E-10	1.733E-10	1.162E-10	8.208E-11	6.030E-11	4.567E-11	3.544E-11	2.807E-11
SE	7.077E-11	4.246E-10	9.040E-10	9.364E-10	5.849E-10	3.922E-10	2.770E-10	2.035E-10	1.541E-10	1.196E-10	9.473E-11
SSE	2.147E-09	2.140E-09	2.400E-09	1.991E-09	1.109E-09	7.167E-10	4.974E-10	3.622E-10	2.731E-10	2.116E-10	1.675E-10
DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.598E-10	1.133E-10	7.736E-11	4.475E-11	2.825E-11	2.020E-11	1.435E-11	1.067E-11	8.609E-12	6.801E-12	5.553E-12
SSW	1.597E-10	1.164E-10	7.997E-11	4.650E-11	2.883E-11	2.083E-11	1.493E-11	1.121E-11	8.815E-12	7.041E-12	5.747E-12
SW	5.416E-11	5.310E-11	3.880E-11	2.371E-11	1.515E-11	9.673E-12	6.861E-12	5.152E-12	4.006E-12	3.200E-12	2.612E-12
WSW	6.739E-11	6.198E-11	4.480E-11	2.709E-11	1.639E-11	1.099E-11	8.074E-12	6.062E-12	4.714E-12	3.765E-12	3.073E-12
W	1.148E-10	5.274E-11	5.961E-11	3.765E-11	2.410E-11	1.638E-11	1.174E-11	8.812E-12	6.852E-12	5.473E-12	4.467E-12
WNW	2.397E-10	1.398E-10	9.809E-11	5.810E-11	3.618E-11	2.421E-11	1.807E-11	1.357E-11	1.060E-11	8.467E-12	6.911E-12
NW	2.641E-10	1.703E-10	1.253E-10	7.475E-11	4.588E-11	3.071E-11	2.203E-11	1.655E-11	1.297E-11	1.036E-11	8.458E-12
NNW	4.647E-10	3.012E-10	2.222E-10	1.372E-10	8.811E-11	5.865E-11	4.040E-11	2.866E-11	2.240E-11	1.789E-11	1.460E-11
N	2.117E-10	1.008E-10	6.177E-11	3.292E-11	7.672E-11	4.670E-11	3.346E-11	2.513E-11	1.954E-11	1.561E-11	1.274E-11
NNE	5.542E-11	9.308E-11	5.825E-11	3.060E-11	1.874E-11	1.253E-11	8.933E-12	6.672E-12	5.164E-12	4.110E-12	3.345E-12
NE	3.815E-11	5.359E-11	3.433E-11	1.855E-11	1.146E-11	7.647E-12	5.641E-12	4.085E-12	3.180E-12	2.677E-12	2.185E-12
ENE	3.250E-11	4.201E-11	3.108E-11	1.917E-11	1.226E-11	8.114E-12	5.698E-12	3.724E-12	2.891E-12	2.307E-12	1.883E-12
E	1.837E-11	3.184E-11	2.452E-11	1.558E-11	1.003E-11	6.621E-12	4.625E-12	3.369E-12	2.554E-12	1.813E-12	1.471E-12
ESE	2.261E-11	3.993E-11	3.082E-11	1.962E-11	1.263E-11	8.337E-12	5.822E-12	4.240E-12	3.212E-12	2.508E-12	2.007E-12
SE	7.630E-11	3.612E-11	2.201E-11	1.156E-11	7.052E-12	4.873E-12	3.685E-12	8.859E-12	6.790E-12	5.368E-12	4.354E-12
SSE	1.351E-10	1.625E-10	1.010E-10	5.267E-11	3.218E-11	2.153E-11	1.537E-11	1.149E-11	8.902E-12	7.091E-12	5.774E-12

B304

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.673E-09	1.038E-09	4.839E-10	2.695E-10	1.878E-10	1.077E-10	4.466E-11	2.001E-11	1.094E-11	6.874E-12
SSW	1.490E-09	1.009E-09	4.808E-10	3.072E-10	1.995E-10	1.098E-10	4.608E-11	2.060E-11	1.136E-11	7.088E-12
SW	4.811E-10	4.979E-10	2.310E-10	1.126E-10	6.689E-11	4.698E-11	2.326E-11	1.001E-11	5.204E-12	3.221E-12
WSW	7.149E-10	7.060E-10	3.000E-10	1.442E-10	8.466E-11	5.555E-11	2.627E-11	1.127E-11	6.123E-12	3.790E-12
W	3.962E-09	1.513E-09	5.021E-10	2.423E-10	1.434E-10	6.959E-11	3.651E-11	1.658E-11	8.901E-12	5.509E-12
WNW	4.132E-09	2.632E-09	8.977E-10	4.461E-10	2.843E-10	1.435E-10	5.724E-11	2.494E-11	1.372E-11	8.522E-12
NW	3.334E-09	2.719E-09	9.481E-10	4.588E-10	3.030E-10	1.711E-10	7.315E-11	3.128E-11	1.675E-11	1.043E-11
NNW	4.965E-09	3.123E-09	1.405E-09	8.022E-10	5.322E-10	3.024E-10	1.343E-10	5.921E-11	2.963E-11	1.801E-11
N	4.422E-09	1.928E-09	7.992E-10	4.318E-10	2.640E-10	1.081E-10	5.880E-11	4.941E-11	2.538E-11	1.571E-11
NNE	8.610E-10	4.602E-10	2.056E-10	1.129E-10	6.917E-11	6.923E-11	3.147E-11	1.274E-11	6.744E-12	4.139E-12
NE	4.059E-10	2.887E-10	1.392E-10	7.754E-11	4.764E-11	4.160E-11	1.891E-11	7.861E-12	4.185E-12	2.644E-12
ENE	3.458E-10	2.459E-10	1.185E-10	6.606E-11	4.058E-11	3.504E-11	1.874E-11	8.254E-12	3.971E-12	2.323E-12
E	1.955E-10	1.390E-10	6.700E-11	3.734E-11	2.294E-11	2.559E-11	1.510E-11	6.730E-12	3.418E-12	1.906E-12
ESE	2.406E-10	1.711E-10	8.247E-11	4.595E-11	2.823E-11	3.203E-11	1.900E-11	8.474E-12	4.300E-12	2.531E-12
SE	8.119E-10	5.774E-10	2.783E-10	1.551E-10	9.528E-11	3.878E-11	1.188E-11	4.979E-12	6.593E-12	5.414E-12
SSE	2.161E-09	1.131E-09	5.018E-10	2.751E-10	1.686E-10	1.291E-10	5.431E-11	2.190E-11	1.161E-11	7.140E-12

ERP ELEVATED STACK RELEASES - JUL-SEP 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF DIRECTION DIST. X/Q X/Q X/Q D/Q
ID LOCATION FROM SITE (MI) (SEC/M3) (SEC/M3) (SEC/M3) (PER SQ.METER)

ID	LOCATION	FROM SITE (MI)	X/Q		D/Q		
			(SEC/M3)	(SEC/M3)	(PER SQ.METER)		
			NO	2.26 DAY	8.0 DAY		
			DECAY	DECAY	DECAY		
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	3.9E-08	3.9E-08	3.8E-08	1.9E-09
A	Site Boundary	SSW	.82	3.9E-08	3.9E-08	3.9E-08	1.7E-09
A	Site Boundary	SW	.97	6.6E-08	6.6E-08	6.6E-08	5.7E-10
A	Site Boundary	WSW	.93	9.5E-08	9.5E-08	9.5E-08	7.9E-10
A	Site Boundary	W	.91	3.8E-07	3.8E-07	3.8E-07	3.4E-09
A	Site Boundary	WNW	.94	3.9E-07	3.8E-07	3.8E-07	5.4E-09
A	Site Boundary	NW	.81	1.9E-07	1.9E-07	1.9E-07	2.4E-09
A	Site Boundary	NNW	.69	1.2E-07	1.2E-07	1.2E-07	5.5E-09
A	Site Boundary	N	.67	6.3E-08	6.3E-08	6.2E-08	5.0E-09
A	Site Boundary	NNE	.60	7.7E-09	7.7E-09	7.6E-09	8.7E-10
A	Site Boundary	NE	.62	2.5E-09	2.5E-09	2.5E-09	3.3E-10
A	Site Boundary	ENE	.59	1.3E-09	1.3E-09	1.3E-09	2.5E-10
A	Site Boundary	E	.53	3.0E-10	3.0E-10	3.0E-10	1.1E-10
A	Site Boundary	ESE	.54	4.7E-10	4.7E-10	4.7E-10	1.5E-10
A	Site Boundary	SE	.65	6.1E-09	6.1E-09	6.1E-09	7.1E-10
A	Site Boundary	SSE	.81	4.7E-08	4.7E-08	4.7E-08	2.3E-09
A	Nearest Res	SSW	3.00	6.3E-08	6.2E-08	6.1E-08	3.5E-10
A	Nearest Res	SW	1.30	1.1E-07	1.1E-07	1.1E-07	8.5E-10
A	Nearest Res	WSW	1.90	1.5E-07	1.5E-07	1.5E-07	5.2E-10
A	Nearest Res	W	1.00	4.0E-07	4.0E-07	3.9E-07	3.1E-09
A	Nearest Res	WNW	1.70	4.3E-07	4.3E-07	4.2E-07	2.1E-09
A	Nearest Res	NW	.90	2.7E-07	2.7E-07	2.7E-07	4.4E-09
A	Nearest Res	NNW	1.90	3.3E-07	3.3E-07	3.2E-07	2.3E-09
A	Nearest Res	N	2.50	6.9E-08	6.8E-08	6.7E-08	7.9E-10
A	Nearest Res	NNE	1.70	2.5E-08	2.5E-08	2.5E-08	3.7E-10
A	Nearest Res	ENE	1.70	2.3E-08	2.3E-08	2.3E-08	2.1E-10
A	Nearest Res	E	2.20	1.2E-08	1.2E-08	1.2E-08	8.2E-11
A	Nearest Res	ESE	2.80	1.1E-08	1.1E-08	1.0E-08	6.8E-11
A	Nearest Res	SE	3.00	2.2E-08	2.2E-08	2.2E-08	2.0E-10
A	Nearest Res	SSE	3.00	3.7E-08	3.7E-08	3.6E-08	3.6E-10
A	Nearest Cow	NNW	3.50	2.4E-07	2.4E-07	2.4E-07	7.8E-10
A	Nearest Garde	SSW	3.00	6.3E-08	6.2E-08	6.1E-08	3.5E-10
A	Nearest Garde	SW	1.30	1.1E-07	1.1E-07	1.1E-07	8.5E-10
A	Nearest Garde	WSW	1.90	1.5E-07	1.5E-07	1.5E-07	5.2E-10
A	Nearest Garde	W	2.80	1.2E-07	1.2E-07	1.2E-07	3.8E-10
A	Nearest Garde	WNW	1.70	4.3E-07	4.3E-07	4.2E-07	2.1E-09
A	Nearest Garde	NW	1.90	4.5E-07	4.4E-07	4.4E-07	1.7E-09
A	Nearest Garde	NNW	1.90	3.3E-07	3.3E-07	3.2E-07	2.3E-09
A	Nearest Garde	ENE	1.70	2.3E-08	2.3E-08	2.3E-08	2.1E-10
A	Nearest Garde	ESE	2.30	1.2E-08	1.2E-08	1.2E-08	9.4E-11
A	Nearest Garde	SSE	3.00	3.7E-08	3.7E-08	3.6E-08	3.6E-10
A	MAXIMUM CHI/Q	S	1.50	7.6E-08	7.6E-08	7.6E-08	1.0E-09
A	MAXIMUM CHI/Q	SSW	1.50	7.3E-08	7.3E-08	7.3E-08	1.0E-09
A	MAXIMUM CHI/Q	SW	1.50	1.2E-07	1.2E-07	1.2E-07	6.5E-10
A	MAXIMUM CHI/Q	WSW	1.50	2.2E-07	2.2E-07	2.1E-07	8.6E-10
A	MAXIMUM CHI/Q	W	1.00	4.0E-07	4.0E-07	3.9E-07	3.1E-09
A	MAXIMUM CHI/Q	WNW	1.50	5.4E-07	5.3E-07	5.3E-07	2.8E-09
A	MAXIMUM CHI/Q	NW	1.50	6.7E-07	6.7E-07	6.7E-07	3.0E-09
A	MAXIMUM CHI/Q	NNW	1.50	3.3E-07	3.3E-07	3.3E-07	3.8E-09
A	MAXIMUM CHI/Q	N	1.50	8.8E-08	8.8E-08	8.7E-08	1.8E-09
A	MAXIMUM CHI/Q	NNE	1.50	2.5E-08	2.5E-08	2.5E-08	4.5E-10
A	MAXIMUM CHI/Q	NE	1.50	2.7E-08	2.7E-08	2.7E-08	2.9E-10
A	MAXIMUM CHI/Q	ENE	1.50	2.3E-08	2.3E-08	2.3E-08	2.5E-10
A	MAXIMUM CHI/Q	E	1.50	1.3E-08	1.3E-08	1.3E-08	1.4E-10
A	MAXIMUM CHI/Q	ESE	7.50	1.3E-08	1.3E-08	1.3E-08	4.0E-11
A	MAXIMUM CHI/Q	SE	1.50	3.3E-08	3.3E-08	3.2E-08	5.8E-10
A	MAXIMUM CHI/Q	SSE	1.50	6.1E-08	6.1E-08	6.1E-08	1.1E-09

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Atmospheric Diffusion Estimates

Elevated Releases

October-December 2014

ERP ELEVATED STACK RELEASES - OCT-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	9.679E-11	7.416E-09	2.986E-08	4.783E-08	5.639E-08	4.975E-08	4.140E-08	3.430E-08	2.873E-08	3.220E-08	3.453E-08
SSW	3.392E-11	3.610E-09	2.584E-08	4.710E-08	5.890E-08	5.300E-08	4.466E-08	4.806E-08	4.877E-08	4.250E-08	3.766E-08
SW	3.169E-16	4.931E-10	2.182E-08	5.868E-08	8.970E-08	6.000E-08	4.300E-08	3.255E-08	2.568E-08	2.092E-08	1.749E-08
WSW	2.513E-16	4.585E-10	3.038E-08	9.646E-08	1.563E-07	9.694E-08	6.576E-08	4.766E-08	3.628E-08	2.867E-08	2.333E-08
W	1.283E-13	2.955E-08	1.748E-07	2.349E-07	2.128E-07	1.309E-07	8.879E-08	6.454E-08	4.936E-08	3.921E-08	3.208E-08
WNW	7.958E-15	5.424E-09	1.034E-07	2.186E-07	2.860E-07	1.737E-07	1.170E-07	8.790E-08	6.888E-08	5.427E-08	4.411E-08
NW	1.127E-15	1.469E-09	9.063E-08	2.745E-07	4.772E-07	2.818E-07	1.874E-07	1.375E-07	1.061E-07	8.374E-08	6.818E-08
NNW	1.110E-10	8.045E-09	6.922E-08	1.501E-07	2.178E-07	1.968E-07	1.676E-07	1.398E-07	1.182E-07	9.230E-08	7.455E-08
N	9.510E-11	8.574E-09	4.148E-08	6.769E-08	8.040E-08	7.344E-08	6.264E-08	5.197E-08	4.360E-08	3.708E-08	3.197E-08
NNE	1.264E-15	1.150E-09	1.884E-08	3.663E-08	4.619E-08	4.136E-08	3.468E-08	2.891E-08	2.434E-08	2.077E-08	1.798E-08
NE	6.306E-16	6.512E-10	1.112E-08	2.252E-08	3.032E-08	2.839E-08	2.456E-08	2.095E-08	1.796E-08	1.556E-08	1.363E-08
ENE	6.182E-16	5.847E-10	9.620E-09	1.899E-08	2.444E-08	2.209E-08	1.861E-08	1.555E-08	1.311E-08	1.120E-08	9.695E-09
E	5.323E-16	4.646E-10	7.402E-09	1.442E-08	1.851E-08	1.680E-08	1.422E-08	1.193E-08	1.008E-08	8.629E-09	7.482E-09
ESE	5.790E-11	4.094E-09	1.807E-08	2.912E-08	3.496E-08	3.177E-08	2.722E-08	2.316E-08	1.985E-08	1.721E-08	1.509E-08
SE	2.047E-10	1.333E-08	5.275E-08	7.987E-08	8.785E-08	7.473E-08	6.083E-08	4.968E-08	4.117E-08	3.468E-08	2.967E-08
SSE	1.400E-10	1.095E-08	5.869E-08	9.579E-08	1.090E-07	9.351E-08	7.640E-08	6.251E-08	5.187E-08	4.373E-08	3.745E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.076E-08	2.149E-08	1.404E-08	8.113E-09	5.801E-09	4.448E-09	3.472E-09	2.818E-09	2.382E-09	2.049E-09	1.779E-09
SSW	3.500E-08	3.025E-08	1.993E-08	1.165E-08	8.645E-09	6.640E-09	5.200E-09	4.234E-09	3.557E-09	3.044E-09	2.650E-09
SW	1.603E-08	1.245E-08	8.228E-09	4.822E-09	3.502E-09	2.718E-09	2.223E-09	1.809E-09	1.513E-09	1.293E-09	1.124E-09
WSW	1.983E-08	1.081E-08	6.967E-09	3.865E-09	2.512E-09	1.800E-09	1.373E-09	1.092E-09	8.960E-10	7.527E-10	6.442E-10
W	2.687E-08	1.424E-08	9.821E-09	6.159E-09	4.506E-09	3.332E-09	2.584E-09	2.086E-09	1.734E-09	1.474E-09	1.276E-09
WNW	3.703E-08	1.982E-08	1.304E-08	7.564E-09	5.071E-09	3.721E-09	2.895E-09	2.339E-09	1.941E-09	1.646E-09	1.421E-09
NW	5.745E-08	3.131E-08	2.105E-08	1.256E-08	8.421E-09	6.189E-09	4.894E-09	3.987E-09	3.324E-09	2.831E-09	2.452E-09
NNW	6.266E-08	3.365E-08	2.153E-08	1.211E-08	8.078E-09	5.912E-09	4.612E-09	3.740E-09	3.136E-09	2.672E-09	2.310E-09
N	2.797E-08	1.688E-08	1.304E-08	9.748E-09	8.360E-09	7.135E-09	5.630E-09	4.592E-09	3.838E-09	3.278E-09	2.849E-09
NNE	1.893E-08	2.757E-08	1.797E-08	1.038E-08	7.067E-09	5.255E-09	4.131E-09	3.374E-09	2.833E-09	2.430E-09	2.119E-09
NE	1.488E-08	2.727E-08	1.797E-08	1.054E-08	7.241E-09	5.423E-09	4.365E-09	3.627E-09	3.108E-09	2.675E-09	2.336E-09
ENE	9.955E-09	1.135E-08	7.379E-09	4.236E-09	2.863E-09	2.115E-09	1.702E-09	1.407E-09	1.173E-09	1.000E-09	8.677E-10
E	7.684E-09	8.254E-09	5.355E-09	3.065E-09	2.068E-09	1.526E-09	1.192E-09	9.676E-10	8.265E-10	7.166E-10	6.214E-10
ESE	1.580E-08	1.757E-08	1.153E-08	6.687E-09	4.546E-09	3.372E-09	2.643E-09	2.152E-09	1.801E-09	1.540E-09	1.339E-09
SE	2.574E-08	1.513E-08	1.119E-08	7.606E-09	5.448E-09	4.227E-09	3.452E-09	2.918E-09	2.438E-09	2.081E-09	1.807E-09
SSE	3.804E-08	4.998E-08	3.251E-08	1.874E-08	1.274E-08	9.461E-09	7.432E-09	6.066E-09	5.092E-09	4.366E-09	3.806E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.286E-08	5.153E-08	4.079E-08	3.165E-08	3.244E-08	2.024E-08	8.403E-09	4.418E-09	2.839E-09	2.048E-09
SSW	3.035E-08	5.365E-08	4.824E-08	4.618E-08	3.811E-08	2.672E-08	1.215E-08	6.599E-09	4.252E-09	3.050E-09
SW	3.346E-08	6.961E-08	4.335E-08	2.583E-08	1.797E-08	1.137E-08	4.992E-09	2.729E-09	1.814E-09	1.296E-09
WSW	5.310E-08	1.166E-07	6.683E-08	3.663E-08	2.362E-08	1.111E-08	3.953E-09	1.819E-09	1.098E-09	7.550E-10
W	1.692E-07	1.813E-07	9.033E-08	4.983E-08	3.226E-08	1.508E-08	6.238E-09	3.346E-09	2.094E-09	1.478E-09
WNW	1.328E-07	2.211E-07	1.205E-07	6.875E-08	4.450E-08	2.063E-08	7.673E-09	3.750E-09	2.346E-09	1.650E-09
NW	1.525E-07	3.453E-07	1.926E-07	1.066E-07	6.882E-08	3.256E-08	1.261E-08	6.266E-09	3.994E-09	2.837E-09
NNW	9.155E-08	1.934E-07	1.643E-07	1.145E-07	1.540E-08	3.471E-08	1.241E-08	5.969E-09	3.759E-09	2.675E-09
N	4.582E-08	7.448E-08	6.125E-08	4.351E-08	3.200E-08	1.764E-08	9.863E-09	6.860E-09	4.601E-09	3.285E-09
NNE	2.282E-08	4.192E-08	3.415E-08	2.429E-08	1.916E-08	2.138E-08	1.060E-08	5.288E-09	3.384E-09	2.434E-09
NE	1.386E-08	2.773E-08	2.414E-08	1.790E-08	1.466E-08	2.039E-08	1.072E-08	5.485E-09	3.640E-09	2.678E-09
ENE	1.178E-08	2.218E-08	1.831E-08	1.308E-08	1.024E-08	9.274E-09	4.324E-09	2.149E-09	1.402E-09	1.003E-09
E	8.982E-09	1.684E-08	1.399E-08	1.006E-08	7.897E-09	6.839E-09	3.131E-09	1.537E-09	9.779E-10	7.139E-10
ESE	1.987E-08	3.224E-08	2.681E-08	1.979E-08	1.449E-08	6.812E-09	3.394E-09	2.159E-09	1.543E-09	
SE	5.604E-08	8.025E-08	6.008E-08	4.113E-08	2.970E-08	1.574E-08	7.444E-09	4.243E-09	2.888E-09	2.086E-09
SSE	6.457E-08	9.917E-08	7.541E-08	5.181E-08	3.953E-08	3.956E-08	1.913E-08	9.523E-09	6.085E-09	4.374E-09

B307

ERP ELEVATED STACK RELEASES - OCT-DEC 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	9.676E-11	7.411E-09	2.983E-08	4.775E-08	5.624E-08	4.957E-08	4.120E-08	3.411E-08	2.854E-08	3.196E-08	3.423E-08
SSW	3.391E-11	3.608E-09	2.581E-08	4.702E-08	5.873E-08	5.277E-08	4.440E-08	4.767E-08	4.825E-08	4.196E-08	3.710E-08
SW	3.168E-16	4.927E-10	2.179E-08	5.855E-08	8.937E-08	5.971E-08	4.273E-08	3.230E-08	2.545E-08	2.071E-08	1.728E-08
WSW	2.512E-16	4.580E-10	3.031E-08	9.615E-08	1.555E-07	9.626E-08	6.518E-08	4.716E-08	3.584E-08	2.827E-08	2.296E-08
W	1.283E-13	2.952E-08	1.745E-07	2.342E-07	2.118E-07	1.301E-07	8.804E-08	6.388E-08	4.876E-08	3.866E-08	3.157E-08
WNW	7.955E-15	5.419E-09	1.033E-07	2.181E-07	2.851E-07	1.729E-07	1.163E-07	8.729E-08	6.832E-08	5.376E-08	4.364E-08
NW	1.126E-15	1.468E-09	9.052E-08	2.740E-07	4.757E-07	2.806E-07	1.863E-07	1.365E-07	1.053E-07	8.294E-08	6.744E-08
NNW	1.110E-10	8.041E-09	6.915E-08	1.498E-07	2.172E-07	1.962E-07	1.669E-07	1.391E-07	1.175E-07	9.168E-08	7.398E-08
N	9.507E-11	8.568E-09	4.145E-08	6.761E-08	8.024E-08	7.325E-08	6.244E-08	5.177E-08	4.340E-08	3.689E-08	3.179E-08
NNE	1.264E-15	1.149E-09	1.882E-08	3.658E-08	4.609E-08	4.124E-08	3.455E-08	2.879E-08	2.422E-08	2.065E-08	1.786E-08
NE	6.304E-16	6.507E-10	1.110E-08	2.248E-08	3.024E-08	2.827E-08	2.442E-08	2.081E-08	1.781E-08	1.540E-08	1.347E-08
ENE	6.180E-16	5.843E-10	9.610E-09	1.896E-08	2.438E-08	2.201E-08	1.852E-08	1.546E-08	1.302E-08	1.111E-08	9.612E-09
E	5.321E-16	4.643E-10	7.395E-09	1.440E-08	1.847E-08	1.675E-08	1.416E-08	1.187E-08	1.003E-08	8.575E-09	7.429E-09
ESE	5.789E-11	4.092E-09	1.805E-08	2.909E-08	3.490E-08	3.168E-08	2.711E-08	2.305E-08	1.973E-08	1.709E-08	1.497E-08
SE	2.047E-10	1.333E-08	5.272E-08	7.980E-08	8.773E-08	7.459E-08	6.068E-08	4.953E-08	4.102E-08	3.454E-08	2.954E-08
SSE	1.400E-10	1.094E-08	5.865E-08	9.570E-08	1.088E-07	9.331E-08	7.619E-08	6.230E-08	5.166E-08	4.353E-08	3.726E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.045E-08	2.117E-08	1.376E-08	7.867E-09	5.566E-09	4.222E-09	3.261E-09	2.620E-09	2.191E-09	1.865E-09	1.602E-09
SSW	3.439E-08	2.926E-08	1.905E-08	1.087E-08	7.856E-09	5.878E-09	4.499E-09	3.582E-09	2.941E-09	2.464E-09	2.100E-09
SW	1.582E-08	1.212E-08	7.925E-09	4.548E-09	3.220E-09	2.435E-09	1.936E-09	1.540E-09	1.260E-09	1.054E-09	8.965E-10
WSW	1.948E-08	1.053E-08	6.732E-09	3.672E-09	2.348E-09	1.655E-09	1.242E-09	9.726E-10	7.855E-10	6.497E-10	5.475E-10
W	2.639E-08	1.385E-08	9.442E-09	5.770E-09	4.096E-09	2.953E-09	2.238E-09	1.767E-09	1.437E-09	1.196E-09	1.014E-09
WNW	3.660E-08	1.947E-08	1.274E-08	7.297E-09	4.833E-09	3.505E-09	2.695E-09	2.151E-09	1.765E-09	1.479E-09	1.262E-09
NW	5.674E-08	3.069E-08	2.047E-08	1.201E-08	7.928E-09	5.740E-09	4.465E-09	3.579E-09	2.940E-09	2.469E-09	2.109E-09
NNW	6.213E-08	3.323E-08	2.116E-08	1.180E-08	7.806E-09	5.665E-09	4.382E-09	3.523E-09	2.930E-09	2.475E-09	2.122E-09
N	2.779E-08	1.672E-08	1.288E-08	9.541E-09	8.067E-09	6.774E-09	5.286E-09	4.264E-09	3.528E-09	2.984E-09	2.567E-09
NNE	1.879E-08	2.705E-08	1.751E-08	9.981E-09	6.700E-09	4.915E-09	3.812E-09	3.073E-09	2.547E-09	2.157E-09	1.857E-09
NE	1.468E-08	2.638E-08	1.718E-08	9.849E-09	6.618E-09	4.849E-09	3.816E-09	3.102E-09	2.597E-09	2.189E-09	1.875E-09
ENE	9.859E-09	1.117E-08	7.224E-09	4.103E-09	2.744E-09	2.006E-09	1.597E-09	1.306E-09	1.078E-09	9.098E-10	7.811E-10
E	7.625E-09	8.162E-09	5.275E-09	2.997E-09	2.007E-09	1.471E-09	1.140E-09	9.191E-10	7.792E-10	6.705E-10	5.773E-10
ESE	1.565E-08	1.731E-08	1.130E-08	6.490E-09	4.372E-09	3.214E-09	2.497E-09	2.016E-09	1.674E-09	1.421E-09	1.226E-09
SE	2.561E-08	1.501E-08	1.107E-08	7.463E-09	5.297E-09	4.066E-09	3.279E-09	2.734E-09	2.261E-09	1.911E-09	1.643E-09
SSE	3.782E-08	4.898E-08	3.161E-08	1.795E-08	1.201E-08	8.788E-09	6.801E-09	5.471E-09	4.527E-09	3.827E-09	3.291E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.281E-08	5.139E-08	4.060E-08	3.143E-08	3.216E-08	1.994E-08	8.153E-09	4.196E-09	2.640E-09	1.864E-09
SSW	3.030E-08	5.348E-08	4.794E-08	4.569E-08	3.754E-08	2.586E-08	1.135E-08	5.854E-09	3.600E-09	2.470E-09
SW	3.339E-08	6.934E-08	4.309E-08	2.560E-08	1.775E-08	1.108E-08	4.708E-09	2.445E-09	1.546E-09	1.056E-09
WSW	5.294E-08	1.160E-07	6.626E-08	3.619E-08	2.325E-08	1.083E-08	3.763E-09	1.675E-09	9.784E-10	6.521E-10
W	1.688E-07	1.805E-07	8.959E-08	4.924E-08	3.175E-08	1.468E-08	5.842E-09	2.972E-09	1.776E-09	1.200E-09
WNW	1.326E-07	2.203E-07	1.198E-07	6.819E-08	4.403E-08	2.028E-08	7.411E-09	3.535E-09	2.159E-09	1.483E-09
NW	1.523E-07	3.442E-07	1.915E-07	1.057E-07	6.807E-08	3.194E-08	1.207E-08	5.813E-09	3.589E-09	2.475E-09
NNW	9.143E-08	1.929E-07	1.636E-07	1.138E-07	7.484E-08	3.429E-08	1.211E-08	5.723E-09	3.542E-09	2.479E-09
N	4.577E-08	7.433E-08	6.105E-08	4.331E-08	3.182E-08	1.747E-08	9.627E-09	6.524E-09	4.276E-09	2.991E-09
NNE	2.279E-08	4.182E-08	3.403E-08	2.416E-08	1.903E-08	2.097E-08	1.020E-08	4.950E-09	3.084E-09	2.161E-09
NE	1.384E-08	2.764E-08	2.400E-08	1.775E-08	1.449E-08	1.969E-08	1.004E-08	4.908E-09	3.114E-09	2.193E-09
ENE	1.176E-08	2.212E-08	1.823E-08	1.299E-08	1.015E-08	9.124E-09	4.193E-09	2.039E-09	1.303E-09	9.120E-10
E	8.970E-09	1.680E-08	1.393E-08	1.000E-08	7.841E-09	6.760E-09	3.064E-09	1.482E-09	9.290E-10	6.682E-10
ESE	1.985E-08	3.218E-08	2.670E-08	1.967E-08	1.585E-08	1.427E-08	6.618E-09	3.236E-09	2.024E-09	1.424E-09
SE	5.600E-08	8.012E-08	5.993E-08	4.098E-08	2.957E-08	1.561E-08	7.302E-09	4.079E-09	2.710E-09	1.915E-09
SSE	6.451E-08	9.900E-08	7.520E-08	5.161E-08	3.933E-08	3.878E-08	1.835E-08	8.853E-09	5.491E-09	3.836E-09

B308

ERP ELEVATED STACK RELEASES - OCT-DEC 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	9.678E-11	7.359E-09	2.964E-08	4.758E-08	5.571E-08	4.872E-08	4.020E-08	3.305E-08	2.748E-08	3.071E-08	3.291E-08
SSW	3.392E-11	3.589E-09	2.575E-08	4.700E-08	5.827E-08	5.196E-08	4.341E-08	4.642E-08	4.690E-08	4.066E-08	3.589E-08
SW	3.168E-16	4.930E-10	2.181E-08	5.864E-08	8.850E-08	5.852E-08	4.154E-08	3.120E-08	2.445E-08	1.981E-08	1.647E-08
WSW	2.513E-16	4.584E-10	3.036E-08	9.633E-08	1.540E-07	9.421E-08	6.316E-08	4.530E-08	3.416E-08	2.677E-08	2.161E-08
W	1.283E-13	2.954E-08	1.739E-07	2.321E-07	2.079E-07	1.267E-07	8.518E-08	6.147E-08	4.670E-08	3.689E-08	3.002E-08
WNW	7.957E-15	5.423E-09	1.034E-07	2.172E-07	2.815E-07	1.694E-07	1.133E-07	8.463E-08	6.600E-08	5.167E-08	4.173E-08
NW	1.127E-15	1.468E-09	9.060E-08	2.734E-07	4.708E-07	2.755E-07	1.818E-07	1.327E-07	1.020E-07	8.001E-08	6.476E-08
NNW	1.110E-10	7.989E-09	6.897E-08	1.497E-07	2.154E-07	1.928E-07	1.631E-07	1.354E-07	1.140E-07	8.851E-08	7.102E-08
N	9.509E-11	8.514E-09	4.124E-08	6.742E-08	7.952E-08	7.207E-08	6.104E-08	5.031E-08	4.195E-08	3.548E-08	3.044E-08
NNE	1.264E-15	1.150E-09	1.883E-08	3.662E-08	4.576E-08	4.061E-08	3.377E-08	2.794E-08	2.336E-08	1.982E-08	1.705E-08
NE	6.305E-16	6.511E-10	1.111E-08	2.251E-08	3.004E-08	2.789E-08	2.395E-08	2.030E-08	1.730E-08	1.490E-08	1.299E-08
ENE	6.181E-16	5.846E-10	9.617E-09	1.898E-08	2.420E-08	2.168E-08	1.810E-08	1.500E-08	1.256E-08	1.066E-08	9.172E-09
E	5.322E-16	4.645E-10	7.400E-09	1.442E-08	1.834E-08	1.650E-08	1.385E-08	1.154E-08	9.690E-09	8.244E-09	7.110E-09
ESE	5.789E-11	4.065E-09	1.795E-08	2.900E-08	3.459E-08	3.121E-08	2.657E-08	2.248E-08	1.917E-08	1.655E-08	1.446E-08
SE	2.047E-10	1.323E-08	5.239E-08	7.949E-08	8.682E-08	7.322E-08	5.910E-08	4.789E-08	3.940E-08	3.297E-08	2.803E-08
SSE	1.400E-10	1.088E-08	5.842E-08	9.551E-08	1.078E-07	9.166E-08	7.424E-08	6.026E-08	4.962E-08	4.155E-08	3.536E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	2.921E-08	2.009E-08	1.271E-08	6.890E-09	4.593E-09	3.313E-09	2.453E-09	1.899E-09	1.546E-09	1.289E-09	1.087E-09
SSW	3.326E-08	2.843E-08	1.808E-08	9.843E-09	6.756E-09	4.934E-09	3.708E-09	2.907E-09	2.356E-09	1.951E-09	1.646E-09
SW	1.507E-08	1.158E-08	7.403E-09	4.055E-09	2.729E-09	1.981E-09	1.545E-09	1.209E-09	9.751E-10	8.055E-10	6.780E-10
WSW	1.824E-08	9.608E-09	5.996E-09	3.148E-09	1.952E-09	1.345E-09	9.876E-10	7.587E-10	6.027E-10	4.913E-10	4.088E-10
W	2.502E-08	1.299E-08	8.785E-09	5.219E-09	3.595E-09	2.544E-09	1.895E-09	1.475E-09	1.186E-09	9.764E-10	8.198E-10
WNW	3.481E-08	1.802E-08	1.147E-08	6.221E-09	3.876E-09	2.690E-09	2.010E-09	1.567E-09	1.258E-09	1.034E-09	8.672E-10
NW	5.425E-08	2.863E-08	1.861E-08	1.039E-08	6.547E-09	4.562E-09	3.451E-09	2.708E-09	2.184E-09	1.802E-09	1.516E-09
NNW	5.932E-08	3.084E-08	1.908E-08	1.004E-08	6.234E-09	4.292E-09	3.176E-09	2.468E-09	1.999E-09	1.651E-09	1.386E-09
N	2.650E-08	1.571E-08	1.204E-08	8.960E-09	7.545E-09	6.167E-09	4.713E-09	3.735E-09	3.041E-09	2.534E-09	2.152E-09
NNE	1.795E-08	2.626E-08	1.652E-08	8.957E-09	5.720E-09	4.028E-09	3.019E-09	2.361E-09	1.905E-09	1.575E-09	1.327E-09
NE	1.419E-08	2.613E-08	1.659E-08	9.070E-09	5.793E-09	4.076E-09	3.110E-09	2.479E-09	2.047E-09	1.704E-09	1.443E-09
ENE	9.400E-09	1.072E-08	6.750E-09	3.630E-09	2.282E-09	1.585E-09	1.207E-09	9.560E-10	7.699E-10	6.353E-10	5.345E-10
E	7.291E-09	7.818E-09	4.910E-09	2.634E-09	1.654E-09	1.148E-09	8.497E-10	6.573E-10	5.366E-10	4.477E-10	3.757E-10
ESE	1.514E-08	1.685E-08	1.070E-08	5.812E-09	3.667E-09	2.554E-09	1.894E-09	1.466E-09	1.172E-09	9.605E-10	8.023E-10
SE	2.417E-08	1.389E-08	1.014E-08	6.790E-09	4.801E-09	3.691E-09	2.992E-09	2.501E-09	2.040E-09	1.703E-09	1.447E-09
SSE	3.581E-08	4.724E-08	2.964E-08	1.603E-08	1.025E-08	7.224E-09	5.416E-09	4.238E-09	3.421E-09	2.829E-09	2.384E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.266E-08	5.080E-08	3.961E-08	3.030E-08	3.089E-08	1.884E-08	7.162E-09	3.310E-09	1.923E-09	1.290E-09
SSW	3.027E-08	5.296E-08	4.689E-08	4.439E-08	3.633E-08	2.490E-08	1.030E-08	4.929E-09	2.926E-09	1.958E-09
SW	3.344E-08	6.854E-08	4.193E-08	2.461E-08	1.694E-08	1.050E-08	4.210E-09	2.006E-09	1.216E-09	8.086E-10
WSW	5.303E-08	1.146E-07	6.429E-08	3.453E-08	2.189E-08	9.921E-09	3.249E-09	1.364E-09	7.647E-10	4.938E-10
W	1.677E-07	1.772E-07	8.676E-08	4.718E-08	3.020E-08	1.380E-08	5.290E-09	2.565E-09	1.485E-09	9.804E-10
WNW	1.322E-07	2.174E-07	1.168E-07	6.586E-08	4.211E-08	1.884E-08	6.345E-09	2.734E-09	1.576E-09	1.039E-09
NW	1.520E-07	3.401E-07	1.871E-07	1.024E-07	6.538E-08	2.987E-08	1.051E-08	4.647E-09	2.721E-09	1.809E-09
NNW	9.132E-08	1.908E-07	1.600E-07	1.104E-07	7.187E-08	3.194E-08	1.036E-08	4.363E-09	2.492E-09	1.656E-09
N	4.560E-08	7.352E-08	5.969E-08	4.187E-08	3.048E-08	1.648E-08	9.015E-09	5.953E-09	3.750E-09	2.543E-09
NNE	2.281E-08	4.144E-08	3.326E-08	2.332E-08	1.820E-08	2.009E-08	9.200E-09	4.075E-09	2.375E-09	1.581E-09
NE	1.385E-08	2.741E-08	2.354E-08	1.724E-08	1.400E-08	1.924E-08	9.286E-09	4.147E-09	2.495E-09	1.709E-09
ENE	1.177E-08	2.192E-08	1.781E-08	1.253E-08	9.696E-09	8.663E-09	3.724E-09	1.620E-09	9.569E-10	6.378E-10
E	8.978E-09	1.665E-08	1.363E-08	9.667E-09	7.513E-09	6.409E-09	2.704E-09	1.164E-09	6.663E-10	4.474E-10
ESE	1.978E-08	3.184E-08	2.617E-08	1.912E-08	1.533E-08	1.374E-08	5.946E-09	2.587E-09	1.476E-09	9.646E-10
SE	5.573E-08	7.915E-08	5.838E-08	3.937E-08	2.806E-08	1.451E-08	6.650E-09	3.707E-09	2.466E-09	1.708E-09
SSE	6.434E-08	9.789E-08	7.329E-08	4.959E-08	3.736E-08	3.688E-08	1.649E-08	7.307E-09	4.263E-09	2.839E-09

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ERP ELEVATED STACK RELEASES - OCT-DEC 2014
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	DISTANCES IN MILES										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	8.629E-10	1.144E-09	1.628E-09	1.500E-09	8.866E-10	5.843E-10	4.094E-10	2.995E-10	2.264E-10	1.761E-10	1.689E-10
SSW	3.646E-10	8.432E-10	1.526E-09	1.518E-09	9.316E-10	6.212E-10	4.377E-10	3.211E-10	3.051E-10	2.307E-10	1.806E-10
SW	4.198E-11	2.518E-10	5.362E-10	5.554E-10	6.688E-10	3.666E-10	2.280E-10	1.552E-10	1.123E-10	8.500E-11	6.654E-11
WSW	4.591E-11	2.754E-10	5.865E-10	9.197E-10	7.540E-10	4.102E-10	2.537E-10	1.720E-10	1.242E-10	9.386E-11	7.343E-11
W	5.116E-11	2.503E-09	2.465E-09	1.763E-09	8.272E-10	4.500E-10	2.783E-10	1.887E-10	1.363E-10	1.030E-10	8.055E-11
WNW	6.296E-11	3.777E-10	1.931E-09	2.069E-09	1.212E-09	6.311E-10	3.839E-10	2.615E-10	2.056E-10	1.603E-10	1.322E-10
NW	1.167E-10	7.004E-10	1.491E-09	4.034E-09	2.691E-09	1.339E-09	7.910E-10	5.248E-10	3.799E-10	2.943E-10	2.412E-10
NNW	1.187E-09	1.744E-09	2.634E-09	2.481E-09	2.859E-09	1.555E-09	9.671E-10	7.824E-10	5.587E-10	4.248E-10	3.406E-10
N	1.207E-09	1.862E-09	2.885E-09	2.741E-09	1.645E-09	1.089E-09	7.650E-10	5.603E-10	4.238E-10	3.287E-10	2.603E-10
NNE	1.023E-10	6.138E-10	1.307E-09	1.354E-09	8.456E-10	5.670E-10	4.005E-10	2.942E-10	2.228E-10	1.729E-10	1.370E-10
NE	5.640E-11	3.384E-10	7.205E-10	7.463E-10	4.662E-10	3.126E-10	2.208E-10	1.622E-10	1.228E-10	9.534E-11	7.551E-11
ENE	5.116E-11	3.069E-10	6.535E-10	6.769E-10	4.228E-10	2.835E-10	2.003E-10	1.471E-10	1.114E-10	8.647E-11	6.848E-11
E	4.066E-11	2.440E-10	5.195E-10	5.381E-10	3.361E-10	2.253E-10	1.592E-10	1.169E-10	8.856E-11	6.874E-11	5.443E-11
ESE	5.862E-10	8.286E-10	1.225E-09	1.145E-09	6.814E-10	4.501E-10	3.157E-10	2.311E-10	1.747E-10	1.355E-10	1.073E-10
SE	2.290E-09	2.984E-09	4.195E-09	3.850E-09	2.270E-09	1.495E-09	1.047E-09	7.661E-10	5.790E-10	4.490E-10	3.556E-10
SSE	1.592E-09	2.831E-09	4.679E-09	4.537E-09	2.750E-09	1.827E-09	1.285E-09	9.418E-10	7.125E-10	5.528E-10	4.378E-10
DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.358E-10	8.418E-11	5.536E-11	3.097E-11	1.940E-11	1.543E-11	1.098E-11	8.185E-12	6.368E-12	5.088E-12	4.154E-12
SSW	1.461E-10	9.232E-11	6.102E-11	3.426E-11	2.399E-11	1.652E-11	1.184E-11	8.893E-12	6.987E-12	5.582E-12	4.556E-12
SW	5.411E-11	3.475E-11	2.306E-11	1.299E-11	8.134E-12	5.908E-12	4.542E-12	3.411E-12	2.652E-12	2.118E-12	1.729E-12
WSW	5.902E-11	3.279E-11	2.080E-11	1.335E-11	8.069E-12	5.414E-12	4.233E-12	3.178E-12	2.471E-12	1.974E-12	1.611E-12
W	6.475E-11	2.896E-11	3.504E-11	2.186E-11	1.383E-11	9.517E-12	6.820E-12	5.121E-12	3.982E-12	3.181E-12	2.596E-12
WNW	1.145E-10	6.988E-11	5.007E-11	3.017E-11	1.817E-11	1.183E-11	8.933E-12	6.710E-12	5.313E-12	4.244E-12	3.464E-12
NW	2.079E-10	1.251E-10	8.914E-11	5.425E-11	3.306E-11	2.213E-11	1.630E-11	1.223E-11	9.533E-12	7.615E-12	6.216E-12
NNW	2.869E-10	1.594E-10	1.091E-10	6.323E-11	3.989E-11	2.656E-11	1.954E-11	1.510E-11	1.212E-11	9.682E-12	7.904E-12
N	2.097E-10	9.939E-11	6.063E-11	3.191E-11	6.038E-11	4.000E-11	2.866E-11	2.152E-11	1.673E-11	1.337E-11	1.091E-11
NNE	1.103E-10	1.409E-10	8.708E-11	4.511E-11	2.752E-11	1.842E-11	1.316E-11	9.850E-12	7.640E-12	6.092E-12	4.965E-12
NE	6.081E-11	1.050E-10	6.532E-11	3.408E-11	2.083E-11	1.393E-11	1.007E-11	7.403E-12	5.750E-12	4.633E-12	3.781E-12
ENE	5.515E-11	5.199E-11	3.620E-11	2.128E-11	1.345E-11	8.930E-12	6.300E-12	4.965E-12	3.861E-12	3.085E-12	2.518E-12
E	4.384E-11	4.739E-11	3.399E-11	2.047E-11	1.301E-11	8.624E-12	6.063E-12	4.452E-12	3.401E-12	2.857E-12	2.329E-12
ESE	8.648E-11	1.063E-10	7.819E-11	4.805E-11	3.072E-11	2.036E-11	1.430E-11	1.048E-11	7.992E-12	6.281E-12	5.056E-12
SE	2.865E-10	1.358E-10	8.290E-11	4.371E-11	2.668E-11	1.831E-11	1.358E-11	2.041E-11	1.576E-11	1.254E-11	1.021E-11
SSE	3.527E-10	3.603E-10	2.202E-10	1.125E-10	6.831E-11	4.577E-11	3.275E-11	2.455E-11	1.907E-11	1.521E-11	1.241E-11

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***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.464E-09	8.886E-10	4.121E-10	2.281E-10	1.588E-10	8.284E-11	3.125E-11	1.471E-11	8.293E-12	5.121E-12
SSW	1.371E-09	9.240E-10	4.400E-10	2.813E-10	1.827E-10	9.036E-11	3.565E-11	1.664E-11	9.010E-12	5.618E-12
SW	4.815E-10	5.093E-10	2.359E-10	1.142E-10	6.740E-11	3.385E-11	1.307E-11	5.955E-12	3.445E-12	2.132E-12
WSW	6.654E-10	6.380E-10	2.628E-10	1.263E-10	7.415E-11	3.329E-11	1.266E-11	5.650E-12	3.210E-12	1.987E-12
W	2.161E-09	8.674E-10	2.883E-10	1.386E-10	8.134E-11	3.962E-11	2.122E-11	9.587E-12	5.172E-12	3.201E-12
WNW	1.647E-09	1.144E-09	4.008E-10	2.043E-10	1.340E-10	7.100E-11	2.926E-11	1.236E-11	6.813E-12	4.272E-12
NW	2.446E-09	2.388E-09	8.307E-10	3.887E-10	2.446E-10	1.275E-10	5.258E-11	2.271E-11	1.237E-11	7.665E-12
NNW	2.368E-09	2.196E-09	1.050E-09	5.716E-10	3.457E-10	1.653E-10	6.304E-11	2.731E-11	1.523E-11	9.746E-12
N	2.594E-09	1.641E-09	7.696E-10	4.266E-10	2.618E-10	1.067E-10	5.094E-11	4.090E-11	2.174E-11	1.346E-11
NNE	1.174E-09	8.347E-10	4.024E-10	2.242E-10	1.378E-10	1.102E-10	4.662E-11	1.874E-11	9.953E-12	6.133E-12
NE	6.471E-10	4.602E-10	2.218E-10	1.236E-10	7.594E-11	7.754E-11	3.513E-11	1.422E-11	7.535E-12	4.648E-12
ENE	5.869E-10	4.174E-10	2.012E-10	1.121E-10	6.888E-11	4.568E-11	2.112E-11	9.084E-12	4.926E-12	3.105E-12
E	4.665E-10	3.317E-10	1.599E-10	8.911E-11	5.475E-11	4.065E-11	2.016E-11	8.770E-12	4.512E-12	2.823E-12
ESE	1.101E-09	6.816E-10	3.177E-10	1.759E-10	1.080E-10	8.941E-11	4.704E-11	2.070E-11	1.062E-11	6.334E-12
SE	3.773E-09	2.277E-09	1.054E-09	5.829E-10	3.577E-10	1.458E-10	4.485E-11	1.865E-11	1.669E-11	1.263E-11
SSE	4.205E-09	2.737E-09	1.292E-09	7.172E-10	4.403E-10	2.963E-10	1.168E-10	4.657E-11	2.480E-11	1.531E-11

ERP ELEVATED STACK RELEASES - OCT-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST
RELEASE TYPE OF DIRECTION DIST. X/Q X/Q X/Q D/Q
ID LOCATION FROM SITE (MI) (SEC/M3) (SEC/M3) (SEC/M3) (PER SQ.METER)

ID	LOCATION	FROM SITE (MI)	X/Q			D/Q (PER SQ.METER)	
			(SEC/M3)	(SEC/M3)	(SEC/M3)		
			NO	2.26 DAY	8.0 DAY		
			DECAY	DECAY	DECAY		
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	3.4E-08	3.4E-08	3.4E-08	1.6E-09
A	Site Boundary	SSW	.82	3.3E-08	3.3E-08	3.3E-08	1.6E-09
A	Site Boundary	SW	.97	5.5E-08	5.5E-08	5.5E-08	5.7E-10
A	Site Boundary	WSW	.93	7.7E-08	7.7E-08	7.7E-08	8.6E-10
A	Site Boundary	W	.91	2.2E-07	2.2E-07	2.2E-07	1.9E-09
A	Site Boundary	WNW	.94	1.9E-07	1.9E-07	1.9E-07	2.3E-09
A	Site Boundary	NW	.81	1.3E-07	1.3E-07	1.3E-07	1.6E-09
A	Site Boundary	NNW	.69	4.5E-08	4.5E-08	4.5E-08	2.4E-09
A	Site Boundary	N	.67	2.9E-08	2.9E-08	2.9E-08	2.6E-09
A	Site Boundary	NNE	.60	5.5E-09	5.5E-09	5.5E-09	8.8E-10
A	Site Boundary	NE	.62	4.2E-09	4.2E-09	4.2E-09	5.3E-10
A	Site Boundary	ENE	.59	2.4E-09	2.4E-09	2.4E-09	4.2E-10
A	Site Boundary	E	.53	7.4E-10	7.4E-10	7.4E-10	2.7E-10
A	Site Boundary	ESE	.54	5.4E-09	5.4E-09	5.3E-09	8.8E-10
A	Site Boundary	SE	.65	3.4E-08	3.4E-08	3.3E-08	3.7E-09
A	Site Boundary	SSE	.81	7.0E-08	7.0E-08	7.0E-08	4.8E-09
A	Nearest Res	SSW	3.00	4.8E-08	4.8E-08	4.6E-08	3.2E-10
A	Nearest Res	SW	1.30	8.4E-08	8.4E-08	8.4E-08	8.9E-10
A	Nearest Res	WSW	1.90	1.1E-07	1.1E-07	1.0E-07	4.6E-10
A	Nearest Res	W	1.00	2.3E-07	2.3E-07	2.3E-07	1.8E-09
A	Nearest Res	WNW	1.70	2.3E-07	2.3E-07	2.3E-07	9.1E-10
A	Nearest Res	NW	.90	2.0E-07	2.0E-07	2.0E-07	3.9E-09
A	Nearest Res	NNW	1.90	2.0E-07	2.0E-07	2.0E-07	1.7E-09
A	Nearest Res	N	2.50	6.3E-08	6.2E-08	6.1E-08	7.7E-10
A	Nearest Res	NNE	1.70	4.5E-08	4.5E-08	4.4E-08	7.2E-10
A	Nearest Res	ENE	1.70	2.4E-08	2.4E-08	2.4E-08	3.6E-10
A	Nearest Res	E	2.20	1.6E-08	1.6E-08	1.5E-08	1.9E-10
A	Nearest Res	ESE	2.80	2.5E-08	2.5E-08	2.4E-08	2.6E-10
A	Nearest Res	SE	3.00	5.0E-08	5.0E-08	4.8E-08	7.7E-10
A	Nearest Res	SSE	3.00	6.3E-08	6.2E-08	6.0E-08	9.4E-10
A	Nearest Cow	NNW	3.50	1.2E-07	1.2E-07	1.1E-07	5.6E-10
A	Nearest Garde	SSW	3.00	4.8E-08	4.8E-08	4.6E-08	3.2E-10
A	Nearest Garde	SW	1.30	8.4E-08	8.4E-08	8.4E-08	8.9E-10
A	Nearest Garde	WSW	1.90	1.1E-07	1.1E-07	1.0E-07	4.6E-10
A	Nearest Garde	W	2.80	7.3E-08	7.2E-08	7.0E-08	2.2E-10
A	Nearest Garde	WNW	1.70	2.3E-07	2.3E-07	2.3E-07	9.1E-10
A	Nearest Garde	NW	1.90	3.1E-07	3.1E-07	3.0E-07	1.5E-09
A	Nearest Garde	NNW	1.90	2.0E-07	2.0E-07	2.0E-07	1.7E-09
A	Nearest Garde	ENE	1.70	2.4E-08	2.4E-08	2.4E-08	3.6E-10
A	Nearest Garde	ESE	2.30	2.9E-08	2.9E-08	2.8E-08	3.6E-10
A	Nearest Garde	SSE	3.00	6.3E-08	6.2E-08	6.0E-08	9.4E-10
A	MAXIMUM CHI/Q	S	1.50	5.6E-08	5.6E-08	5.6E-08	8.9E-10
A	MAXIMUM CHI/Q	SSW	1.50	5.9E-08	5.9E-08	5.8E-08	9.3E-10
A	MAXIMUM CHI/Q	SW	1.50	9.0E-08	8.9E-08	8.9E-08	6.7E-10
A	MAXIMUM CHI/Q	WSW	1.50	1.6E-07	1.6E-07	1.5E-07	7.5E-10
A	MAXIMUM CHI/Q	W	1.00	2.3E-07	2.3E-07	2.3E-07	1.8E-09
A	MAXIMUM CHI/Q	WNW	1.50	2.9E-07	2.9E-07	2.8E-07	1.2E-09
A	MAXIMUM CHI/Q	NW	1.50	4.8E-07	4.8E-07	4.7E-07	2.7E-09
A	MAXIMUM CHI/Q	NNW	1.50	2.2E-07	2.2E-07	2.2E-07	2.9E-09
A	MAXIMUM CHI/Q	N	1.50	8.0E-08	8.0E-08	8.0E-08	1.6E-09
A	MAXIMUM CHI/Q	NNE	1.50	4.6E-08	4.6E-08	4.6E-08	8.5E-10
A	MAXIMUM CHI/Q	NE	1.50	3.0E-08	3.0E-08	3.0E-08	4.7E-10
A	MAXIMUM CHI/Q	ENE	1.50	2.4E-08	2.4E-08	2.4E-08	4.2E-10
A	MAXIMUM CHI/Q	E	1.50	1.9E-08	1.8E-08	1.8E-08	3.4E-10
A	MAXIMUM CHI/Q	ESE	1.50	3.5E-08	3.5E-08	3.5E-08	6.8E-10
A	MAXIMUM CHI/Q	SE	1.50	8.8E-08	8.8E-08	8.7E-08	2.3E-09
A	MAXIMUM CHI/Q	SSE	1.50	1.1E-07	1.1E-07	1.1E-07	2.7E-09

Atmospheric Diffusion Estimates

Elevated Releases

July-December 2014

ERP ELEVATED STACK RELEASES - JUL-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES FROM THE SITE							
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	9.178E-11	6.794E-09	3.121E-08	5.332E-08	6.642E-08	6.026E-08	5.108E-08	4.290E-08	3.631E-08	4.228E-08	4.696E-08	
SSW	3.390E-11	3.673E-09	2.777E-08	5.178E-08	6.607E-08	5.999E-08	5.080E-08	5.512E-08	5.639E-08	4.928E-08	4.374E-08	
SW	2.510E-16	4.869E-10	2.300E-08	6.446E-08	1.053E-07	7.195E-08	5.238E-08	4.015E-08	3.202E-08	2.633E-08	2.218E-08	
WSW	2.395E-16	5.294E-10	3.433E-08	1.080E-07	1.868E-07	1.193E-07	8.310E-08	6.171E-08	4.802E-08	3.871E-08	3.207E-08	
W	4.475E-11	4.931E-08	2.441E-07	3.168E-07	2.845E-07	1.754E-07	1.193E-07	8.702E-08	6.677E-08	5.321E-08	4.366E-08	
WNW	1.525E-09	1.614E-08	1.647E-07	3.221E-07	4.118E-07	2.517E-07	1.707E-07	1.299E-07	1.032E-07	8.173E-08	6.677E-08	
NW	1.008E-10	1.148E-08	1.180E-07	3.189E-07	5.764E-07	3.448E-07	2.314E-07	1.716E-07	1.337E-07	1.060E-07	8.671E-08	
NNW	8.528E-10	3.066E-08	1.119E-07	1.940E-07	2.750E-07	2.600E-07	2.335E-07	2.043E-07	1.803E-07	1.419E-07	1.153E-07	
N	2.669E-09	2.479E-08	5.760E-08	7.663E-08	8.436E-08	7.657E-08	6.563E-08	5.482E-08	4.631E-08	3.966E-08	3.442E-08	
NNE	8.934E-10	3.633E-09	1.594E-08	2.833E-08	3.565E-08	3.243E-08	2.758E-08	2.326E-08	1.977E-08	1.701E-08	1.482E-08	
NE	4.237E-16	4.938E-10	9.322E-09	2.007E-08	2.868E-08	2.753E-08	2.411E-08	2.070E-08	1.781E-08	1.545E-08	1.355E-08	
ENE	4.025E-16	4.366E-10	8.017E-09	1.699E-08	2.374E-08	2.247E-08	1.951E-08	1.668E-08	1.431E-08	1.240E-08	1.088E-08	
E	3.061E-16	3.232E-10	5.707E-09	1.173E-08	1.585E-08	1.473E-08	1.266E-08	1.074E-08	9.179E-09	7.932E-09	6.941E-09	
ESE	2.894E-11	2.163E-09	1.111E-08	1.894E-08	2.385E-08	2.220E-08	1.932E-08	1.662E-08	1.437E-08	1.254E-08	1.107E-08	
SE	1.023E-10	7.047E-09	3.262E-08	5.233E-08	6.028E-08	5.252E-08	4.346E-08	3.594E-08	3.010E-08	2.558E-08	2.206E-08	
SSE	1.932E-10	1.359E-08	5.075E-08	7.639E-08	8.521E-08	7.347E-08	6.044E-08	4.978E-08	4.155E-08	3.523E-08	3.032E-08	

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES FROM THE SITE							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	4.209E-08	2.870E-08	1.868E-08	1.073E-08	7.530E-09	5.694E-09	4.432E-09	3.589E-09	3.016E-09	2.583E-09	2.239E-09	
SSW	4.058E-08	3.252E-08	2.122E-08	1.225E-08	8.823E-09	6.666E-09	5.200E-09	4.220E-09	3.528E-09	3.012E-09	2.616E-09	
SW	2.079E-08	1.825E-08	1.224E-08	7.308E-09	5.453E-09	4.305E-09	3.555E-09	2.905E-09	2.439E-09	2.092E-09	1.824E-09	
WSW	2.840E-08	1.906E-08	1.381E-08	8.747E-09	5.903E-09	4.361E-09	3.412E-09	2.773E-09	2.318E-09	1.981E-09	1.722E-09	
W	3.666E-08	1.964E-08	1.377E-08	8.832E-09	6.537E-09	4.839E-09	3.763E-09	3.046E-09	2.538E-09	2.163E-09	1.875E-09	
WNW	5.646E-08	3.115E-08	2.097E-08	1.258E-08	8.576E-09	6.374E-09	5.022E-09	4.094E-09	3.420E-09	2.913E-09	2.524E-09	
NW	7.349E-08	4.096E-08	2.798E-08	1.704E-08	1.150E-08	8.498E-09	6.771E-09	5.537E-09	4.628E-09	3.951E-09	3.431E-09	
NNW	9.794E-08	5.465E-08	3.537E-08	2.023E-08	1.367E-08	1.010E-08	7.966E-09	6.517E-09	5.520E-09	4.735E-09	4.111E-09	
N	3.031E-08	1.881E-08	1.519E-08	1.187E-08	9.983E-09	8.304E-09	6.538E-09	5.327E-09	4.451E-09	3.801E-09	3.302E-09	
NNE	1.599E-08	2.313E-08	1.504E-08	8.668E-09	5.887E-09	4.370E-09	3.430E-09	2.798E-09	2.347E-09	2.011E-09	1.752E-09	
NE	1.471E-08	2.422E-08	1.588E-08	9.247E-09	6.324E-09	4.719E-09	3.781E-09	3.131E-09	2.674E-09	2.296E-09	2.002E-09	
ENE	1.157E-08	1.626E-08	1.073E-08	6.277E-09	4.295E-09	3.203E-09	2.624E-09	2.197E-09	1.840E-09	1.575E-09	1.371E-09	
E	7.394E-09	1.042E-08	6.864E-09	4.007E-09	2.738E-09	2.041E-09	1.606E-09	1.312E-09	1.133E-09	9.897E-10	8.615E-10	
ESE	1.180E-08	1.521E-08	1.013E-08	5.986E-09	4.120E-09	3.085E-09	2.435E-09	1.995E-09	1.679E-09	1.442E-09	1.259E-09	
SE	1.927E-08	1.164E-08	8.916E-09	6.387E-09	4.669E-09	3.667E-09	3.016E-09	2.557E-09	2.141E-09	1.831E-09	1.593E-09	
SSE	3.140E-08	3.936E-08	2.546E-08	1.457E-08	9.847E-09	7.284E-09	5.703E-09	4.641E-09	3.886E-09	3.324E-09	2.892E-09	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.561E-08	6.077E-08	5.026E-08	4.047E-08	4.377E-08	2.722E-08	1.107E-08	5.679E-09	3.611E-09	2.584E-09
SSW	3.309E-08	6.019E-08	5.498E-08	5.332E-08	4.421E-08	2.929E-08	1.272E-08	6.655E-09	4.237E-09	3.018E-09
SW	3.642E-08	8.139E-08	5.271E-08	3.217E-08	2.290E-08	1.614E-08	7.578E-09	4.311E-09	2.913E-09	2.096E-09
WSW	5.954E-08	1.393E-07	8.419E-08	4.838E-08	3.268E-08	1.880E-08	8.607E-09	4.393E-09	2.782E-09	1.985E-09
W	2.331E-07	2.432E-07	1.213E-07	6.739E-08	4.390E-08	2.081E-08	8.909E-09	4.861E-09	3.058E-09	2.167E-09
WNW	2.017E-07	3.207E-07	1.760E-07	1.026E-07	6.739E-08	3.225E-08	1.267E-08	6.420E-09	4.102E-09	2.919E-09
NW	1.836E-07	4.163E-07	2.377E-07	1.340E-07	8.754E-08	4.242E-08	1.701E-08	8.609E-09	5.543E-09	3.959E-09
NNW	1.303E-07	2.503E-07	2.289E-07	1.725E-07	1.168E-07	5.570E-08	2.068E-08	1.020E-08	6.551E-09	4.737E-09
N	5.876E-08	7.918E-08	6.422E-08	4.621E-08	3.445E-08	1.976E-08	1.177E-08	8.045E-09	5.339E-09	3.809E-09
NNE	1.871E-08	3.259E-08	2.714E-08	1.971E-08	1.590E-08	1.795E-08	8.848E-09	4.398E-09	2.807E-09	2.015E-09
NE	1.214E-08	2.626E-08	2.366E-08	1.774E-08	1.454E-08	1.840E-08	9.421E-09	4.772E-09	3.143E-09	2.299E-09
ENE	1.032E-08	2.167E-08	1.917E-08	1.426E-08	1.159E-08	1.276E-08	6.386E-09	3.262E-09	2.183E-09	1.578E-09
E	7.189E-09	1.444E-08	1.245E-08	9.152E-09	7.402E-09	4.168E-09	4.078E-09	2.053E-09	1.328E-09	9.846E-10
ESE	1.260E-08	2.203E-08	1.901E-08	1.431E-08	1.177E-08	1.219E-08	6.078E-09	3.101E-09	2.000E-09	1.444E-09
SE	3.569E-08	5.506E-08	4.287E-08	3.005E-08	2.207E-08	1.213E-08	6.185E-09	3.674E-09	2.530E-09	1.835E-09
SSE	5.389E-08	7.803E-08	5.965E-08	4.149E-08	3.217E-08	3.141E-08	1.489E-08	7.335E-09	4.657E-09	3.330E-09

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ERP ELEVATED STACK RELEASES - JUL-DEC 2014
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	9.175E-11	6.790E-09	3.117E-08	5.322E-08	6.622E-08	6.001E-08	5.081E-08	4.262E-08	3.604E-08	4.191E-08	4.646E-08											
SSW	3.389E-11	3.671E-09	2.774E-08	5.169E-08	6.587E-08	5.974E-08	5.053E-08	5.474E-08	5.591E-08	4.880E-08	4.324E-08											
SW	2.509E-16	4.864E-10	2.296E-08	6.430E-08	1.049E-07	7.158E-08	5.204E-08	3.983E-08	3.172E-08	2.604E-08	2.191E-08											
WSW	2.394E-16	5.289E-10	3.426E-08	1.076E-07	1.860E-07	1.185E-07	8.246E-08	6.113E-08	4.749E-08	3.822E-08	3.162E-08											
W	4.469E-11	4.925E-08	2.437E-07	3.160E-07	2.833E-07	1.743E-07	1.184E-07	8.624E-08	6.607E-08	5.256E-08	4.306E-08											
WNW	1.525E-09	1.613E-08	1.645E-07	3.215E-07	4.105E-07	2.506E-07	1.698E-07	1.290E-07	1.023E-07	8.092E-08	6.602E-08											
NW	1.008E-10	1.146E-08	1.178E-07	3.183E-07	5.745E-07	3.433E-07	2.301E-07	1.704E-07	1.326E-07	1.050E-07	8.578E-08											
NNW	8.526E-10	3.064E-08	1.117E-07	1.937E-07	2.744E-07	2.592E-07	2.326E-07	2.034E-07	1.793E-07	1.409E-07	1.144E-07											
N	2.668E-09	2.478E-08	5.755E-08	7.654E-08	8.420E-08	7.636E-08	6.541E-08	5.459E-08	4.608E-08	3.944E-08	3.421E-08											
NNE	8.933E-10	3.632E-09	1.593E-08	2.829E-08	3.557E-08	3.233E-08	2.747E-08	2.315E-08	1.966E-08	1.690E-08	1.472E-08											
NE	4.236E-16	4.934E-10	9.308E-09	2.002E-08	2.857E-08	2.738E-08	2.394E-08	2.052E-08	1.762E-08	1.526E-08	1.336E-08											
ENE	4.023E-16	4.362E-10	8.005E-09	1.695E-08	2.364E-08	2.235E-08	1.937E-08	1.653E-08	1.416E-08	1.225E-08	1.073E-08											
E	3.060E-16	3.230E-10	5.699E-09	1.171E-08	1.580E-08	1.467E-08	1.259E-08	1.068E-08	9.111E-09	7.864E-09	6.874E-09											
ESE	2.893E-11	2.162E-09	1.110E-08	1.892E-08	2.380E-08	2.213E-08	1.924E-08	1.653E-08	1.428E-08	1.245E-08	1.098E-08											
SE	1.023E-10	7.044E-09	3.260E-08	5.227E-08	6.017E-08	5.239E-08	4.332E-08	3.581E-08	2.996E-08	2.545E-08	2.193E-08											
SSE	1.931E-10	1.359E-08	5.071E-08	7.631E-08	8.506E-08	7.328E-08	6.024E-08	4.959E-08	4.136E-08	3.504E-08	3.014E-08											

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.159E-08	2.815E-08	1.821E-08	1.032E-08	7.147E-09	5.332E-09	4.096E-09	3.273E-09	2.714E-09	2.295E-09	1.963E-09											
SSW	4.006E-08	3.181E-08	2.060E-08	1.170E-08	8.289E-09	6.158E-09	4.730E-09	3.780E-09	3.112E-09	2.617E-09	2.239E-09											
SW	2.051E-08	1.780E-08	1.183E-08	6.938E-09	5.073E-09	3.924E-09	3.171E-09	2.543E-09	2.096E-09	1.765E-09	1.512E-09											
WSW	2.795E-08	1.857E-08	1.332E-08	8.266E-09	5.474E-09	3.969E-09	3.048E-09	2.432E-09	1.997E-09	1.676E-09	1.431E-09											
W	3.610E-08	1.918E-08	1.332E-08	8.386E-09	6.079E-09	4.416E-09	3.374E-09	2.684E-09	2.198E-09	1.841E-09	1.570E-09											
WNW	5.575E-08	3.053E-08	2.039E-08	1.204E-08	8.076E-09	5.909E-09	4.580E-09	3.674E-09	3.022E-09	2.535E-09	2.164E-09											
NW	7.260E-08	4.019E-08	2.726E-08	1.637E-08	1.090E-08	7.946E-09	6.242E-09	5.034E-09	4.152E-09	3.499E-09	3.001E-09											
NNW	9.711E-08	5.393E-08	3.475E-08	1.970E-08	1.319E-08	9.659E-09	7.544E-09	6.115E-09	5.131E-09	4.360E-09	3.752E-09											
N	3.010E-08	1.861E-08	1.498E-08	1.159E-08	9.621E-09	7.893E-09	6.149E-09	4.957E-09	4.101E-09	3.467E-09	2.983E-09											
NNE	1.586E-08	2.275E-08	1.471E-08	8.384E-09	5.629E-09	4.132E-09	3.207E-09	2.587E-09	2.146E-09	1.819E-09	1.567E-09											
NE	1.448E-08	2.347E-08	1.522E-08	8.676E-09	5.808E-09	4.245E-09	3.329E-09	2.698E-09	2.254E-09	1.896E-09	1.622E-09											
ENE	1.139E-08	1.587E-08	1.039E-08	5.980E-09	4.028E-09	2.958E-09	2.387E-09	1.970E-09	1.625E-09	1.371E-09	1.176E-09											
E	7.315E-09	1.026E-08	6.720E-09	3.882E-09	2.626E-09	1.937E-09	1.509E-09	1.220E-09	1.043E-09	9.021E-10	7.775E-10											
ESE	1.168E-08	1.495E-08	9.900E-09	5.783E-09	3.935E-09	2.913E-09	2.275E-09	1.843E-09	1.535E-09	1.304E-09	1.127E-09											
SE	1.915E-08	1.153E-08	8.793E-09	6.244E-09	4.521E-09	3.516E-09	2.860E-09	2.398E-09	1.989E-09	1.685E-09	1.452E-09											
SSE	3.118E-08	3.872E-08	2.490E-08	1.408E-08	9.407E-09	6.878E-09	5.322E-09	4.281E-09	3.543E-09	2.996E-09	2.578E-09											

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40
S	3.555E-08	6.057E-08	4.999E-08	4.016E-08	4.331E-08	2.672E-08	1.066E-08	5.321E-09	3.295E-09	2.296E-09
SSW	3.303E-08	6.000E-08	5.467E-08	5.287E-08	4.371E-08	2.866E-08	1.216E-08	6.155E-09	3.797E-09	2.623E-09
SW	3.634E-08	8.105E-08	5.236E-08	3.187E-08	2.262E-08	1.575E-08	7.196E-09	3.929E-09	2.552E-09	1.770E-09
WSW	5.938E-08	1.386E-07	8.355E-08	4.786E-08	3.221E-08	1.832E-08	8.149E-09	4.002E-09	2.442E-09	1.680E-09
W	2.326E-07	2.421E-07	1.205E-07	6.669E-08	4.330E-08	2.034E-08	8.457E-09	4.442E-09	2.696E-09	1.847E-09
WNW	2.013E-07	3.196E-07	1.750E-07	1.018E-07	6.663E-08	3.163E-08	1.214E-08	5.955E-09	3.684E-09	2.541E-09
NW	1.833E-07	4.148E-07	2.364E-07	1.329E-07	8.660E-08	4.165E-08	1.636E-08	8.052E-09	5.043E-09	3.508E-09
NNW	1.301E-07	2.497E-07	2.280E-07	1.716E-07	1.159E-07	5.500E-08	2.015E-08	9.754E-09	6.148E-09	4.363E-09
N	5.871E-08	7.901E-08	6.400E-08	4.598E-08	3.423E-08	1.955E-08	1.147E-08	7.656E-09	4.971E-09	3.475E-09
NNE	1.869E-08	3.251E-08	2.704E-08	1.961E-08	1.579E-08	1.765E-08	8.567E-09	4.161E-09	2.596E-09	1.823E-09
NE	1.211E-08	2.614E-08	2.349E-08	1.755E-08	1.434E-08	1.781E-08	8.856E-09	4.295E-09	2.709E-09	1.901E-09
ENE	1.030E-08	2.158E-08	1.903E-08	1.411E-08	1.142E-08	1.244E-08	6.092E-09	3.015E-09	1.958E-09	1.374E-09
E	7.177E-09	1.439E-08	1.238E-08	9.083E-09	7.331E-09	8.032E-09	3.954E-09	1.949E-09	1.235E-09	8.977E-10
ESE	1.259E-08	2.197E-08	1.893E-08	1.422E-08	1.167E-08	1.198E-08	5.877E-09	2.930E-09	1.849E-09	1.307E-09
SE	3.566E-08	5.496E-08	4.274E-08	2.991E-08	2.194E-08	1.201E-08	6.045E-09	3.522E-09	2.374E-09	1.689E-09
SSE	5.384E-08	7.788E-08	5.946E-08	4.130E-08	3.198E-08	3.091E-08	1.441E-08	6.930E-09	4.297E-09	3.003E-09

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ERP ELEVATED STACK RELEASES - JUL-DEC 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	9.177E-11	6.743E-09	3.101E-08	5.310E-08	6.566E-08	5.907E-08	4.967E-08	4.141E-08	3.481E-08	4.047E-08	4.497E-08
SSW	3.390E-11	3.652E-09	2.768E-08	5.167E-08	6.538E-08	5.883E-08	4.940E-08	5.330E-08	5.431E-08	4.724E-08	4.176E-08
SW	2.510E-16	4.867E-10	2.299E-08	6.441E-08	1.040E-07	7.031E-08	5.076E-08	3.864E-08	3.064E-08	2.507E-08	2.103E-08
WSW	2.395E-16	5.293E-10	3.431E-08	1.078E-07	1.844E-07	1.164E-07	8.039E-08	5.925E-08	4.581E-08	3.673E-08	3.028E-08
W	4.473E-11	4.922E-08	2.425E-07	3.127E-07	2.780E-07	1.698E-07	1.146E-07	8.307E-08	6.338E-08	5.025E-08	4.104E-08
WNW	1.525E-09	1.607E-08	1.644E-07	3.197E-07	4.049E-07	2.453E-07	1.652E-07	1.251E-07	9.891E-08	7.793E-08	6.328E-08
NW	1.008E-10	1.138E-08	1.174E-07	3.171E-07	5.691E-07	3.377E-07	2.252E-07	1.662E-07	1.291E-07	1.018E-07	8.280E-08
NNW	8.528E-10	3.039E-08	1.107E-07	1.927E-07	2.718E-07	2.552E-07	2.282E-07	1.993E-07	1.755E-07	1.374E-07	1.111E-07
N	2.669E-09	2.458E-08	5.692E-08	7.595E-08	8.323E-08	7.506E-08	6.393E-08	5.309E-08	4.461E-08	3.803E-08	3.286E-08
NNE	8.934E-10	3.607E-09	1.588E-08	2.828E-08	3.530E-08	3.185E-08	2.688E-08	2.252E-08	1.903E-08	1.628E-08	1.412E-08
NE	4.237E-16	4.937E-10	9.318E-09	2.006E-08	2.841E-08	2.703E-08	2.349E-08	2.003E-08	1.712E-08	1.477E-08	1.288E-08
ENE	4.024E-16	4.365E-10	8.013E-09	1.697E-08	2.350E-08	2.205E-08	1.898E-08	1.610E-08	1.372E-08	1.182E-08	1.031E-08
E	3.060E-16	3.231E-10	5.704E-09	1.173E-08	1.570E-08	1.446E-08	1.233E-08	1.039E-08	8.817E-09	7.576E-09	6.595E-09
ESE	2.893E-11	2.148E-09	1.105E-08	1.888E-08	2.361E-08	2.182E-08	1.887E-08	1.615E-08	1.390E-08	1.208E-08	1.063E-08
SE	1.023E-10	6.998E-09	3.243E-08	5.213E-08	5.961E-08	5.150E-08	4.227E-08	3.470E-08	2.886E-08	2.438E-08	2.090E-08
SSE	1.931E-10	1.349E-08	5.036E-08	7.597E-08	8.418E-08	7.197E-08	5.873E-08	4.801E-08	3.979E-08	3.352E-08	2.868E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.019E-08	2.691E-08	1.695E-08	9.116E-09	5.950E-09	4.226E-09	3.117E-09	2.405E-09	1.941E-09	1.610E-09	1.354E-09
SSW	3.867E-08	3.058E-08	1.929E-08	1.040E-08	6.962E-09	5.029E-09	3.775E-09	2.958E-09	2.394E-09	1.982E-09	1.673E-09
SW	1.970E-08	1.719E-08	1.114E-08	6.207E-09	4.277E-09	3.150E-09	2.488E-09	1.958E-09	1.588E-09	1.318E-09	1.115E-09
WSW	2.675E-08	1.761E-08	1.238E-08	7.423E-09	4.777E-09	3.388E-09	2.554E-09	2.005E-09	1.624E-09	1.347E-09	1.139E-09
W	3.432E-08	1.807E-08	1.247E-08	7.580E-09	5.284E-09	3.751E-09	2.810E-09	2.198E-09	1.775E-09	1.468E-09	1.237E-09
WNW	5.319E-08	2.842E-08	1.851E-08	1.037E-08	6.536E-09	4.569E-09	3.439E-09	2.699E-09	2.178E-09	1.795E-09	1.509E-09
NW	6.978E-08	3.769E-08	2.489E-08	1.417E-08	8.953E-09	6.251E-09	4.767E-09	3.759E-09	3.040E-09	2.516E-09	2.123E-09
NNW	9.381E-08	5.072E-08	3.171E-08	1.690E-08	1.054E-08	7.281E-09	5.413E-09	4.227E-09	3.454E-09	2.869E-09	2.418E-09
N	2.882E-08	1.764E-08	1.418E-08	1.107E-08	9.109E-09	7.231E-09	5.517E-09	4.368E-09	3.556E-09	2.963E-09	2.516E-09
NNE	1.524E-08	2.211E-08	1.389E-08	7.513E-09	4.793E-09	3.375E-09	2.529E-09	1.978E-09	1.596E-09	1.320E-09	1.112E-09
NE	1.398E-08	2.312E-08	1.462E-08	7.943E-09	5.048E-09	3.539E-09	2.688E-09	2.138E-09	1.761E-09	1.463E-09	1.237E-09
ENE	1.096E-08	1.551E-08	9.893E-09	5.396E-09	3.411E-09	2.378E-09	1.835E-09	1.462E-09	1.178E-09	9.732E-10	8.191E-10
E	7.025E-09	9.973E-09	6.352E-09	3.462E-09	2.188E-09	1.526E-09	1.133E-09	8.782E-10	7.219E-10	6.043E-10	5.071E-10
ESE	1.133E-08	1.468E-08	9.451E-09	5.210E-09	3.311E-09	2.317E-09	1.724E-09	1.338E-09	1.072E-09	8.801E-10	7.362E-10
SE	1.817E-08	1.076E-08	8.163E-09	5.799E-09	4.201E-09	3.278E-09	2.682E-09	2.256E-09	1.846E-09	1.546E-09	1.318E-09
SSE	2.966E-08	3.726E-08	2.327E-08	1.250E-08	7.958E-09	5.592E-09	4.183E-09	3.267E-09	2.634E-09	2.175E-09	1.831E-09

DIRECTION FROM SITE	CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.543E-08	5.994E-08	4.887E-08	3.885E-08	4.187E-08	2.544E-08	9.450E-09	4.242E-09	2.432E-09	1.614E-09
SSW	3.300E-08	5.942E-08	5.347E-08	5.133E-08	4.224E-08	2.736E-08	1.085E-08	5.043E-09	2.977E-09	1.990E-09
SW	3.640E-08	8.021E-08	5.113E-08	3.080E-08	2.174E-08	1.506E-08	6.446E-09	3.186E-09	1.968E-09	1.322E-09
WSW	5.948E-08	1.372E-07	8.154E-08	4.619E-08	3.088E-08	1.731E-08	7.349E-09	3.425E-09	2.017E-09	1.352E-09
W	2.307E-07	2.376E-07	1.167E-07	6.400E-08	4.128E-08	1.919E-08	7.647E-09	3.783E-09	2.212E-09	1.473E-09
WNW	2.005E-07	3.150E-07	1.705E-07	9.840E-08	6.389E-08	2.952E-08	1.047E-08	4.641E-09	2.712E-09	1.803E-09
NW	1.826E-07	4.103E-07	2.316E-07	1.293E-07	8.361E-08	3.913E-08	1.423E-08	6.378E-09	3.773E-09	2.526E-09
NNW	1.293E-07	2.468E-07	2.238E-07	1.678E-07	1.125E-07	5.185E-08	1.737E-08	7.403E-09	4.271E-09	2.876E-09
N	5.819E-08	7.798E-08	6.256E-08	4.452E-08	3.290E-08	1.858E-08	1.089E-08	7.046E-09	4.387E-09	2.973E-09
NNE	1.866E-08	3.221E-08	2.646E-08	1.898E-08	1.518E-08	1.693E-08	7.721E-09	3.415E-09	1.990E-09	1.325E-09
NE	1.213E-08	2.594E-08	2.305E-08	1.705E-08	1.385E-08	1.731E-08	8.140E-09	3.601E-09	2.151E-09	1.468E-09
ENE	1.031E-08	2.140E-08	1.865E-08	1.368E-08	1.100E-08	1.200E-08	5.513E-09	2.436E-09	1.460E-09	9.769E-10
E	7.186E-09	1.427E-08	1.212E-08	8.793E-09	7.045E-09	7.708E-09	3.538E-09	1.545E-09	8.914E-10	6.031E-10
ESE	1.255E-08	2.177E-08	1.857E-08	1.385E-08	1.132E-08	1.161E-08	5.308E-09	2.345E-09	1.347E-09	8.838E-10
SE	3.554E-08	5.434E-08	4.170E-08	2.882E-08	2.092E-08	1.125E-08	5.614E-09	3.286E-09	2.221E-09	1.550E-09
SSE	5.355E-08	7.693E-08	5.797E-08	3.975E-08	3.048E-08	2.935E-08	1.288E-08	5.659E-09	3.287E-09	2.183E-09

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ERP ELEVATED STACK RELEASES - JUL-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	25	50	75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	8.717E-10	1.199E-09	1.744E-09	1.621E-09	9.621E-10	6.349E-10	4.451E-10	3.258E-10	2.463E-10	1.934E-10	1.838E-10
SSW	3.697E-10	8.743E-10	1.592E-09	1.587E-09	9.745E-10	6.500E-10	4.580E-10	3.361E-10	3.191E-10	2.413E-10	1.889E-10
SW	4.196E-11	2.517E-10	5.360E-10	5.552E-10	6.580E-10	3.620E-10	2.259E-10	1.540E-10	1.116E-10	8.451E-11	6.617E-11
WSW	4.917E-11	2.950E-10	6.281E-10	9.344E-10	8.075E-10	4.393E-10	2.717E-10	1.842E-10	1.330E-10	1.005E-10	7.864E-11
W	1.966E-10	3.640E-09	3.529E-09	2.423E-09	1.134E-09	6.167E-10	3.816E-10	2.590E-10	1.873E-10	1.419E-10	1.113E-10
WNW	4.811E-10	8.709E-10	3.477E-09	3.459E-09	1.988E-09	1.028E-09	6.215E-10	4.200E-10	3.271E-10	2.526E-10	2.061E-10
NW	1.011E-09	1.365E-09	1.962E-09	4.349E-09	2.860E-09	1.427E-09	8.469E-10	5.663E-10	4.142E-10	3.251E-10	2.702E-10
NNW	3.872E-09	3.749E-09	4.073E-09	3.322E-09	3.347E-09	1.813E-09	1.126E-09	9.215E-10	6.717E-10	5.244E-10	4.332E-10
N	3.736E-09	3.603E-09	3.896E-09	3.170E-09	1.744E-09	1.122E-09	7.772E-10	5.653E-10	4.260E-10	3.300E-10	2.613E-10
NNE	4.562E-10	7.214E-10	1.132E-09	1.079E-09	6.490E-10	4.301E-10	3.021E-10	2.213E-10	1.674E-10	1.299E-10	1.028E-10
NE	4.589E-11	2.753E-10	5.862E-10	6.072E-10	3.793E-10	2.543E-10	1.796E-10	1.320E-10	9.994E-11	7.757E-11	6.143E-11
ENE	4.065E-11	2.438E-10	5.192E-10	5.378E-10	3.359E-10	2.252E-10	1.591E-10	1.169E-10	8.852E-11	6.870E-11	5.441E-11
E	2.884E-11	1.731E-10	3.685E-10	3.817E-10	2.384E-10	1.599E-10	1.129E-10	8.294E-11	6.282E-11	4.876E-11	3.861E-11
ESE	3.035E-10	4.770E-10	7.461E-10	7.110E-10	4.272E-10	2.831E-10	1.988E-10	1.457E-10	1.102E-10	8.547E-11	6.768E-11
SE	1.180E-09	1.704E-09	2.549E-09	2.393E-09	1.427E-09	9.434E-10	6.620E-10	4.847E-10	3.665E-10	2.842E-10	2.251E-10
SSE	1.870E-09	2.485E-09	3.539E-09	3.264E-09	1.929E-09	1.271E-09	8.909E-10	6.518E-10	4.927E-10	3.821E-10	3.026E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.478E-10	9.875E-11	6.636E-11	3.786E-11	2.383E-11	1.782E-11	1.267E-11	9.427E-12	7.489E-12	5.945E-12	4.854E-12
SSW	1.529E-10	1.043E-10	7.042E-11	4.032E-11	2.637E-11	1.866E-11	1.337E-11	1.004E-11	7.894E-12	6.306E-12	5.147E-12
SW	5.414E-11	4.394E-11	3.095E-11	1.836E-11	1.165E-11	7.796E-12	5.704E-12	4.283E-12	3.330E-12	2.660E-12	2.171E-12
WSW	6.321E-11	4.743E-11	3.284E-11	2.024E-11	1.224E-11	8.211E-12	6.158E-12	4.624E-12	3.595E-12	2.872E-12	2.344E-12
W	8.980E-11	4.086E-11	4.733E-11	2.977E-11	1.897E-11	1.295E-11	9.282E-12	6.970E-12	5.419E-12	4.329E-12	3.533E-12
WNW	1.772E-10	1.049E-10	7.414E-11	4.417E-11	2.720E-11	1.803E-11	1.351E-11	1.015E-11	7.961E-12	6.360E-12	5.191E-12
NW	2.360E-10	1.477E-10	1.072E-10	6.451E-11	3.948E-11	2.643E-11	1.917E-11	1.439E-11	1.126E-11	8.991E-12	7.338E-12
NNW	3.758E-10	2.303E-10	1.657E-10	1.002E-10	6.401E-11	4.262E-11	2.998E-11	2.189E-11	1.726E-11	1.379E-11	1.126E-11
N	2.107E-10	1.001E-10	6.120E-11	3.242E-11	1.855E-11	1.103E-11	7.335E-12	5.106E-12	3.333E-12	2.233E-12	1.449E-12
NNE	8.285E-11	1.170E-10	7.265E-11	3.784E-11	2.312E-11	1.547E-11	1.104E-11	8.258E-12	6.400E-12	5.099E-12	4.154E-12
NE	4.947E-11	7.928E-11	4.982E-11	2.631E-11	1.614E-11	1.079E-11	7.853E-12	5.743E-12	4.465E-12	3.655E-12	2.983E-12
ENE	4.382E-11	4.704E-11	3.367E-11	2.025E-11	1.287E-11	8.533E-12	6.007E-12	4.350E-12	3.379E-12	2.699E-12	2.203E-12
E	3.110E-11	3.961E-11	2.925E-11	1.802E-11	1.152E-11	7.622E-12	5.344E-12	3.910E-12	2.977E-12	2.335E-12	1.900E-12
ESE	5.453E-11	7.312E-11	5.449E-11	3.383E-11	2.167E-11	1.434E-11	1.006E-11	7.361E-12	5.601E-12	4.394E-12	3.531E-12
SE	1.814E-10	8.596E-11	5.245E-11	2.763E-11	1.686E-11	1.159E-11	8.631E-12	1.463E-11	1.127E-11	8.951E-12	7.283E-12
SSE	2.438E-10	2.613E-10	1.606E-10	8.254E-11	5.022E-11	3.363E-11	2.405E-11	1.801E-11	1.398E-11	1.115E-11	9.086E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	1.568E-09	9.631E-10	4.480E-10	2.488E-10	1.733E-10	9.525E-11	3.796E-11	1.736E-11	9.614E-12	5.998E-12
SSW	1.430E-09	9.664E-10	4.604E-10	2.943E-10	1.911E-10	1.000E-10	4.081E-11	1.860E-11	1.018E-11	6.347E-12
SW	4.813E-10	5.036E-10	2.334E-10	1.134E-10	6.715E-11	4.043E-11	1.818E-11	7.987E-12	4.326E-12	2.678E-12
WSW	6.902E-10	6.720E-10	2.814E-10	1.353E-10	7.941E-11	4.445E-11	1.948E-11	8.465E-12	4.671E-12	2.891E-12
W	3.062E-09	1.191E-09	3.952E-10	1.905E-10	1.124E-10	5.461E-11	2.887E-11	1.309E-11	7.039E-12	4.357E-12
WNW	2.890E-09	1.889E-09	6.494E-10	3.252E-10	2.092E-10	1.073E-10	4.329E-11	1.867E-11	1.028E-11	6.401E-12
NW	2.890E-09	2.554E-09	8.894E-10	4.237E-10	2.738E-10	1.493E-10	6.288E-11	2.700E-11	1.456E-11	9.050E-12
NNW	3.667E-09	2.660E-09	1.228E-09	6.870E-10	4.390E-10	2.339E-10	9.868E-11	4.327E-11	2.244E-11	1.388E-11
N	3.508E-09	1.785E-09	7.844E-10	4.292E-10	2.629E-10	1.074E-10	5.487E-11	4.516E-11	2.356E-11	1.458E-11
NNE	1.017E-09	6.474E-10	3.039E-10	1.685E-10	1.034E-10	8.969E-11	3.903E-11	1.574E-11	8.346E-12	5.135E-12
NE	5.265E-10	3.744E-10	1.805E-10	1.006E-10	6.178E-11	5.956E-11	2.701E-11	1.104E-11	5.859E-12	3.646E-12
ENE	4.663E-10	3.316E-10	1.598E-10	8.907E-11	5.472E-11	4.038E-11	1.995E-11	8.679E-12	4.453E-12	2.717E-12
E	3.309E-10	2.353E-10	1.134E-10	6.321E-11	3.884E-11	3.318E-11	1.763E-11	7.750E-12	3.964E-12	2.364E-12
ESE	6.707E-10	4.262E-10	2.000E-10	1.109E-10	6.808E-11	6.071E-11	3.302E-11	1.458E-11	7.461E-12	4.432E-12
SE	2.292E-09	1.427E-09	6.661E-10	3.689E-10	2.264E-10	9.226E-11	2.836E-11	1.181E-11	1.164E-11	9.020E-12
SSE	3.182E-09	1.933E-09	8.968E-10	4.960E-10	3.044E-10	2.126E-10	8.551E-11	3.422E-11	1.820E-11	1.122E-11

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ERP ELEVATED STACK RELEASES - JUL-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE TYPE OF ID	DIRECTION LOCATION	DIST. FROM SITE (MI)	X/Q (SEC/M3)		X/Q (SEC/M3)	X/Q (SEC/M3)	D/Q (PER SQ.METER)
			NO DECA	NO DECA			
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary S	.80	3.6E-08	3.6E-08	3.6E-08	1.8E-09	
A	Site Boundary SSW	.82	3.6E-08	3.6E-08	3.6E-08	1.7E-09	
A	Site Boundary SW	.97	6.1E-08	6.0E-08	6.1E-08	5.7E-10	
A	Site Boundary WSW	.93	8.6E-08	8.6E-08	8.6E-08	8.2E-10	
A	Site Boundary W	.91	3.0E-07	3.0E-07	3.0E-07	2.7E-09	
A	Site Boundary WNW	.94	2.9E-07	2.9E-07	2.9E-07	3.9E-09	
A	Site Boundary NW	.81	1.6E-07	1.6E-07	1.6E-07	2.0E-09	
A	Site Boundary NNW	.69	8.5E-08	8.4E-08	8.4E-08	4.0E-09	
A	Site Boundary N	.67	4.6E-08	4.6E-08	4.5E-08	3.8E-09	
A	Site Boundary NNE	.60	6.6E-09	6.6E-09	6.5E-09	8.8E-10	
A	Site Boundary NE	.62	3.3E-09	3.3E-09	3.3E-09	4.3E-10	
A	Site Boundary ENE	.59	1.9E-09	1.9E-09	1.9E-09	3.4E-10	
A	Site Boundary E	.53	5.2E-10	5.2E-10	5.2E-10	1.9E-10	
A	Site Boundary ESE	.54	2.9E-09	2.9E-09	2.9E-09	5.1E-10	
A	Site Boundary SE	.65	2.0E-08	2.0E-08	2.0E-08	2.2E-09	
A	Site Boundary SSE	.81	5.9E-08	5.9E-08	5.8E-08	3.6E-09	
A	Nearest Res SSW	3.00	5.5E-08	5.5E-08	5.3E-08	3.4E-10	
A	Nearest Res SW	1.30	9.7E-08	9.6E-08	9.6E-08	8.7E-10	
A	Nearest Res WSW	1.90	1.3E-07	1.3E-07	1.3E-07	4.9E-10	
A	Nearest Res W	1.00	3.2E-07	3.2E-07	3.1E-07	2.4E-09	
A	Nearest Res WNW	1.70	3.3E-07	3.3E-07	3.3E-07	1.5E-09	
A	Nearest Res NW	.90	2.4E-07	2.4E-07	2.3E-07	4.2E-09	
A	Nearest Res NNW	1.90	2.6E-07	2.6E-07	2.6E-07	2.0E-09	
A	Nearest Res N	2.50	6.6E-08	6.5E-08	6.4E-08	7.8E-10	
A	Nearest Res NNE	1.70	3.5E-08	3.5E-08	3.4E-08	5.4E-10	
A	Nearest Res ENE	1.70	2.4E-08	2.4E-08	2.3E-08	2.8E-10	
A	Nearest Res E	2.20	1.4E-08	1.4E-08	1.4E-08	1.4E-10	
A	Nearest Res ESE	2.80	1.8E-08	1.8E-08	1.7E-08	1.6E-10	
A	Nearest Res SE	3.00	3.6E-08	3.6E-08	3.5E-08	4.8E-10	
A	Nearest Res SSE	3.00	5.0E-08	5.0E-08	4.8E-08	6.5E-10	
A	Nearest Cow NNW	3.50	1.8E-07	1.8E-07	1.8E-07	6.7E-10	
A	Nearest Garde SSW	3.00	5.5E-08	5.5E-08	5.3E-08	3.4E-10	
A	Nearest Garde SW	1.30	9.7E-08	9.6E-08	9.6E-08	8.7E-10	
A	Nearest Garde WSW	1.90	1.3E-07	1.3E-07	1.3E-07	4.9E-10	
A	Nearest Garde W	2.80	9.8E-08	9.7E-08	9.4E-08	3.0E-10	
A	Nearest Garde WNW	1.70	3.3E-07	3.3E-07	3.3E-07	1.5E-09	
A	Nearest Garde NW	1.90	3.8E-07	3.8E-07	3.7E-07	1.6E-09	
A	Nearest Garde NNW	1.90	2.6E-07	2.6E-07	2.6E-07	2.0E-09	
A	Nearest Garde ENE	1.70	2.4E-08	2.4E-08	2.3E-08	2.8E-10	
A	Nearest Garde ESE	2.30	2.0E-08	2.0E-08	2.0E-08	2.3E-10	
A	Nearest Garde SSE	3.00	5.0E-08	5.0E-08	4.8E-08	6.5E-10	
A	MAXIMUM CHI/Q S	1.50	6.6E-08	6.6E-08	6.6E-08	9.6E-10	
A	MAXIMUM CHI/Q SSW	1.50	6.6E-08	6.6E-08	6.5E-08	9.7E-10	
A	MAXIMUM CHI/Q SW	1.50	1.1E-07	1.0E-07	1.0E-07	6.6E-10	
A	MAXIMUM CHI/Q WSW	1.50	1.9E-07	1.9E-07	1.8E-07	8.1E-10	
A	MAXIMUM CHI/Q W	1.00	3.2E-07	3.2E-07	3.1E-07	2.4E-09	
A	MAXIMUM CHI/Q WNW	1.50	4.1E-07	4.1E-07	4.0E-07	2.0E-09	
A	MAXIMUM CHI/Q NW	1.50	5.8E-07	5.7E-07	5.7E-07	2.9E-09	
A	MAXIMUM CHI/Q NNW	1.50	2.8E-07	2.7E-07	2.7E-07	3.3E-09	
A	MAXIMUM CHI/Q N	1.50	8.4E-08	8.4E-08	8.3E-08	1.7E-09	
A	MAXIMUM CHI/Q NNE	1.50	3.6E-08	3.6E-08	3.5E-08	6.5E-10	
A	MAXIMUM CHI/Q NE	1.50	2.9E-08	2.9E-08	2.8E-08	3.8E-10	
A	MAXIMUM CHI/Q ENE	1.50	2.4E-08	2.4E-08	2.4E-08	3.4E-10	
A	MAXIMUM CHI/Q E	1.50	1.6E-08	1.6E-08	1.6E-08	2.4E-10	
A	MAXIMUM CHI/Q ESE	1.50	2.4E-08	2.4E-08	2.4E-08	4.3E-10	
A	MAXIMUM CHI/Q SE	1.50	6.0E-08	6.0E-08	6.0E-08	1.4E-09	
A	MAXIMUM CHI/Q SSE	1.50	8.5E-08	8.5E-08	8.4E-08	1.9E-09	

Atmospheric Diffusion Estimates

Elevated Releases

January-December 2014

ERP ELEVATED STACK RELEASES - JAN-DEC 2014
 NO DECAY, UNDEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.612E-09	1.525E-08	4.263E-08	6.535E-08	7.730E-08	6.911E-08	5.821E-08	4.873E-08	4.117E-08	4.769E-08	5.232E-08	1.774E-09	1.453E-08	3.978E-08	5.856E-08	6.693E-08	5.883E-08	4.903E-08	5.216E-08	5.241E-08	4.539E-08	3.992E-08
SSW	1.046E-09	1.011E-08	4.107E-08	8.250E-08	1.226E-07	8.230E-08	5.914E-08	4.486E-08	3.545E-08	2.892E-08	2.420E-08	3.037E-10	4.561E-09	4.215E-08	1.101E-07	1.819E-07	1.158E-07	8.065E-08	5.986E-08	4.656E-08	3.752E-08	3.107E-08
WSW	3.355E-10	4.504E-08	1.916E-07	2.443E-07	2.214E-07	1.372E-07	9.380E-08	6.867E-08	5.284E-08	4.220E-08	3.469E-08	9.230E-10	1.854E-08	1.401E-07	2.605E-07	3.227E-07	1.957E-07	1.320E-07	9.966E-08	7.858E-08	6.207E-08	5.058E-08
W	1.655E-09	1.910E-08	1.110E-07	2.670E-07	4.625E-07	2.751E-07	1.838E-07	1.357E-07	1.053E-07	8.326E-08	6.793E-08	4.731E-09	4.161E-08	1.094E-07	1.714E-07	2.322E-07	2.165E-07	1.921E-07	1.664E-07	1.456E-07	1.145E-07	9.294E-08
WNW	8.323E-09	4.507E-08	7.526E-08	8.498E-08	8.533E-08	7.575E-08	6.448E-08	5.371E-08	4.531E-08	3.878E-08	3.365E-08	N	1.017E-09	1.056E-08	2.528E-08	3.406E-08	3.787E-08	3.367E-08	2.848E-08	2.399E-08	2.040E-08	1.756E-08
NW	4.801E-10	4.065E-09	1.424E-08	2.355E-08	2.975E-08	2.749E-08	2.364E-08	2.009E-08	1.716E-08	1.482E-08	1.294E-08	NNE	8.542E-12	1.102E-09	9.990E-09	1.926E-08	2.524E-08	2.321E-08	1.981E-08	1.673E-08	1.423E-08	1.224E-08
NNW	2.969E-11	2.198E-09	9.113E-09	1.494E-08	1.822E-08	1.645E-08	1.395E-08	1.176E-08	1.001E-08	8.629E-09	7.540E-09	E	2.885E-10	6.084E-09	1.906E-08	2.703E-08	3.023E-08	2.678E-08	2.600E-08	1.902E-08	1.617E-08	1.392E-08
N	9.783E-10	9.850E-09	3.519E-08	5.408E-08	6.111E-08	5.292E-08	4.365E-08	3.601E-08	3.009E-08	2.553E-08	2.197E-08	ESE	3.395E-09	2.896E-08	6.729E-08	8.876E-08	9.356E-08	7.971E-08	6.531E-08	5.368E-08	4.473E-08	3.787E-08
NNE	1.017E-09	1.056E-08	2.528E-08	3.406E-08	3.787E-08	3.367E-08	2.848E-08	2.399E-08	2.040E-08	1.756E-08	1.531E-08	SE										
NE	4.801E-10	4.065E-09	1.424E-08	2.355E-08	2.975E-08	2.749E-08	2.364E-08	2.009E-08	1.716E-08	1.482E-08	1.294E-08	SSE										
ENE	8.542E-12	1.102E-09	9.990E-09	1.926E-08	2.524E-08	2.321E-08	1.981E-08	1.673E-08	1.423E-08	1.224E-08	1.067E-08											
E	2.969E-11	2.198E-09	9.113E-09	1.494E-08	1.822E-08	1.645E-08	1.395E-08	1.176E-08	1.001E-08	8.629E-09	7.540E-09											
ESE	2.885E-10	6.084E-09	1.906E-08	2.703E-08	3.023E-08	2.678E-08	2.600E-08	1.902E-08	1.617E-08	1.392E-08	1.214E-08											
SE	9.783E-10	9.850E-09	3.519E-08	5.408E-08	6.111E-08	5.292E-08	4.365E-08	3.601E-08	3.009E-08	2.553E-08	2.197E-08											
SSE	3.395E-09	2.896E-08	6.729E-08	8.876E-08	9.356E-08	7.971E-08	6.531E-08	5.368E-08	4.473E-08	3.787E-08	3.255E-08											

ANNUAL AVERAGE SECTOR	CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES FROM THE SITE											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.664E-08	3.086E-08	2.001E-08	1.143E-08	7.956E-09	5.983E-09	4.648E-09	3.758E-09	3.150E-09	2.694E-09	2.332E-09	SSW	3.658E-08	2.710E-08	1.754E-08	1.001E-08	7.065E-09	5.284E-09	4.107E-09	3.322E-09	2.769E-09	2.358E-09
SSW	3.658E-08	2.710E-08	1.754E-08	1.001E-08	7.065E-09	5.284E-09	4.107E-09	3.322E-09	2.769E-09	2.358E-09	2.043E-09	SW	2.224E-08	1.743E-08	1.152E-08	6.763E-09	4.913E-09	3.809E-09	3.097E-09	2.521E-09	2.111E-09	1.805E-09
SW	2.224E-08	1.743E-08	1.152E-08	6.763E-09	4.913E-09	3.809E-09	3.097E-09	2.521E-09	2.111E-09	1.805E-09	1.571E-09	WSW	2.743E-08	1.783E-08	1.262E-08	7.785E-09	5.234E-09	3.855E-09	3.008E-09	2.439E-09	2.036E-09	1.737E-09
WSW	2.743E-08	1.783E-08	1.262E-08	7.785E-09	5.234E-09	3.855E-09	3.008E-09	2.439E-09	2.036E-09	1.737E-09	1.507E-09	W	2.917E-08	1.570E-08	1.101E-08	7.012E-09	5.123E-09	3.784E-09	2.943E-09	2.382E-09	1.985E-09	1.691E-09
W	2.917E-08	1.570E-08	1.101E-08	7.012E-09	5.123E-09	3.784E-09	2.943E-09	2.382E-09	1.985E-09	1.691E-09	1.465E-09	WNW	4.262E-08	2.318E-08	1.546E-08	9.144E-09	6.192E-09	4.580E-09	3.591E-09	2.917E-09	2.432E-09	2.068E-09
WNW	4.262E-08	2.318E-08	1.546E-08	9.144E-09	6.192E-09	4.580E-09	3.591E-09	2.917E-09	2.432E-09	2.068E-09	1.789E-09	NW	5.741E-08	3.161E-08	2.138E-08	1.285E-08	8.646E-09	6.373E-09	5.051E-09	4.117E-09	3.437E-09	2.931E-09
NW	5.741E-08	3.161E-08	2.138E-08	1.285E-08	8.646E-09	6.373E-09	5.051E-09	4.117E-09	3.437E-09	2.931E-09	2.543E-09	NNW	7.880E-08	4.374E-08	2.826E-08	1.614E-08	1.089E-08	8.040E-09	6.332E-09	5.176E-09	4.381E-09	3.756E-09
NNW	7.880E-08	4.374E-08	2.826E-08	1.614E-08	1.089E-08	8.040E-09	6.332E-09	5.176E-09	4.381E-09	3.756E-09	3.260E-09	N	2.962E-08	1.839E-08	1.483E-08	1.163E-08	9.882E-09	8.281E-09	6.529E-09	5.323E-09	4.452E-09	3.804E-09
N	2.962E-08	1.839E-08	1.483E-08	1.163E-08	9.882E-09	8.281E-09	6.529E-09	5.323E-09	4.452E-09	3.804E-09	3.307E-09	NNE	1.653E-08	2.358E-08	1.532E-08	8.827E-09	5.996E-09	4.452E-09	3.496E-09	2.852E-09	2.393E-09	2.051E-09
NNE	1.653E-08	2.358E-08	1.532E-08	8.827E-09	5.996E-09	4.452E-09	3.496E-09	2.852E-09	2.393E-09	2.051E-09	1.787E-09	NE	1.394E-08	2.162E-08	1.412E-08	8.190E-09	5.586E-09	4.161E-09	3.322E-09	2.743E-09	2.332E-09	2.000E-09
NE	1.394E-08	2.162E-08	1.412E-08	8.190E-09	5.586E-09	4.161E-09	3.322E-09	2.743E-09	2.332E-09	2.000E-09	1.744E-09	ENE	1.119E-08	1.603E-08	1.062E-08	6.252E-09	4.297E-09	3.217E-09	2.665E-09	2.251E-09	1.889E-09	1.619E-09
ENE	1.119E-08	1.603E-08	1.062E-08	6.252E-09	4.297E-09	3.217E-09	2.665E-09	2.251E-09	1.889E-09	1.619E-09	1.411E-09	E	8.030E-09	1.163E-08	7.678E-09	4.496E-09	3.081E-09	2.300E-09	1.813E-09	1.484E-09	1.285E-09	1.126E-09
E	8.030E-09	1.163E-08	7.678E-09	4.496E-09	3.081E-09	2.300E-09	1.813E-09	1.484E-09	1.285E-09	1.126E-09	9.812E-10	ESE	1.251E-08	1.375E-08	9.035E-09	5.252E-09	3.578E-09	2.658E-09	2.086E-09	1.700E-09	1.425E-09	1.220E-09
ESE	1.251E-08	1.375E-08	9.035E-09	5.252E-09	3.578E-09	2.658E-09	2.086E-09	1.700E-09	1.425E-09	1.220E-09	1.061E-09	SE	1.916E-08	1.149E-08	8.687E-09	6.096E-09	4.425E-09	3.465E-09	2.846E-09	2.414E-09	2.021E-09	1.728E-09
SE	1.916E-08	1.149E-08	8.687E-09	6.096E-09	4.425E-09	3.465E-09	2.846E-09	2.414E-09	2.021E-09	1.728E-09	1.502E-09	SSE	3.344E-08	3.645E-08	2.340E-08	1.324E-08	8.886E-09	6.535E-09	5.091E-09	4.127E-09	3.443E-09	2.936E-09
SSE	3.344E-08	3.645E-08	2.340E-08	1.324E-08	8.886E-09	6.535E-09	5.091E-09	4.127E-09	3.443E-09	2.936E-09	2.547E-09											

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.664E-08	7.100E-08	5.733E-08	4.582E-08	4.885E-08	2.954E-08	1.179E-08	5.975E-09	3.781E-09	2.695E-09
SSW	4.252E-08	6.147E-08	5.289E-08	4.966E-08	4.030E-08	2.496E-08	1.037E-08	5.288E-09	3.336E-09	2.363E-09
SW	5.261E-08	9.578E-08	5.960E-08	3.565E-08	2.487E-08	1.587E-08	6.999E-09	3.819E-09	2.529E-09	1.809E-09
WSW	6.401E-08	1.366E-07	8.172E-08	4.692E-08	3.163E-08	1.765E-08	7.726E-09	3.884E-09	2.448E-09	1.740E-09
W	1.824E-07	1.891E-07	9.533E-08	5.331E-08	3.487E-08	1.661E-08	7.062E-09	3.805E-09	2.391E-09	1.694E-09
WNW	1.666E-07	2.524E-07	1.360E-07	7.831E-08	5.103E-08	2.407E-08	9.234E-09	4.614E-09	2.925E-09	2.072E-09
NW	1.599E-07	3.358E-07	1.889E-07	1.056E-07	6.858E-08	3.280E-08	1.288E-08	6.451E-09	4.125E-09	2.937E-09
NNW	1.219E-07	2.117E-07	1.883E-07	1.397E-07	9.408E-08	4.465E-08	1.650E-08	8.116E-09	5.203E-09	3.757E-09
N	7.287E-08	8.099E-08	6.318E-08	4.522E-08	3.368E-08	1.930E-08	1.156E-08	8.007E-09	5.336E-09	3.812E-09
NNE	2.591E-08	3.516E-08	2.807E-08	2.034E-08	1.643E-08	1.834E-08	9.013E-09	4.481E-09	2.861E-09	2.054E-09
NE	1.612E-08	2.737E-08	2.325E-08	1.710E-08	1.387E-08	1.658E-08	8.352E-09	4.205E-09	2.752E-09	2.004E-09
ENE	1.214E-08	2.301E-08	1.948E-08	1.419E-08	1.133E-08	1.255E-08	6.354E-09	3.284E-09	2.231E-09	1.622E-09
E	1.017E-08	1.670E-08	1.374E-08	9.985E-09	8.044E-09	9.074E-09	4.574E-09	2.314E-09	1.502E-09	1.120E-09
ESE	1.972E-08	2.798E-08	2.228E-08	1.612E-08	1.280E-08	1.138E-08	5.349E-09	2.675E-09	1.706E-09	1.222E-09
SE	3.796E-08	5.591E-08	4.307E-08	3.004E-08	2.199E-08	1.195E-08	5.929E-09	3.473E-09	2.388E-09	1.731E-09
SSE	6.831E-08	8.634E-08	6.450E-08	4.467E-08	3.446E-08	2.998E-08	1.356E-08	6.584E-09	4.142E-09	2.942E-09

ERP ELEVATED STACK RELEASES - JAN-DEC 2014
2.260 DAY DECAY, UNDEPLETED
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.611E-09	1.524E-08	4.257E-08	6.524E-08	7.708E-08	6.883E-08	5.791E-08	4.843E-08	4.087E-08	4.727E-08	5.176E-08
SSW	1.774E-09	1.452E-08	3.974E-08	5.847E-08	6.676E-08	5.861E-08	4.880E-08	5.184E-08	5.203E-08	4.500E-08	3.952E-08
SW	1.045E-09	1.011E-08	4.102E-08	8.234E-08	1.222E-07	8.191E-08	5.878E-08	4.452E-08	3.514E-08	2.863E-08	2.392E-08
WSW	3.037E-10	4.558E-09	4.208E-08	1.099E-07	1.812E-07	1.152E-07	8.006E-08	5.933E-08	4.608E-08	3.706E-08	3.064E-08
W	3.354E-10	4.499E-08	1.912E-07	2.437E-07	2.206E-07	1.366E-07	9.320E-08	6.814E-08	5.236E-08	4.176E-08	3.428E-08
WNW	9.227E-10	1.852E-08	1.399E-07	2.600E-07	3.217E-07	1.948E-07	1.313E-07	9.898E-08	7.795E-08	6.149E-08	5.004E-08
NW	1.654E-09	1.908E-08	1.108E-07	2.665E-07	4.612E-07	2.740E-07	1.829E-07	1.348E-07	1.045E-07	8.256E-08	6.728E-08
NNW	4.730E-09	4.159E-08	1.093E-07	1.712E-07	2.317E-07	2.158E-07	1.913E-07	1.656E-07	1.447E-07	1.136E-07	9.218E-08
N	8.322E-09	4.505E-08	7.521E-08	8.489E-08	8.516E-08	7.555E-08	6.426E-08	5.348E-08	4.509E-08	3.856E-08	3.343E-08
NNE	1.017E-09	1.056E-08	2.526E-08	3.401E-08	3.779E-08	3.357E-08	2.837E-08	2.388E-08	2.029E-08	1.745E-08	1.520E-08
NE	4.800E-10	4.063E-09	1.422E-08	2.351E-08	2.965E-08	2.737E-08	2.350E-08	1.994E-08	1.701E-08	1.467E-08	1.280E-08
ENE	8.539E-12	1.101E-09	9.977E-09	1.923E-08	2.516E-08	2.310E-08	1.969E-08	1.661E-08	1.411E-08	1.213E-08	1.056E-08
E	2.969E-11	2.196E-09	9.103E-09	1.491E-08	1.817E-08	1.639E-08	1.388E-08	1.169E-08	9.938E-09	8.558E-09	7.470E-09
ESE	2.885E-10	6.079E-09	1.904E-08	2.699E-08	3.016E-08	2.670E-08	2.251E-08	1.893E-08	1.607E-08	1.383E-08	1.205E-08
SE	9.781E-10	9.846E-09	3.516E-08	5.403E-08	6.101E-08	5.280E-08	4.352E-08	3.588E-08	2.996E-08	2.540E-08	2.185E-08
SSE	3.394E-09	2.894E-08	6.723E-08	8.866E-08	9.339E-08	7.951E-08	6.509E-08	5.345E-08	4.451E-08	3.766E-08	3.234E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.608E-08	3.025E-08	1.948E-08	1.098E-08	7.532E-09	5.583E-09	4.278E-09	3.411E-09	2.820E-09	2.378E-09	2.030E-09
SSW	3.616E-08	2.658E-08	1.708E-08	9.614E-09	6.688E-09	4.930E-09	3.779E-09	3.015E-09	2.479E-09	2.082E-09	1.780E-09
SW	2.195E-08	1.703E-08	1.117E-08	6.450E-09	4.602E-09	3.504E-09	2.796E-09	2.238E-09	1.843E-09	1.551E-09	1.328E-09
WSW	2.700E-08	1.739E-08	1.220E-08	7.388E-09	4.880E-09	3.533E-09	2.709E-09	2.160E-09	1.772E-09	1.487E-09	1.269E-09
W	2.879E-08	1.539E-08	1.071E-08	6.715E-09	4.826E-09	3.510E-09	2.690E-09	2.145E-09	1.762E-09	1.480E-09	1.264E-09
WNW	4.211E-08	2.275E-08	1.506E-08	8.783E-09	5.864E-09	4.276E-09	3.305E-09	2.647E-09	2.175E-09	1.825E-09	1.558E-09
NW	5.679E-08	3.109E-08	2.090E-08	1.241E-08	8.252E-09	6.012E-09	4.707E-09	3.791E-09	3.128E-09	2.638E-09	2.263E-09
NNW	7.808E-08	4.312E-08	2.773E-08	1.568E-08	1.048E-08	7.661E-09	5.974E-09	4.836E-09	4.052E-09	3.440E-09	2.958E-09
N	2.941E-08	1.818E-08	1.461E-08	1.134E-08	9.520E-09	7.874E-09	6.143E-09	4.957E-09	4.105E-09	3.474E-09	2.990E-09
NNE	1.639E-08	2.325E-08	1.503E-08	8.577E-09	5.770E-09	4.243E-09	3.300E-09	2.667E-09	2.217E-09	1.882E-09	1.625E-09
NE	1.376E-08	2.111E-08	1.368E-08	7.800E-09	5.234E-09	3.837E-09	3.014E-09	2.448E-09	2.047E-09	1.728E-09	1.484E-09
ENE	1.105E-08	1.571E-08	1.034E-08	6.001E-09	4.069E-09	3.005E-09	2.455E-09	2.043E-09	1.692E-09	1.432E-09	1.232E-09
E	7.946E-09	1.145E-08	7.517E-09	4.356E-09	2.954E-09	2.183E-09	1.704E-09	1.380E-09	1.184E-09	1.027E-09	8.856E-10
ESE	1.240E-08	1.355E-08	8.863E-09	5.103E-09	3.443E-09	2.533E-09	1.970E-09	1.590E-09	1.320E-09	1.120E-09	9.654E-10
SE	1.904E-08	1.138E-08	8.572E-09	5.966E-09	4.294E-09	3.333E-09	2.712E-09	2.278E-09	1.891E-09	1.602E-09	1.381E-09
SSE	3.320E-08	3.590E-08	2.292E-08	1.283E-08	8.518E-09	6.197E-09	4.777E-09	3.830E-09	3.161E-09	2.667E-09	2.290E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.657E-08	7.078E-08	5.703E-08	4.547E-08	4.833E-08	2.898E-08	1.134E-08	5.581E-09	3.433E-09	2.380E-09
SSW	4.246E-08	6.130E-08	5.263E-08	4.930E-08	3.990E-08	2.449E-08	9.973E-09	4.938E-09	3.029E-09	2.088E-09
SW	5.251E-08	9.543E-08	5.924E-08	3.534E-08	2.458E-08	1.552E-08	6.678E-09	3.514E-09	2.247E-09	1.555E-09
WSW	6.387E-08	1.360E-07	8.114E-08	4.643E-08	3.120E-08	1.722E-08	7.343E-09	3.563E-09	2.169E-09	1.491E-09
W	1.821E-07	1.884E-07	9.474E-08	5.283E-08	3.446E-08	1.629E-08	6.764E-09	3.533E-09	2.155E-09	1.484E-09
WNW	1.663E-07	2.516E-07	1.353E-07	7.769E-08	5.050E-08	2.364E-08	8.881E-09	4.311E-09	2.656E-09	1.830E-09
NW	1.596E-07	3.347E-07	1.880E-07	1.048E-07	6.792E-08	3.227E-08	1.245E-08	6.087E-09	3.800E-09	2.644E-09
NNW	1.218E-07	2.112E-07	1.875E-07	1.388E-07	9.332E-08	4.405E-08	1.604E-08	7.737E-09	4.862E-09	3.443E-09
N	7.281E-08	8.083E-08	6.296E-08	4.500E-08	3.346E-08	1.909E-08	1.126E-08	7.620E-09	4.971E-09	3.482E-09
NNE	2.588E-08	3.507E-08	2.796E-08	2.023E-08	1.631E-08	1.807E-08	8.764E-09	4.273E-09	2.676E-09	1.886E-09
NE	1.609E-08	2.727E-08	2.311E-08	1.696E-08	1.371E-08	1.617E-08	7.965E-09	3.880E-09	2.457E-09	1.732E-09
ENE	1.212E-08	2.293E-08	1.937E-08	1.407E-08	1.121E-08	1.229E-08	6.106E-09	3.069E-09	2.027E-09	1.435E-09
E	1.015E-08	1.665E-08	1.367E-08	9.913E-09	7.969E-09	8.923E-09	4.436E-09	2.197E-09	1.398E-09	1.021E-09
ESE	1.969E-08	2.792E-08	2.219E-08	1.603E-08	1.270E-08	1.121E-08	5.201E-09	2.550E-09	1.596E-09	1.122E-09
SE	3.792E-08	5.581E-08	4.294E-08	2.992E-08	2.186E-08	1.183E-08	5.802E-09	3.341E-09	2.255E-09	1.606E-09
SSE	6.825E-08	8.617E-08	6.428E-08	4.446E-08	3.423E-08	2.953E-08	1.316E-08	6.248E-09	3.846E-09	2.674E-09

B320

ERP ELEVATED STACK RELEASES - JAN-DEC 2014
 8.000 DAY DECAY, DEPLETED
 CORRECTED USING STANDARD OPEN TERRAIN FACTORS

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	.250	.500	.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.612E-09	1.512E-08	4.225E-08	6.497E-08	7.635E-08	6.771E-08	5.658E-08	4.703E-08	3.947E-08	4.565E-08	5.009E-08
SSW	1.774E-09	1.441E-08	3.941E-08	5.817E-08	6.608E-08	5.760E-08	4.762E-08	5.038E-08	5.042E-08	4.344E-08	3.804E-08
SW	1.046E-09	1.003E-08	4.072E-08	8.211E-08	1.209E-07	8.038E-08	5.731E-08	4.318E-08	3.394E-08	2.755E-08	2.295E-08
WSW	3.037E-10	4.525E-09	4.196E-08	1.098E-07	1.794E-07	1.131E-07	7.810E-08	5.758E-08	4.453E-08	3.570E-08	2.943E-08
W	3.355E-10	4.479E-08	1.901E-07	2.410E-07	2.165E-07	1.331E-07	9.033E-08	6.575E-08	5.033E-08	4.002E-08	3.276E-08
WNW	9.230E-10	1.843E-08	1.397E-07	2.583E-07	3.171E-07	1.905E-07	1.276E-07	9.582E-08	7.521E-08	5.906E-08	4.783E-08
NW	1.654E-09	1.893E-08	1.101E-07	2.652E-07	4.565E-07	2.692E-07	1.788E-07	1.313E-07	1.015E-07	7.989E-08	6.482E-08
NNW	4.730E-09	4.124E-08	1.081E-07	1.700E-07	2.293E-07	2.123E-07	1.876E-07	1.621E-07	1.416E-07	1.107E-07	8.938E-08
N	8.323E-09	4.467E-08	7.411E-08	8.388E-08	8.396E-08	7.413E-08	6.274E-08	5.198E-08	4.364E-08	3.718E-08	3.213E-08
NNE	1.017E-09	1.047E-08	2.498E-08	3.375E-08	3.736E-08	3.299E-08	2.772E-08	2.322E-08	1.964E-08	1.682E-08	1.461E-08
NE	4.800E-10	4.033E-09	1.413E-08	2.344E-08	2.941E-08	2.696E-08	2.301E-08	1.942E-08	1.649E-08	1.416E-08	1.230E-08
ENE	8.541E-12	1.096E-09	9.966E-09	1.923E-08	2.498E-08	2.277E-08	1.927E-08	1.615E-08	1.364E-08	1.167E-08	1.011E-08
E	2.969E-11	2.181E-09	9.047E-09	1.487E-08	1.801E-08	1.613E-08	1.357E-08	1.136E-08	9.606E-09	8.234E-09	7.158E-09
ESE	2.885E-10	6.034E-09	1.886E-08	2.681E-08	2.982E-08	2.624E-08	2.200E-08	1.841E-08	1.556E-08	1.333E-08	1.158E-08
SE	9.782E-10	9.776E-09	3.495E-08	5.384E-08	6.041E-08	5.188E-08	4.244E-08	3.476E-08	2.885E-08	2.432E-08	2.081E-08
SSE	3.395E-09	2.871E-08	6.652E-08	8.801E-08	9.227E-08	7.800E-08	6.340E-08	5.172E-08	4.281E-08	3.601E-08	3.078E-08

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.451E-08	2.889E-08	1.812E-08	9.696E-09	6.281E-09	4.439E-09	3.268E-09	2.517E-09	2.025E-09	1.676E-09	1.408E-09
SSW	3.477E-08	2.537E-08	1.588E-08	8.480E-09	5.580E-09	3.994E-09	2.989E-09	2.336E-09	1.885E-09	1.558E-09	1.313E-09
SW	2.107E-08	1.635E-08	1.046E-08	5.730E-09	3.853E-09	2.794E-09	2.175E-09	1.706E-09	1.380E-09	1.144E-09	9.654E-10
WSW	2.591E-08	1.650E-08	1.133E-08	6.610E-09	4.238E-09	2.996E-09	2.253E-09	1.766E-09	1.429E-09	1.184E-09	9.992E-10
W	2.745E-08	1.454E-08	1.005E-08	6.046E-09	4.160E-09	2.950E-09	2.212E-09	1.732E-09	1.400E-09	1.159E-09	9.778E-10
WNW	4.006E-08	2.109E-08	1.360E-08	7.521E-09	4.721E-09	3.290E-09	2.469E-09	1.933E-09	1.557E-09	1.282E-09	1.077E-09
NW	5.447E-08	2.906E-08	1.901E-08	1.069E-08	6.750E-09	4.714E-09	3.582E-09	2.819E-09	2.278E-09	1.885E-09	1.590E-09
NNW	7.535E-08	4.052E-08	2.529E-08	1.346E-08	8.388E-09	5.790E-09	4.302E-09	3.356E-09	2.739E-09	2.274E-09	1.915E-09
N	2.818E-08	1.725E-08	1.385E-08	1.085E-08	9.031E-09	7.222E-09	5.517E-09	4.372E-09	3.562E-09	2.970E-09	2.524E-09
NNE	1.578E-08	2.258E-08	1.418E-08	7.680E-09	4.922E-09	3.479E-09	2.616E-09	2.053E-09	1.662E-09	1.378E-09	1.164E-09
NE	1.325E-08	2.065E-08	1.302E-08	7.070E-09	4.514E-09	3.178E-09	2.420E-09	1.925E-09	1.582E-09	1.316E-09	1.115E-09
ENE	1.059E-08	1.530E-08	9.803E-09	5.384E-09	3.421E-09	2.395E-09	1.869E-09	1.503E-09	1.215E-09	1.006E-09	8.486E-10
E	7.624E-09	1.114E-08	7.110E-09	3.887E-09	2.462E-09	1.719E-09	1.278E-09	9.918E-10	8.179E-10	6.864E-10	5.764E-10
ESE	1.193E-08	1.313E-08	8.354E-09	4.543E-09	2.870E-09	2.000E-09	1.484E-09	1.150E-09	9.194E-10	7.536E-10	6.297E-10
SE	1.806E-08	1.061E-08	7.936E-09	5.511E-09	3.962E-09	3.081E-09	2.519E-09	2.121E-09	1.736E-09	1.454E-09	1.239E-09
SSE	3.156E-08	3.432E-08	2.127E-08	1.131E-08	7.150E-09	4.998E-09	3.724E-09	2.898E-09	2.330E-09	1.919E-09	1.612E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES FROM THE SITE									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.632E-08	6.998E-08	5.573E-08	4.398E-08	4.671E-08	2.758E-08	1.005E-08	4.462E-09	2.544E-09	1.680E-09
SSW	4.219E-08	6.056E-08	5.138E-08	4.775E-08	3.843E-08	2.324E-08	8.835E-09	4.015E-09	2.351E-09	1.564E-09
SW	5.229E-08	9.427E-08	5.781E-08	3.414E-08	2.362E-08	1.478E-08	5.946E-09	2.829E-09	1.716E-09	1.148E-09
WSW	6.379E-08	1.345E-07	7.922E-08	4.489E-08	2.998E-08	1.629E-08	6.604E-09	3.030E-09	1.777E-09	1.188E-09
W	1.805E-07	1.849E-07	9.190E-08	5.081E-08	3.294E-08	1.541E-08	6.097E-09	2.977E-09	1.743E-09	1.163E-09
WNW	1.655E-07	2.478E-07	1.317E-07	7.495E-08	4.828E-08	2.198E-08	7.628E-09	3.343E-09	1.943E-09	1.287E-09
NW	1.588E-07	3.307E-07	1.839E-07	1.018E-07	6.545E-08	3.024E-08	1.079E-08	4.804E-09	2.831E-09	1.892E-09
NNW	1.208E-07	2.086E-07	1.840E-07	1.357E-07	9.050E-08	4.149E-08	1.383E-08	5.888E-09	3.391E-09	2.279E-09
N	7.191E-08	7.958E-08	6.148E-08	4.356E-08	3.216E-08	1.817E-08	1.071E-08	7.022E-09	4.390E-09	2.980E-09
NNE	2.566E-08	3.462E-08	2.733E-08	1.959E-08	1.570E-08	1.733E-08	7.897E-09	3.518E-09	2.065E-09	1.383E-09
NE	1.603E-08	2.700E-08	2.263E-08	1.644E-08	1.320E-08	1.561E-08	7.256E-09	3.231E-09	1.936E-09	1.320E-09
ENE	1.211E-08	2.272E-08	1.895E-08	1.360E-08	1.075E-08	1.181E-08	5.494E-09	2.458E-09	1.498E-09	1.010E-09
E	1.011E-08	1.647E-08	1.337E-08	9.584E-09	7.649E-09	8.568E-09	3.970E-09	1.741E-09	1.007E-09	6.846E-10
ESE	1.954E-08	2.756E-08	2.169E-08	1.553E-08	1.223E-08	1.074E-08	4.646E-09	2.026E-09	1.157E-09	7.568E-10
SE	3.775E-08	5.516E-08	4.189E-08	2.881E-08	2.083E-08	1.108E-08	5.361E-09	3.091E-09	2.088E-09	1.458E-09
SSE	6.767E-08	8.498E-08	6.262E-08	4.277E-08	3.262E-08	2.791E-08	1.167E-08	5.062E-09	2.918E-09	1.927E-09

B321

ERP ELEVATED STACK RELEASES - JAN-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	DISTANCES IN MILES										
	.25	.50	.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	1.349E-09	1.664E-09	2.253E-09	2.038E-09	1.192E-09	7.832E-10	5.479E-10	4.006E-10	3.026E-10	2.370E-10	2.255E-10
SSW	1.662E-09	1.848E-09	2.305E-09	2.013E-09	1.156E-09	7.544E-10	5.262E-10	3.841E-10	3.620E-10	2.737E-10	2.142E-10
SW	1.015E-09	1.011E-09	1.134E-09	9.409E-10	9.482E-10	5.158E-10	3.197E-10	2.172E-10	1.570E-10	1.188E-10	9.298E-11
WSW	4.399E-10	6.084E-10	8.879E-10	1.442E-09	9.443E-10	5.126E-10	3.169E-10	2.148E-10	1.551E-10	1.172E-10	9.168E-11
W	5.047E-10	3.317E-09	3.047E-09	2.040E-09	9.651E-10	5.206E-10	3.208E-10	2.171E-10	1.567E-10	1.185E-10	9.292E-11
WNW	7.269E-10	9.760E-10	3.555E-09	3.068E-09	1.812E-09	9.275E-10	5.565E-10	3.731E-10	2.839E-10	2.180E-10	1.767E-10
NW	1.708E-09	1.785E-09	2.102E-09	4.027E-09	2.587E-09	1.290E-09	7.648E-10	5.103E-10	3.720E-10	2.907E-10	2.404E-10
NNW	4.907E-09	4.393E-09	4.327E-09	3.329E-09	3.135E-09	1.695E-09	1.053E-09	8.491E-10	6.150E-10	4.760E-10	3.893E-10
N	6.515E-09	5.577E-09	5.150E-09	3.792E-09	1.949E-09	1.222E-09	8.357E-10	6.038E-10	4.536E-10	3.509E-10	2.778E-10
NNE	1.611E-09	1.543E-09	1.655E-09	1.340E-09	7.351E-10	4.724E-10	3.270E-10	2.378E-10	1.792E-10	1.388E-10	1.099E-10
NE	5.010E-10	6.363E-10	8.794E-10	8.018E-10	4.711E-10	3.099E-10	2.170E-10	1.587E-10	1.199E-10	9.298E-11	7.363E-11
ENE	1.110E-10	3.274E-10	6.292E-10	6.362E-10	3.931E-10	2.627E-10	1.853E-10	1.360E-10	1.030E-10	7.992E-11	6.329E-11
E	2.893E-10	3.817E-10	5.410E-10	4.981E-10	2.942E-10	1.938E-10	1.358E-10	9.934E-11	7.509E-11	5.823E-11	4.611E-11
ESE	7.708E-10	9.009E-10	1.171E-09	1.042E-09	6.040E-10	3.956E-10	2.763E-10	2.019E-10	1.525E-10	1.182E-10	9.362E-11
SE	1.386E-09	1.882E-09	2.717E-09	2.518E-09	1.492E-09	9.844E-10	6.901E-10	5.050E-10	3.817E-10	2.961E-10	2.345E-10
SSE	3.555E-09	3.727E-09	4.403E-09	3.750E-09	2.122E-09	1.378E-09	9.592E-10	6.993E-10	5.277E-10	4.089E-10	3.238E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	1.813E-10	1.141E-10	7.542E-11	4.239E-11	2.659E-11	2.077E-11	1.478E-11	1.101E-11	8.697E-12	6.898E-12	5.632E-12
SSW	1.730E-10	1.066E-10	7.001E-11	3.916E-11	2.726E-11	1.911E-11	1.369E-11	1.028E-11	8.050E-12	6.430E-12	5.249E-12
SW	7.541E-11	5.495E-11	3.783E-11	2.208E-11	1.400E-11	9.788E-12	7.125E-12	5.350E-12	4.160E-12	3.323E-12	2.712E-12
WSW	7.380E-11	5.269E-11	3.608E-11	2.275E-11	1.377E-11	9.231E-12	6.802E-12	5.108E-12	3.971E-12	3.172E-12	2.589E-12
W	7.498E-11	3.423E-11	4.218E-11	2.619E-11	1.643E-11	1.119E-11	8.015E-12	6.018E-12	4.680E-12	3.738E-12	3.051E-12
WNW	1.508E-10	8.711E-11	6.084E-11	3.590E-11	2.268E-11	1.513E-11	1.121E-11	8.419E-12	6.606E-12	5.277E-12	4.307E-12
NW	2.088E-10	1.285E-10	9.260E-11	5.642E-11	3.448E-11	2.309E-11	1.666E-11	1.251E-11	9.770E-12	7.804E-12	6.370E-12
NNW	3.341E-10	1.978E-10	1.399E-10	8.364E-11	5.338E-11	3.566E-11	2.565E-11	1.897E-11	1.484E-11	1.185E-11	9.674E-12
N	2.242E-10	1.067E-10	6.541E-11	3.485E-11	7.029E-11	4.450E-11	3.186E-11	2.393E-11	1.860E-11	1.486E-11	1.213E-11
NNE	8.861E-11	1.303E-10	8.051E-11	4.170E-11	2.544E-11	1.703E-11	1.218E-11	9.116E-12	7.071E-12	5.639E-12	4.596E-12
NE	5.933E-11	9.101E-11	5.644E-11	2.937E-11	1.794E-11	1.201E-11	8.789E-12	6.491E-12	5.047E-12	4.086E-12	3.335E-12
ENE	5.098E-11	5.475E-11	3.922E-11	2.360E-11	1.501E-11	9.950E-12	7.003E-12	5.081E-12	3.950E-12	3.156E-12	2.578E-12
E	3.716E-11	4.546E-11	3.341E-11	2.052E-11	1.312E-11	8.700E-12	6.112E-12	4.483E-12	3.419E-12	2.699E-12	2.197E-12
ESE	7.545E-11	7.864E-11	5.614E-11	3.373E-11	2.147E-11	1.427E-11	1.007E-11	7.417E-12	5.679E-12	4.483E-12	3.623E-12
SE	1.889E-10	8.955E-11	5.465E-11	2.881E-11	1.758E-11	1.208E-11	8.980E-12	1.415E-11	1.093E-11	8.695E-12	7.089E-12
SSE	2.610E-10	2.625E-10	1.613E-10	8.298E-11	5.049E-11	3.381E-11	2.417E-11	1.811E-11	1.405E-11	1.121E-11	9.133E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.027E-09	1.198E-09	5.517E-10	3.056E-10	2.125E-10	1.118E-10	4.271E-11	1.993E-11	1.120E-11	6.962E-12
SSW	2.074E-09	1.168E-09	5.302E-10	3.347E-10	2.166E-10	1.051E-10	4.072E-11	1.911E-11	1.041E-11	6.472E-12
SW	1.021E-09	7.544E-10	3.310E-10	1.596E-10	9.411E-11	5.189E-11	2.199E-11	9.847E-12	5.404E-12	3.345E-12
WSW	1.072E-09	8.630E-10	3.282E-10	1.577E-10	9.261E-11	5.000E-11	2.172E-11	9.468E-12	5.159E-12	3.193E-12
W	2.660E-09	1.006E-09	3.326E-10	1.594E-10	9.386E-11	4.682E-11	2.541E-11	1.131E-11	6.079E-12	3.763E-12
WNW	2.765E-09	1.698E-09	5.821E-10	2.843E-10	1.793E-10	8.958E-11	3.556E-11	1.557E-11	8.526E-12	5.312E-12
NW	2.887E-09	2.331E-09	8.031E-10	3.805E-10	2.436E-10	1.304E-10	5.471E-11	2.356E-11	1.265E-11	7.855E-12
NNW	3.898E-09	2.538E-09	1.143E-09	6.289E-10	3.945E-10	2.024E-10	8.270E-11	3.638E-11	1.930E-11	1.193E-11
N	4.642E-09	2.036E-09	8.460E-10	4.574E-10	2.796E-10	1.145E-10	5.739E-11	4.632E-11	2.417E-11	1.496E-11
NNE	1.490E-09	7.528E-10	3.301E-10	1.805E-10	1.106E-10	9.890E-11	4.310E-11	1.733E-11	9.211E-12	5.677E-12
NE	7.909E-10	4.730E-10	2.184E-10	1.207E-10	7.407E-11	6.860E-11	3.030E-11	1.230E-11	6.597E-12	4.092E-12
ENE	5.652E-10	3.892E-10	1.862E-10	1.036E-10	6.366E-11	4.701E-11	2.325E-11	1.012E-11	5.199E-12	3.177E-12
E	4.865E-10	2.949E-10	1.367E-10	7.560E-11	4.639E-11	3.826E-11	2.010E-11	8.844E-12	4.544E-12	2.726E-12
ESE	1.053E-09	6.086E-10	2.783E-10	1.535E-10	9.418E-11	6.793E-11	3.326E-11	1.451E-11	7.512E-12	4.519E-12
SE	2.443E-09	1.495E-09	6.945E-10	3.843E-10	2.358E-10	9.612E-11	2.956E-11	1.231E-11	1.144E-11	8.761E-12
SSE	3.963E-09	2.153E-09	9.670E-10	5.315E-10	3.258E-10	2.172E-10	8.596E-11	3.440E-11	1.830E-11	1.128E-11

B322

ERP ELEVATED STACK RELEASES - JAN-DEC 2014
CORRECTED USING STANDARD OPEN TERRAIN FACTORS
SPECIFIC POINTS OF INTEREST

RELEASE TYPE	DIRECTION	DIST.	X/Q	X/Q		X/Q	D/Q
				(SEC/M3)	(SEC/M3)		
ID	LOCATION	FROM SITE (MI)	NO	2.26 DAY	8.0 DAY	(PER SQ.METER)	
			DECAY	DECAY	DECAY		
			UNDEPLETED	UNDEPLETED	DEPLETED		
A	Site Boundary	S	.80	4.8E-08	4.8E-08	4.8E-08	2.3E-09
A	Site Boundary	SSW	.82	4.6E-08	4.6E-08	4.6E-08	2.3E-09
A	Site Boundary	SW	.97	7.9E-08	7.9E-08	7.8E-08	9.7E-10
A	Site Boundary	WSW	.93	9.0E-08	9.0E-08	9.0E-08	1.2E-09
A	Site Boundary	W	.91	2.3E-07	2.3E-07	2.3E-07	2.3E-09
A	Site Boundary	WNW	.94	2.4E-07	2.4E-07	2.3E-07	3.4E-09
A	Site Boundary	NW	.81	1.5E-07	1.5E-07	1.5E-07	2.1E-09
A	Site Boundary	NNW	.69	8.7E-08	8.7E-08	8.6E-08	4.3E-09
A	Site Boundary	N	.67	6.5E-08	6.5E-08	6.4E-08	5.2E-09
A	Site Boundary	NNE	.60	1.5E-08	1.5E-08	1.5E-08	1.6E-09
A	Site Boundary	NE	.62	7.8E-09	7.8E-09	7.8E-09	7.5E-10
A	Site Boundary	ENE	.59	2.9E-09	2.9E-09	2.9E-09	4.3E-10
A	Site Boundary	E	.53	2.6E-09	2.6E-09	2.6E-09	4.0E-10
A	Site Boundary	ESE	.54	7.5E-09	7.5E-09	7.4E-09	9.3E-10
A	Site Boundary	SE	.65	2.2E-08	2.2E-08	2.2E-08	2.4E-09
A	Site Boundary	SSE	.81	7.4E-08	7.4E-08	7.3E-08	4.3E-09
A	Nearest Res	SSW	3.00	5.2E-08	5.2E-08	5.0E-08	3.8E-10
A	Nearest Res	SW	1.30	1.1E-07	1.1E-07	1.1E-07	1.3E-09
A	Nearest Res	WSW	1.90	1.3E-07	1.3E-07	1.2E-07	5.7E-10
A	Nearest Res	W	1.00	2.4E-07	2.4E-07	2.4E-07	2.0E-09
A	Nearest Res	WNW	1.70	2.6E-07	2.6E-07	2.5E-07	1.4E-09
A	Nearest Res	NW	.90	2.0E-07	2.0E-07	2.0E-07	4.1E-09
A	Nearest Res	NNW	1.90	2.2E-07	2.2E-07	2.2E-07	1.9E-09
A	Nearest Res	N	2.50	6.4E-08	6.4E-08	6.3E-08	8.4E-10
A	Nearest Res	NNE	1.70	3.7E-08	3.6E-08	3.6E-08	6.0E-10
A	Nearest Res	ENE	1.70	2.5E-08	2.5E-08	2.4E-08	3.3E-10
A	Nearest Res	E	2.20	1.5E-08	1.5E-08	1.5E-08	1.7E-10
A	Nearest Res	ESE	2.80	2.0E-08	2.0E-08	2.0E-08	2.3E-10
A	Nearest Res	SE	3.00	3.6E-08	3.6E-08	3.5E-08	5.0E-10
A	Nearest Res	SSE	3.00	5.4E-08	5.3E-08	5.2E-08	7.0E-10
A	Nearest Cow	NNW	3.50	1.5E-07	1.4E-07	1.4E-07	6.2E-10
A	Nearest Garde	SSW	3.00	5.2E-08	5.2E-08	5.0E-08	3.8E-10
A	Nearest Garde	SW	1.30	1.1E-07	1.1E-07	1.1E-07	1.3E-09
A	Nearest Garde	WSW	1.90	1.3E-07	1.3E-07	1.2E-07	5.7E-10
A	Nearest Garde	W	2.80	7.7E-08	7.7E-08	7.4E-08	2.5E-10
A	Nearest Garde	WNW	1.70	2.6E-07	2.6E-07	2.5E-07	1.4E-09
A	Nearest Garde	NW	1.90	3.0E-07	3.0E-07	3.0E-07	1.5E-09
A	Nearest Garde	NNW	1.90	2.2E-07	2.2E-07	2.2E-07	1.9E-09
A	Nearest Garde	ENE	1.70	2.5E-08	2.5E-08	2.4E-08	3.3E-10
A	Nearest Garde	ESE	2.30	2.4E-08	2.4E-08	2.4E-08	3.2E-10
A	Nearest Garde	SSE	3.00	5.4E-08	5.3E-08	5.2E-08	7.0E-10
A	MAXIMUM CHI/Q	S	1.50	7.7E-08	7.7E-08	7.6E-08	1.2E-09
A	MAXIMUM CHI/Q	SSW	1.50	6.7E-08	6.7E-08	6.6E-08	1.2E-09
A	MAXIMUM CHI/Q	SW	1.50	1.2E-07	1.2E-07	1.2E-07	9.5E-10
A	MAXIMUM CHI/Q	WSW	1.50	1.8E-07	1.8E-07	1.8E-07	9.4E-10
A	MAXIMUM CHI/Q	W	1.00	2.4E-07	2.4E-07	2.4E-07	2.0E-09
A	MAXIMUM CHI/Q	WNW	1.50	3.2E-07	3.2E-07	3.2E-07	1.8E-09
A	MAXIMUM CHI/Q	NW	1.50	4.6E-07	4.6E-07	4.6E-07	2.6E-09
A	MAXIMUM CHI/Q	NNW	1.50	2.3E-07	2.3E-07	2.3E-07	3.1E-09
A	MAXIMUM CHI/Q	N	1.50	8.5E-08	8.5E-08	8.4E-08	1.9E-09
A	MAXIMUM CHI/Q	NNE	1.50	3.8E-08	3.8E-08	3.7E-08	7.4E-10
A	MAXIMUM CHI/Q	NE	1.50	3.0E-08	3.0E-08	2.9E-08	4.7E-10
A	MAXIMUM CHI/Q	ENE	1.50	2.5E-08	2.5E-08	2.5E-08	3.9E-10
A	MAXIMUM CHI/Q	E	1.50	1.8E-08	1.8E-08	1.8E-08	2.9E-10
A	MAXIMUM CHI/Q	ESE	1.50	3.0E-08	3.0E-08	3.0E-08	6.0E-10
A	MAXIMUM CHI/Q	SE	1.50	6.1E-08	6.1E-08	6.0E-08	1.5E-09
A	MAXIMUM CHI/Q	SSE	1.50	9.4E-08	9.3E-08	9.2E-08	2.1E-09

B323

ATMOSPHERIC DIFFUSION MODEL

Onsite meteorological data from January 1 through December 31, 2014 were used to determine long-term (routine) diffusion estimates for evaluating normal atmospheric releases from Cooper Nuclear Station. Atmospheric dispersion parameters (X/Q values) were determined for the site boundary distances from each release point, the standard population distances, and special locations for nearest residence, cow, and garden using the methodology presented in U.S. NRC Regulatory Guide 1.111 (Rev.1) and the computer code XOQDOQ (NUREG/CR2919). Two release modes were analyzed. Releases from the 99-meter free-standing stack were considered 100 percent elevated, while releases from the reactor building, turbine-generator building, radwaste building and augmented radwaste building vents were considered as a 100 percent ground level release (one combined source term was assumed to apply for these vents).

Winds were obtained from measurements at the 10-meter level (for ground-level releases) and the 100-meter level (for elevated releases), and the stability class was based on the vertical temperature gradient between 60 meters and 10 meters (for ground releases) and 100 meters and 10 meters (for elevated releases). In accordance with Regulatory Guide 1.111, calm periods were distributed directionally in proportion to the directional distribution within a stability class of the lowest wind speed group. For the calculations, calm periods were assigned a speed of one-half the threshold wind speed of the wind vane or anemometer, whichever is higher.

The Gaussian straight-line trajectory model, which assumes that the air flow transports and diffuses effluents along a straight line through the entire region of interest in the airflow direction at the release point, was modified to account for various modes of effluent releases. In the case of an elevated release, plume rise due to momentum effects was incorporated into the calculation. For ground-level releases, building wake effects were considered.

The mathematical equation used in the Gaussian straight-line trajectory model is:

$$(X/Q)_i = 2.032 \sum_{jk} \frac{f_{ijk}}{xu_{jk} \Sigma_{zk}} \exp \left[\frac{-1/2 h_e^2}{\sigma_{zk}^2} \right] \quad (\text{Eq. 1})$$

and

$$\Sigma_{zk} = (\sigma_{zk}^2 + 0.5 D_z^2 / \pi)^{1/2} \leq \sqrt{3} \sigma_{zk} \quad (\text{Eq. 2})$$

where

I	=	index identifying direction sector;
j	=	index identifying wind speed class;
k	=	index identifying atmospheric stability class;
$\frac{X}{Q}$	=	average effluent concentration normalized by source strength at the specific downwind distance;
f	=	joint frequency distribution of wind direction, wind speed class, and atmospheric stability class;
x	=	distance from the release point to a receptor;
u	=	wind speed;
Σ_z	=	vertical plume spread with volumetric building wake correction for a release within the building wake cavity;
σ_z	=	vertical plume spread without volumetric building wake correction;
D_z	=	maximum adjacent building height either upwind or downwind of the release point (44.5 meters for ground-level releases); and
h_e	=	effective plume height;

The term Σ_{zk} given in Equations 1 and 2 is used for ground-level release ($h = 0$) within the building wake cavity. For an elevated release, no volumetric building wake correction needs to be considered, i.e., $\Sigma_{zk} = \sigma_{zk}$. For all building wake determinations, the reactor building was considered to be the dominating structure in the modification of air flows within the building complex.

Since the model does not directly consider the effects of spatial and temporal variation in airflow due to terrain, appropriate adjustments were made to the calculated X/Q values, using the default values of Regulatory Guide 1.111, Rev. 0.

APPENDIX C

DOSE CALCULATIONS

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GASEOUS EFFLUENT DOSE CALCULATIONS (EXCEPT CARBON-14)	C8
CARBON-14 GASEOUS EFFLUENT DOSE CALCULATIONS	C52
DOSE CALCULATION MODELS	C66

LIQUID EFFLUENT DOSE CALCULATIONS

Doses to the maximum individual and 0 to 50 - mile population resulting from the release of radioactive material in liquid effluents from Cooper Nuclear Station were calculated using the latest version of the LADTAP II computer program included as part of NRC Dose 2.3.20 (ORNL 2015). The LADTAP II program implements the radiological dose models of Regulatory Guide 1.109 for determining the radiation exposure to man from three principal exposure pathways in the aquatic environment -- potable water, aquatic foods, and recreational water use. Doses to both the maximum individual and 0 to 50 mile population are calculated as a function of age group and pathway for significant body organs, and are presented in Tables 1 - 6.

Assumptions and data sources used for input to the LADTAP II code are described in a separate section of this appendix (see page C66).

No Liquid Releases 2014

TABLE 1. Doses to Maximum Individual at the Site Boundary, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January-June 2014 Cooper Nuclear Station

Period and Pathway	Dose to Individual, mrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>								
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>2nd Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 1st & 2nd Quarters	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

Calculated doses are based on the following periods of exposures: Fishing: April - November; Drinking water and shoreline: January - December

TABLE 2. Doses to Maximum Individual at the Site Boundary, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, July-December 2014, Cooper Nuclear Station

Period and Pathway	Dose to Individual, mrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>3rd Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>4th Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 3rd & 4th Quarters	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

Calculated doses are based on the following periods of exposures: Fishing: April - November; Drinking water and shoreline: January - December

TABLE 3. Summary of Doses to Maximum Individual at the Site Boundary, Resulting from Exposure to Radioactivity Discharged in Liquid Effluents, January-December 2014, Cooper Nuclear Station

Period and Pathway	Dose to Individual, mrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>2nd Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+001	0.00 E+00	0.00 E+00
<u>3rd Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>4th Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 2014	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

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TABLE 4. Doses to Population Within a 50-Mile Radius, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January-June 2014, Cooper Nuclear Station

Period and Pathway	Dose to Population, manrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>								
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>2nd Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Swimming	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Boating	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 1st & 2nd Quarters	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

Calculated doses are based on the following periods of exposures: Fishing and Boating: April - November; Drinking water and shoreline: January - December; Swimming: June - September. Exposure from drinking water is calculated for the city of St. Joseph, Missouri, nearest public water intake from the Missouri River, 84 miles downstream.

TABLE 5. Doses to Population Within a 50-Mile Radius, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, July-December 2014, Cooper Nuclear Station

Period and Pathway	Dose to Population, manrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>3rd Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Swimming	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Boating	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>4th Quarter</u>								
Eating Fish		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Drinking Water		0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Shoreline	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Boating	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 3rd & 4th Quarters	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

Calculated doses are based on the following periods of exposures: Fishing and Boating: April - November; Drinking water and shoreline: January - December; Swimming: June - September. Exposure from drinking water is calculated for the city of St. Joseph, Missouri, nearest public water intake from the Missouri River, 84 miles downstream.

TABLE 6. Summary of Doses to Population Within a 50-Mile Radius, Resulting from Exposure to Radioactivity Discharged in Liquid Effluents, January-December 2014 Cooper Nuclear Station

Period and Pathway	Dose to Population, manrem							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>2nd Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>3rd Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
<u>4th Quarter</u>	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Totals for 2014	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00

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GASEOUS EFFLUENT DOSE CALCULATIONS (EXCEPT CARBON-14)

Doses to the maximum individual and 0 to 50 mile population resulting from the release of radioactive material in gaseous effluents from the Cooper Nuclear Station were calculated using the latest version of the GASPARG computer code included as part of NRC Dose 2.3.20 (ORNL 2015). Four sites were selected for individual dose calculations: the site boundary, the nearest residence, the nearest garden and the nearest cow. GASPARG implements the radiological dose models of Regulatory Guide 1.109 for determining the radiation exposure to man from four principal atmospheric exposure pathways: plume, ground, inhalation, and ingestion. Doses to the maximum individual and the population are calculated as a function of age group and pathway for significant body organs.

Tables 1 through 7 present maximum individual doses. Population doses are given in Tables 8 through 14.

Assumptions and data used for input to the GASPARG code are described in a separate section of this appendix (see page C66).

TABLE 1. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 2.31E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 3.72E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.50E-05	2.50E-05	2.50E-05	2.50E-05	2.50E-05	2.50E-05	2.52E-05	4.93E-05
GROUND	6.92E-04	6.92E-04	6.92E-04	6.92E-04	6.92E-04	6.92E-04	6.92E-04	8.14E-04
VEGET								
ADULT	1.39E-05	9.32E-05	2.74E-05	9.52E-06	5.14E-06	8.29E-04	2.33E-07	0.00E+00
TEEN	2.06E-05	9.99E-05	4.53E-05	1.47E-05	7.84E-06	1.12E-03	4.36E-07	0.00E+00
CHILD	4.00E-05	6.61E-05	1.10E-04	2.37E-05	1.26E-05	2.14E-03	6.64E-07	0.00E+00
MEAT								
ADULT	2.94E-06	2.38E-05	4.05E-07	1.50E-06	1.75E-07	2.22E-05	1.90E-08	0.00E+00
TEEN	2.29E-06	1.28E-05	3.39E-07	1.17E-06	1.42E-07	1.61E-05	1.80E-08	0.00E+00
CHILD	3.51E-06	6.47E-06	6.36E-07	1.42E-06	1.80E-07	2.43E-05	2.11E-08	0.00E+00
COW MILK								
ADULT	2.67E-06	5.96E-06	3.52E-06	3.65E-06	3.82E-06	6.24E-04	1.61E-07	0.00E+00
TEEN	3.81E-06	7.13E-06	6.42E-06	6.44E-06	6.81E-06	9.88E-04	3.33E-07	0.00E+00
CHILD	6.31E-06	4.86E-06	1.56E-05	1.11E-05	1.13E-05	1.96E-03	5.11E-07	0.00E+00
INFANT	1.08E-05	4.36E-06	2.95E-05	2.47E-05	1.95E-05	4.76E-03	9.25E-07	0.00E+00
GOATMILK								
ADULT	4.26E-06	1.75E-06	7.12E-06	6.65E-06	5.45E-06	7.49E-04	4.83E-07	0.00E+00
TEEN	5.07E-06	2.26E-06	1.30E-05	1.17E-05	9.71E-06	1.19E-03	9.98E-07	0.00E+00
CHILD	6.55E-06	1.71E-06	3.16E-05	2.04E-05	1.61E-05	2.35E-03	1.53E-06	0.00E+00
INFANT	1.05E-05	1.65E-06	5.72E-05	4.34E-05	2.75E-05	5.71E-03	2.78E-06	0.00E+00
INHAL								
ADULT	2.22E-07	1.98E-06	2.83E-07	3.57E-07	4.55E-07	6.17E-05	3.54E-05	0.00E+00
TEEN	2.83E-07	2.64E-06	3.99E-07	4.87E-07	6.28E-07	7.81E-05	5.20E-05	0.00E+00
CHILD	3.08E-07	8.82E-06	5.46E-07	4.68E-07	5.90E-07	9.19E-05	4.23E-05	0.00E+00
INFANT	1.93E-07	7.43E-06	4.01E-07	4.03E-07	3.88E-07	8.43E-05	2.75E-05	0.00E+00

TABLE 1. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .60 MILES NNE

ANNUAL BETA AIR DOSE = 8.59E-06 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.38E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.29E-06	9.29E-06	9.29E-06	9.29E-06	9.29E-06	9.29E-06	9.37E-06	1.83E-05
GROUND	4.35E-04	4.35E-04	4.35E-04	4.35E-04	4.35E-04	4.35E-04	4.35E-04	5.12E-04
VEGET								
ADULT	8.70E-06	5.86E-05	1.71E-05	5.96E-06	3.18E-06	5.11E-04	1.46E-07	0.00E+00
TEEN	1.29E-05	6.28E-05	2.83E-05	9.18E-06	4.85E-06	6.88E-04	2.74E-07	0.00E+00
CHILD	2.51E-05	4.15E-05	6.88E-05	1.48E-05	7.81E-06	1.32E-03	4.18E-07	0.00E+00
MEAT								
ADULT	1.85E-06	1.50E-05	2.53E-07	9.45E-07	1.08E-07	1.37E-05	1.20E-08	0.00E+00
TEEN	1.44E-06	8.06E-06	2.12E-07	7.38E-07	8.82E-08	9.93E-06	1.13E-08	0.00E+00
CHILD	2.21E-06	4.07E-06	3.97E-07	8.93E-07	1.12E-07	1.50E-05	1.33E-08	0.00E+00
COW MILK								
ADULT	1.67E-06	3.74E-06	2.19E-06	2.27E-06	2.36E-06	3.85E-04	1.01E-07	0.00E+00
TEEN	2.38E-06	4.48E-06	4.00E-06	4.01E-06	4.20E-06	6.09E-04	2.09E-07	0.00E+00
CHILD	3.93E-06	3.05E-06	9.74E-06	6.91E-06	6.99E-06	1.21E-03	3.22E-07	0.00E+00
INFANT	6.70E-06	2.73E-06	1.83E-05	1.54E-05	1.20E-05	2.93E-03	5.82E-07	0.00E+00
GOATMILK								
ADULT	2.66E-06	1.09E-06	4.44E-06	4.15E-06	3.38E-06	4.61E-04	3.04E-07	0.00E+00
TEEN	3.16E-06	1.41E-06	8.10E-06	7.34E-06	6.01E-06	7.31E-04	6.28E-07	0.00E+00
CHILD	4.07E-06	1.06E-06	1.97E-05	1.27E-05	9.99E-06	1.45E-03	9.65E-07	0.00E+00
INFANT	6.50E-06	1.02E-06	3.57E-05	2.71E-05	1.70E-05	3.52E-03	1.75E-06	0.00E+00
INHAL								
ADULT	1.82E-07	1.65E-06	2.31E-07	2.91E-07	3.68E-07	4.98E-05	2.95E-05	0.00E+00
TEEN	2.32E-07	2.19E-06	3.26E-07	3.96E-07	5.07E-07	6.30E-05	4.34E-05	0.00E+00
CHILD	2.52E-07	7.34E-06	4.46E-07	3.81E-07	4.76E-07	7.41E-05	3.53E-05	0.00E+00
INFANT	1.58E-07	6.18E-06	3.27E-07	3.27E-07	3.13E-07	6.80E-05	2.29E-05	0.00E+00

TABLE 1. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 6.98E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.12E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.62E-05	1.49E-04
GROUND	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.31E-04
VEGET								
ADULT	2.27E-06	1.51E-05	4.66E-06	1.59E-06	9.21E-07	1.51E-04	3.76E-08	0.00E+00
TEEN	3.38E-06	1.62E-05	7.69E-06	2.45E-06	1.40E-06	2.04E-04	7.04E-08	0.00E+00
CHILD	6.56E-06	1.07E-05	1.87E-05	3.96E-06	2.26E-06	3.90E-04	1.07E-07	0.00E+00
MEAT								
ADULT	4.76E-07	3.84E-06	6.82E-08	2.44E-07	3.06E-08	4.06E-06	3.07E-09	0.00E+00
TEEN	3.71E-07	2.07E-06	5.72E-08	1.91E-07	2.49E-08	2.94E-06	2.90E-09	0.00E+00
CHILD	5.68E-07	1.05E-06	1.07E-07	2.31E-07	3.16E-08	4.44E-06	3.41E-09	0.00E+00
COW MILK								
ADULT	4.54E-07	9.75E-07	6.05E-07	6.29E-07	6.86E-07	1.14E-04	2.60E-08	0.00E+00
TEEN	6.54E-07	1.17E-06	1.10E-06	1.11E-06	1.22E-06	1.80E-04	5.37E-08	0.00E+00
CHILD	1.09E-06	7.99E-07	2.69E-06	1.92E-06	2.03E-06	3.57E-04	8.25E-08	0.00E+00
INFANT	1.88E-06	7.18E-07	5.09E-06	4.30E-06	3.51E-06	8.68E-04	1.49E-07	0.00E+00
GOATMILK								
ADULT	7.15E-07	3.00E-07	1.20E-06	1.12E-06	9.64E-07	1.37E-04	7.79E-08	0.00E+00
TEEN	8.65E-07	3.88E-07	2.19E-06	1.98E-06	1.72E-06	2.16E-04	1.61E-07	0.00E+00
CHILD	1.14E-06	2.95E-07	5.34E-06	3.44E-06	2.85E-06	4.28E-04	2.47E-07	0.00E+00
INFANT	1.86E-06	2.84E-07	9.71E-06	7.37E-06	4.87E-06	1.04E-03	4.48E-07	0.00E+00
INHAL								
ADULT	3.07E-08	2.67E-07	3.93E-08	4.99E-08	6.34E-08	8.45E-06	4.74E-06	0.00E+00
TEEN	3.93E-08	3.64E-07	5.55E-08	6.81E-08	8.74E-08	1.07E-05	6.95E-06	0.00E+00
CHILD	4.29E-08	1.27E-06	7.58E-08	6.56E-08	8.21E-08	1.26E-05	5.65E-06	0.00E+00
INFANT	2.71E-08	1.08E-06	5.58E-08	5.67E-08	5.41E-08	1.15E-05	3.68E-06	0.00E+00

TABLE 1. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 4.24E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 6.84E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.59E-05	4.59E-05	4.59E-05	4.59E-05	4.59E-05	4.59E-05	4.63E-05	9.05E-05
GROUND	8.95E-06	8.95E-06	8.95E-06	8.95E-06	8.95E-06	8.95E-06	8.95E-06	1.05E-05
VEGET								
ADULT	1.85E-07	1.21E-06	3.92E-07	1.32E-07	8.15E-08	1.36E-05	3.00E-09	0.00E+00
TEEN	2.75E-07	1.30E-06	6.48E-07	2.03E-07	1.24E-07	1.83E-05	5.63E-09	0.00E+00
CHILD	5.34E-07	8.61E-07	1.58E-06	3.29E-07	2.00E-07	3.50E-05	8.56E-09	0.00E+00
MEAT								
ADULT	3.82E-08	3.08E-07	5.70E-09	1.97E-08	2.66E-09	3.64E-07	2.45E-10	0.00E+00
TEEN	2.97E-08	1.66E-07	4.78E-09	1.54E-08	2.16E-09	2.64E-07	2.32E-10	0.00E+00
CHILD	4.56E-08	8.38E-08	8.96E-09	1.86E-08	2.75E-09	3.98E-07	2.73E-10	0.00E+00
COW MILK								
ADULT	3.83E-08	7.92E-08	5.16E-08	5.38E-08	6.08E-08	1.02E-05	2.08E-09	0.00E+00
TEEN	5.56E-08	9.51E-08	9.41E-08	9.50E-08	1.08E-07	1.62E-05	4.29E-09	0.00E+00
CHILD	9.33E-08	6.52E-08	2.29E-07	1.64E-07	1.80E-07	3.20E-05	6.60E-09	0.00E+00
INFANT	1.62E-07	5.87E-08	4.36E-07	3.70E-07	3.11E-07	7.78E-05	1.19E-08	0.00E+00
GOATMILK								
ADULT	5.96E-08	2.55E-08	1.01E-07	9.38E-08	8.42E-08	1.23E-05	6.23E-09	0.00E+00
TEEN	7.32E-08	3.30E-08	1.83E-07	1.66E-07	1.50E-07	1.94E-05	1.29E-08	0.00E+00
CHILD	9.89E-08	2.52E-08	4.47E-07	2.88E-07	2.49E-07	3.84E-05	1.98E-08	0.00E+00
INFANT	1.63E-07	2.43E-08	8.18E-07	6.21E-07	4.26E-07	9.34E-05	3.58E-08	0.00E+00
INHAL								
ADULT	5.44E-09	4.18E-08	7.07E-09	9.25E-09	1.19E-08	1.54E-06	7.15E-07	0.00E+00
TEEN	7.01E-09	6.07E-08	9.99E-09	1.27E-08	1.65E-08	1.95E-06	1.05E-06	0.00E+00
CHILD	7.74E-09	2.35E-07	1.36E-08	1.22E-08	1.55E-08	2.29E-06	8.54E-07	0.00E+00
INFANT	5.01E-09	2.00E-07	1.01E-08	1.07E-08	1.02E-08	2.10E-06	5.58E-07	0.00E+00

TABLE 1. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 6.98E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.12E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.55E-05	7.62E-05	1.49E-04
GROUND	3.69E-05	3.69E-05	3.69E-05	3.69E-05	3.69E-05	3.69E-05	3.69E-05	4.34E-05
VEGET								
ADULT	7.56E-07	4.99E-06	1.57E-06	5.33E-07	3.18E-07	5.25E-05	1.24E-08	0.00E+00
TEEN	1.12E-06	5.35E-06	2.60E-06	8.20E-07	4.84E-07	7.07E-05	2.32E-08	0.00E+00
CHILD	2.18E-06	3.54E-06	6.32E-06	1.33E-06	7.80E-07	1.35E-04	3.53E-08	0.00E+00
MEAT								
ADULT	1.57E-07	1.27E-06	2.30E-08	8.08E-08	1.05E-08	1.41E-06	1.01E-09	0.00E+00
TEEN	1.22E-07	6.83E-07	1.92E-08	6.32E-08	8.53E-09	1.02E-06	9.58E-10	0.00E+00
CHILD	1.88E-07	3.45E-07	3.60E-08	7.65E-08	1.08E-08	1.54E-06	1.13E-09	0.00E+00
COW MILK								
ADULT	1.53E-07	3.24E-07	2.05E-07	2.14E-07	2.37E-07	3.95E-05	8.57E-09	0.00E+00
TEEN	2.22E-07	3.89E-07	3.75E-07	3.78E-07	4.22E-07	6.26E-05	1.77E-08	0.00E+00
CHILD	3.71E-07	2.66E-07	9.13E-07	6.52E-07	7.02E-07	1.24E-04	2.72E-08	0.00E+00
INFANT	6.40E-07	2.39E-07	1.73E-06	1.47E-06	1.21E-06	3.01E-04	4.92E-08	0.00E+00
GOATMILK								
ADULT	2.40E-07	1.02E-07	4.04E-07	3.77E-07	3.31E-07	4.74E-05	2.57E-08	0.00E+00
TEEN	2.93E-07	1.32E-07	7.38E-07	6.67E-07	5.89E-07	7.51E-05	5.31E-08	0.00E+00
CHILD	3.91E-07	1.00E-07	1.80E-06	1.16E-06	9.78E-07	1.49E-04	8.16E-08	0.00E+00
INFANT	6.38E-07	9.65E-08	3.28E-06	2.49E-06	1.67E-06	3.62E-04	1.48E-07	0.00E+00
INHAL								
ADULT	1.72E-08	1.44E-07	2.21E-08	2.84E-08	3.63E-08	4.78E-06	2.52E-06	0.00E+00
TEEN	2.21E-08	2.00E-07	3.13E-08	3.88E-08	5.00E-08	6.05E-06	3.70E-06	0.00E+00
CHILD	2.42E-08	7.23E-07	4.27E-08	3.74E-08	4.70E-08	7.11E-06	3.01E-06	0.00E+00
INFANT	1.54E-08	6.14E-07	3.15E-08	3.25E-08	3.10E-08	6.53E-06	1.96E-06	0.00E+00

TABLE 2. DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .69 MILES NNW

ANNUAL BETA AIR DOSE = 1.15E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 2.06E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.38E-05	1.38E-05	1.38E-05	1.38E-05	1.38E-05	1.38E-05	1.39E-05	2.61E-05
GROUND	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.36E-03
VEGET								
ADULT	2.97E-05	1.81E-04	2.17E-04	1.82E-05	7.14E-06	8.52E-04	8.56E-07	0.00E+00
TEEN	4.33E-05	1.99E-04	3.59E-04	2.83E-05	1.10E-05	1.15E-03	1.60E-06	0.00E+00
CHILD	8.55E-05	1.36E-04	8.78E-04	4.63E-05	1.79E-05	2.20E-03	2.44E-06	0.00E+00
MEAT								
ADULT	5.14E-06	3.99E-05	2.53E-06	2.80E-06	3.31E-07	2.28E-05	6.99E-08	0.00E+00
TEEN	3.93E-06	2.15E-05	2.13E-06	2.19E-06	2.68E-07	1.65E-05	6.62E-08	0.00E+00
CHILD	5.95E-06	1.09E-05	4.01E-06	2.68E-06	3.41E-07	2.50E-05	7.77E-08	0.00E+00
COW MILK								
ADULT	5.86E-06	1.09E-05	1.50E-05	7.72E-06	5.24E-06	6.44E-04	5.92E-07	0.00E+00
TEEN	7.38E-06	1.32E-05	2.75E-05	1.36E-05	9.33E-06	1.02E-03	1.22E-06	0.00E+00
CHILD	1.07E-05	9.18E-06	6.75E-05	2.35E-05	1.55E-05	2.02E-03	1.88E-06	0.00E+00
INFANT	1.71E-05	8.36E-06	1.24E-04	4.91E-05	2.63E-05	4.92E-03	3.40E-06	0.00E+00
GOATMILK								
ADULT	1.24E-05	5.34E-06	3.37E-05	1.82E-05	9.50E-06	7.73E-04	1.78E-06	0.00E+00
TEEN	1.32E-05	7.08E-06	6.17E-05	3.21E-05	1.69E-05	1.22E-03	3.67E-06	0.00E+00
CHILD	1.44E-05	5.51E-06	1.51E-04	5.57E-05	2.80E-05	2.43E-03	5.64E-06	0.00E+00
INFANT	2.04E-05	5.43E-06	2.74E-04	1.13E-04	4.66E-05	5.90E-03	1.02E-05	0.00E+00
INHAL								
ADULT	2.46E-07	2.18E-06	3.06E-07	3.72E-07	4.01E-07	4.85E-05	4.15E-05	0.00E+00
TEEN	2.98E-07	2.04E-06	4.33E-07	5.06E-07	5.54E-07	6.19E-05	6.08E-05	0.00E+00
CHILD	3.12E-07	9.15E-07	5.92E-07	4.85E-07	5.20E-07	7.38E-05	4.93E-05	0.00E+00
INFANT	1.88E-07	3.85E-07	4.21E-07	4.05E-07	3.42E-07	6.78E-05	3.17E-05	0.00E+00

C14

TABLE 2. DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 1.00E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.79E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.21E-05	2.26E-05
GROUND	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.52E-03
VEGET								
ADULT	3.39E-05	2.07E-04	2.66E-04	2.04E-05	8.04E-06	9.62E-04	9.60E-07	0.00E+00
TEEN	4.96E-05	2.27E-04	4.41E-04	3.18E-05	1.24E-05	1.29E-03	1.80E-06	0.00E+00
CHILD	9.84E-05	1.56E-04	1.08E-03	5.19E-05	2.01E-05	2.48E-03	2.74E-06	0.00E+00
MEAT								
ADULT	5.76E-06	4.46E-05	3.06E-06	3.13E-06	3.72E-07	2.58E-05	7.84E-08	0.00E+00
TEEN	4.40E-06	2.41E-05	2.58E-06	2.45E-06	3.02E-07	1.87E-05	7.42E-08	0.00E+00
CHILD	6.67E-06	1.22E-05	4.85E-06	3.00E-06	3.83E-07	2.82E-05	8.72E-08	0.00E+00
COW MILK								
ADULT	6.61E-06	1.24E-05	1.79E-05	8.68E-06	5.91E-06	7.27E-04	6.64E-07	0.00E+00
TEEN	8.34E-06	1.50E-05	3.28E-05	1.53E-05	1.05E-05	1.15E-03	1.37E-06	0.00E+00
CHILD	1.22E-05	1.05E-05	8.06E-05	2.64E-05	1.75E-05	2.28E-03	2.11E-06	0.00E+00
INFANT	1.95E-05	9.56E-06	1.49E-04	5.51E-05	2.96E-05	5.55E-03	3.81E-06	0.00E+00
GOATMILK								
ADULT	1.40E-05	6.35E-06	4.00E-05	2.04E-05	1.07E-05	8.72E-04	1.99E-06	0.00E+00
TEEN	1.50E-05	8.44E-06	7.34E-05	3.61E-05	1.90E-05	1.38E-03	4.12E-06	0.00E+00
CHILD	1.65E-05	6.58E-06	1.80E-04	6.26E-05	3.15E-05	2.74E-03	6.33E-06	0.00E+00
INFANT	2.35E-05	6.50E-06	3.26E-04	1.26E-04	5.25E-05	6.66E-03	1.14E-05	0.00E+00
INHAL								
ADULT	4.05E-07	3.58E-06	4.33E-07	6.08E-07	6.45E-07	7.77E-05	6.95E-05	0.00E+00
TEEN	4.88E-07	3.32E-06	6.11E-07	8.27E-07	8.91E-07	9.91E-05	1.02E-04	0.00E+00
CHILD	5.10E-07	1.37E-06	8.34E-07	7.92E-07	8.36E-07	1.18E-04	8.25E-05	0.00E+00
INFANT	3.06E-07	5.25E-07	5.98E-07	6.58E-07	5.49E-07	1.09E-04	5.29E-05	0.00E+00

C15

TABLE 2. DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 1.62E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 2.89E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.95E-05	3.65E-05
GROUND	3.28E-04	3.28E-04	3.28E-04	3.28E-04	3.28E-04	3.28E-04	3.28E-04	3.86E-04
VEGET								
ADULT	1.10E-05	6.51E-05	1.46E-04	5.35E-06	2.22E-06	2.74E-04	2.52E-07	0.00E+00
TEEN	1.64E-05	7.32E-05	2.42E-04	8.32E-06	3.43E-06	3.68E-04	4.73E-07	0.00E+00
CHILD	3.42E-05	5.19E-05	5.93E-04	1.36E-05	5.55E-06	7.05E-04	7.20E-07	0.00E+00
MEAT								
ADULT	1.49E-06	1.14E-05	1.55E-06	8.02E-07	1.01E-07	7.33E-06	2.06E-08	0.00E+00
TEEN	1.14E-06	6.17E-06	1.30E-06	6.29E-07	8.17E-08	5.31E-06	1.95E-08	0.00E+00
CHILD	1.73E-06	3.13E-06	2.46E-06	7.70E-07	1.04E-07	8.02E-06	2.29E-08	0.00E+00
COW MILK								
ADULT	1.86E-06	3.75E-06	8.30E-06	2.32E-06	1.63E-06	2.07E-04	1.74E-07	0.00E+00
TEEN	2.41E-06	4.65E-06	1.52E-05	4.10E-06	2.91E-06	3.27E-04	3.61E-07	0.00E+00
CHILD	3.70E-06	3.32E-06	3.76E-05	7.07E-06	4.83E-06	6.49E-04	5.54E-07	0.00E+00
INFANT	6.10E-06	3.10E-06	7.03E-05	1.48E-05	8.20E-06	1.58E-03	1.00E-06	0.00E+00
GOATMILK								
ADULT	3.91E-06	2.87E-06	1.80E-05	5.43E-06	2.90E-06	2.48E-04	5.23E-07	0.00E+00
TEEN	4.38E-06	3.87E-06	3.31E-05	9.59E-06	5.16E-06	3.92E-04	1.08E-06	0.00E+00
CHILD	5.40E-06	3.06E-06	8.15E-05	1.66E-05	8.57E-06	7.78E-04	1.66E-06	0.00E+00
INFANT	8.21E-06	3.05E-06	1.51E-04	3.36E-05	1.43E-05	1.89E-03	3.01E-06	0.00E+00
INHAL								
ADULT	7.39E-08	7.26E-07	1.73E-07	1.08E-07	1.18E-07	1.43E-05	1.23E-05	0.00E+00
TEEN	9.00E-08	7.06E-07	2.46E-07	1.48E-07	1.63E-07	1.82E-05	1.81E-05	0.00E+00
CHILD	9.54E-08	4.53E-07	3.38E-07	1.42E-07	1.53E-07	2.17E-05	1.47E-05	0.00E+00
INFANT	5.79E-08	2.55E-07	2.33E-07	1.18E-07	1.00E-07	1.99E-05	9.64E-06	0.00E+00

TABLE 2. DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 1.08E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.92E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.29E-05	1.29E-05	1.29E-05	1.29E-05	1.29E-05	1.29E-05	1.30E-05	2.43E-05
GROUND	2.46E-05	2.46E-05	2.46E-05	2.46E-05	2.46E-05	2.46E-05	2.46E-05	2.90E-05
VEGET								
ADULT	1.07E-06	6.21E-06	1.92E-05	4.19E-07	1.85E-07	2.35E-05	1.99E-08	0.00E+00
TEEN	1.64E-06	7.12E-06	3.18E-05	6.53E-07	2.86E-07	3.16E-05	3.73E-08	0.00E+00
CHILD	3.54E-06	5.19E-06	7.78E-05	1.07E-06	4.63E-07	6.06E-05	5.67E-08	0.00E+00
MEAT								
ADULT	1.15E-07	8.72E-07	1.96E-07	6.12E-08	8.21E-09	6.31E-07	1.63E-09	0.00E+00
TEEN	8.76E-08	4.72E-07	1.66E-07	4.80E-08	6.67E-09	4.57E-07	1.54E-09	0.00E+00
CHILD	1.34E-07	2.40E-07	3.13E-07	5.88E-08	8.46E-09	6.89E-07	1.81E-09	0.00E+00
COW MILK								
ADULT	1.58E-07	3.45E-07	1.01E-06	1.87E-07	1.36E-07	1.77E-05	1.38E-08	0.00E+00
TEEN	2.11E-07	4.36E-07	1.87E-06	3.30E-07	2.42E-07	2.80E-05	2.84E-08	0.00E+00
CHILD	3.42E-07	3.19E-07	4.60E-06	5.70E-07	4.03E-07	5.56E-05	4.37E-08	0.00E+00
INFANT	5.78E-07	3.03E-07	8.67E-06	1.20E-06	6.84E-07	1.35E-04	7.90E-08	0.00E+00
GOATMILK								
ADULT	3.33E-07	3.47E-07	2.18E-06	4.33E-07	2.38E-07	2.13E-05	4.13E-08	0.00E+00
TEEN	3.90E-07	4.70E-07	4.00E-06	7.65E-07	4.22E-07	3.37E-05	8.53E-08	0.00E+00
CHILD	5.32E-07	3.74E-07	9.87E-06	1.33E-06	7.02E-07	6.67E-05	1.31E-07	0.00E+00
INFANT	8.51E-07	3.75E-07	1.84E-05	2.69E-06	1.17E-06	1.62E-04	2.37E-07	0.00E+00
INHAL								
ADULT	1.03E-08	1.52E-07	8.31E-08	1.28E-08	1.45E-08	1.83E-06	1.54E-06	0.00E+00
TEEN	1.29E-08	1.66E-07	1.19E-07	1.75E-08	2.00E-08	2.32E-06	2.35E-06	0.00E+00
CHILD	1.45E-08	1.92E-07	1.63E-07	1.68E-08	1.88E-08	2.74E-06	1.96E-06	0.00E+00
INFANT	9.15E-09	1.37E-07	1.09E-07	1.42E-08	1.23E-08	2.51E-06	1.42E-06	0.00E+00

TABLE 2. DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 1.69E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 3.02E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.02E-05	2.02E-05	2.02E-05	2.02E-05	2.02E-05	2.02E-05	2.04E-05	3.82E-05
GROUND	9.77E-05	9.77E-05	9.77E-05	9.77E-05	9.77E-05	9.77E-05	9.77E-05	1.15E-04
VEGET								
ADULT	3.80E-06	2.23E-05	6.15E-05	1.63E-06	7.04E-07	8.83E-05	7.73E-08	0.00E+00
TEEN	5.78E-06	2.54E-05	1.02E-04	2.54E-06	1.09E-06	1.19E-04	1.45E-07	0.00E+00
CHILD	1.23E-05	1.83E-05	2.50E-04	4.16E-06	1.76E-06	2.28E-04	2.20E-07	0.00E+00
MEAT								
ADULT	4.50E-07	3.44E-06	6.37E-07	2.41E-07	3.14E-08	2.37E-06	6.31E-09	0.00E+00
TEEN	3.44E-07	1.86E-06	5.37E-07	1.89E-07	2.55E-08	1.71E-06	5.97E-09	0.00E+00
CHILD	5.23E-07	9.44E-07	1.01E-06	2.32E-07	3.24E-08	2.59E-06	7.02E-09	0.00E+00
COW MILK								
ADULT	5.94E-07	1.26E-06	3.33E-06	7.20E-07	5.18E-07	6.66E-05	5.34E-08	0.00E+00
TEEN	7.84E-07	1.58E-06	6.13E-06	1.27E-06	9.21E-07	1.06E-04	1.10E-07	0.00E+00
CHILD	1.25E-06	1.14E-06	1.51E-05	2.19E-06	1.53E-06	2.09E-04	1.70E-07	0.00E+00
INFANT	2.08E-06	1.08E-06	2.84E-05	4.61E-06	2.60E-06	5.08E-04	3.07E-07	0.00E+00
GOATMILK								
ADULT	1.25E-06	1.15E-06	7.18E-06	1.67E-06	9.11E-07	7.99E-05	1.60E-07	0.00E+00
TEEN	1.44E-06	1.55E-06	1.32E-05	2.96E-06	1.62E-06	1.27E-04	3.31E-07	0.00E+00
CHILD	1.89E-06	1.23E-06	3.25E-05	5.13E-06	2.69E-06	2.51E-04	5.09E-07	0.00E+00
INFANT	2.96E-06	1.23E-06	6.06E-05	1.04E-05	4.49E-06	6.10E-04	9.21E-07	0.00E+00
INHAL								
ADULT	2.95E-08	3.52E-07	1.43E-07	4.05E-08	4.50E-08	5.52E-06	4.66E-06	0.00E+00
TEEN	3.64E-08	3.65E-07	2.04E-07	5.53E-08	6.21E-08	7.03E-06	6.97E-06	0.00E+00
CHILD	3.96E-08	3.42E-07	2.80E-07	5.31E-08	5.83E-08	8.35E-06	5.73E-06	0.00E+00
INFANT	2.45E-08	2.28E-07	1.89E-07	4.46E-08	3.83E-08	7.67E-06	3.92E-06	0.00E+00

TABLE 3. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014

SPECIAL LOCATION NO. 1A Site Boundary
AT .69 MILES NNW

ANNUAL BETA AIR DOSE = 5.52E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 9.02E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.05E-05	6.05E-05	6.05E-05	6.05E-05	6.05E-05	6.05E-05	6.10E-05	1.19E-04
GROUND	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.79E-03
VEGET								
ADULT	3.45E-05	2.19E-04	1.59E-04	2.26E-05	1.01E-05	1.39E-03	8.77E-07	0.00E+00
TEEN	5.05E-05	2.37E-04	2.63E-04	3.51E-05	1.55E-05	1.87E-03	1.64E-06	0.00E+00
CHILD	9.83E-05	1.59E-04	6.42E-04	5.72E-05	2.50E-05	3.59E-03	2.50E-06	0.00E+00
MEAT								
ADULT	6.63E-06	5.23E-05	2.00E-06	3.52E-06	4.12E-07	3.73E-05	7.16E-08	0.00E+00
TEEN	5.10E-06	2.81E-05	1.68E-06	2.76E-06	3.35E-07	2.70E-05	6.78E-08	0.00E+00
CHILD	7.76E-06	1.42E-05	3.16E-06	3.36E-06	4.25E-07	4.08E-05	7.96E-08	0.00E+00
COW MILK								
ADULT	6.89E-06	1.35E-05	1.32E-05	9.26E-06	7.45E-06	1.05E-03	6.06E-07	0.00E+00
TEEN	9.05E-06	1.63E-05	2.42E-05	1.63E-05	1.33E-05	1.66E-03	1.25E-06	0.00E+00
CHILD	1.37E-05	1.12E-05	5.91E-05	2.82E-05	2.20E-05	3.29E-03	1.93E-06	0.00E+00
INFANT	2.24E-05	1.01E-05	1.09E-04	6.02E-05	3.76E-05	8.01E-03	3.48E-06	0.00E+00
GOATMILK								
ADULT	1.33E-05	5.18E-06	2.92E-05	2.01E-05	1.22E-05	1.26E-03	1.82E-06	0.00E+00
TEEN	1.46E-05	6.78E-06	5.34E-05	3.55E-05	2.17E-05	1.99E-03	3.76E-06	0.00E+00
CHILD	1.66E-05	5.21E-06	1.31E-04	6.16E-05	3.61E-05	3.95E-03	5.78E-06	0.00E+00
INFANT	2.43E-05	5.09E-06	2.35E-04	1.26E-04	6.07E-05	9.61E-03	1.04E-05	0.00E+00
INHAL								
ADULT	3.95E-07	3.52E-06	4.68E-07	6.11E-07	7.06E-07	9.00E-05	6.58E-05	0.00E+00
TEEN	4.88E-07	3.87E-06	6.61E-07	8.32E-07	9.74E-07	1.14E-04	9.64E-05	0.00E+00
CHILD	5.19E-07	7.46E-06	9.03E-07	7.99E-07	9.14E-07	1.35E-04	7.82E-05	0.00E+00
INFANT	3.18E-07	5.93E-06	6.53E-07	6.74E-07	6.01E-07	1.24E-04	5.05E-05	0.00E+00

TABLE 3. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 5.22E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 8.52E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.71E-05	5.71E-05	5.71E-05	5.71E-05	5.71E-05	5.71E-05	5.76E-05	1.12E-04
GROUND	1.94E-03	1.94E-03	1.94E-03	1.94E-03	1.94E-03	1.94E-03	1.94E-03	2.28E-03
VEGET								
ADULT	4.48E-05	2.83E-04	2.24E-04	2.90E-05	1.30E-05	1.79E-03	1.12E-06	0.00E+00
TEEN	6.56E-05	3.08E-04	3.72E-04	4.50E-05	1.99E-05	2.41E-03	2.11E-06	0.00E+00
CHILD	1.28E-04	2.07E-04	9.07E-04	7.33E-05	3.22E-05	4.63E-03	3.20E-06	0.00E+00
MEAT								
ADULT	8.48E-06	6.69E-05	2.77E-06	4.50E-06	5.30E-07	4.81E-05	9.18E-08	0.00E+00
TEEN	6.53E-06	3.60E-05	2.32E-06	3.53E-06	4.31E-07	3.48E-05	8.68E-08	0.00E+00
CHILD	9.93E-06	1.82E-05	4.37E-06	4.30E-06	5.46E-07	5.26E-05	1.02E-07	0.00E+00
COW MILK								
ADULT	8.87E-06	1.75E-05	1.79E-05	1.19E-05	9.59E-06	1.35E-03	7.77E-07	0.00E+00
TEEN	1.17E-05	2.11E-05	3.28E-05	2.10E-05	1.71E-05	2.14E-03	1.61E-06	0.00E+00
CHILD	1.77E-05	1.45E-05	8.03E-05	3.62E-05	2.84E-05	4.25E-03	2.47E-06	0.00E+00
INFANT	2.91E-05	1.31E-05	1.48E-04	7.73E-05	4.85E-05	1.03E-02	4.46E-06	0.00E+00
GOATMILK								
ADULT	1.72E-05	6.97E-06	3.95E-05	2.58E-05	1.57E-05	1.62E-03	2.33E-06	0.00E+00
TEEN	1.89E-05	9.15E-06	7.23E-05	4.56E-05	2.79E-05	2.57E-03	4.82E-06	0.00E+00
CHILD	2.16E-05	7.05E-06	1.77E-04	7.91E-05	4.64E-05	5.10E-03	7.40E-06	0.00E+00
INFANT	3.18E-05	6.90E-06	3.19E-04	1.62E-04	7.80E-05	1.24E-02	1.34E-05	0.00E+00
INHAL								
ADULT	6.16E-07	5.43E-06	7.03E-07	9.57E-07	1.11E-06	1.42E-04	1.02E-04	0.00E+00
TEEN	7.61E-07	5.98E-06	9.93E-07	1.30E-06	1.53E-06	1.80E-04	1.50E-04	0.00E+00
CHILD	8.10E-07	1.15E-05	1.35E-06	1.25E-06	1.44E-06	2.13E-04	1.21E-04	0.00E+00
INFANT	4.96E-07	9.13E-06	9.84E-07	1.06E-06	9.46E-07	1.96E-04	7.83E-05	0.00E+00

TABLE 3. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 1.04E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.70E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.15E-04	2.24E-04
GROUND	4.26E-04	4.26E-04	4.26E-04	4.26E-04	4.26E-04	4.26E-04	4.26E-04	5.01E-04
VEGET								
ADULT	1.19E-05	7.33E-05	1.18E-04	6.58E-06	3.10E-06	4.37E-04	2.55E-07	0.00E+00
TEEN	1.78E-05	8.12E-05	1.96E-04	1.02E-05	4.76E-06	5.88E-04	4.78E-07	0.00E+00
CHILD	3.63E-05	5.63E-05	4.79E-04	1.66E-05	7.69E-06	1.13E-03	7.27E-07	0.00E+00
MEAT								
ADULT	1.89E-06	1.48E-05	1.28E-06	9.98E-07	1.24E-07	1.17E-05	2.08E-08	0.00E+00
TEEN	1.45E-06	7.97E-06	1.08E-06	7.82E-07	1.01E-07	8.48E-06	1.97E-08	0.00E+00
CHILD	2.21E-06	4.04E-06	2.04E-06	9.53E-07	1.28E-07	1.28E-05	2.32E-08	0.00E+00
COW MILK								
ADULT	2.13E-06	4.38E-06	7.24E-06	2.76E-06	2.29E-06	3.29E-04	1.76E-07	0.00E+00
TEEN	2.85E-06	5.37E-06	1.33E-05	4.86E-06	4.07E-06	5.20E-04	3.64E-07	0.00E+00
CHILD	4.50E-06	3.78E-06	3.27E-05	8.40E-06	6.77E-06	1.03E-03	5.60E-07	0.00E+00
INFANT	7.52E-06	3.48E-06	6.13E-05	1.80E-05	1.16E-05	2.51E-03	1.01E-06	0.00E+00
GOATMILK								
ADULT	4.13E-06	2.64E-06	1.56E-05	5.93E-06	3.70E-06	3.94E-04	5.29E-07	0.00E+00
TEEN	4.71E-06	3.53E-06	2.86E-05	1.05E-05	6.57E-06	6.25E-04	1.09E-06	0.00E+00
CHILD	5.88E-06	2.77E-06	7.04E-05	1.82E-05	1.09E-05	1.24E-03	1.68E-06	0.00E+00
INFANT	9.10E-06	2.75E-06	1.30E-04	3.74E-05	1.84E-05	3.01E-03	3.04E-06	0.00E+00
INHAL								
ADULT	1.01E-07	9.52E-07	1.96E-07	1.52E-07	1.74E-07	2.24E-05	1.66E-05	0.00E+00
TEEN	1.26E-07	9.53E-07	2.79E-07	2.07E-07	2.40E-07	2.84E-05	2.44E-05	0.00E+00
CHILD	1.35E-07	9.34E-07	3.82E-07	1.99E-07	2.25E-07	3.35E-05	1.99E-05	0.00E+00
INFANT	8.29E-08	6.39E-07	2.67E-07	1.68E-07	1.48E-07	3.08E-05	1.30E-05	0.00E+00

TABLE 3. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 6.75E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.10E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.39E-05	7.39E-05	7.39E-05	7.39E-05	7.39E-05	7.39E-05	7.46E-05	1.45E-04
GROUND	3.17E-05	3.17E-05	3.17E-05	3.17E-05	3.17E-05	3.17E-05	3.17E-05	3.72E-05
VEGET								
ADULT	1.09E-06	6.52E-06	1.55E-05	5.10E-07	2.57E-07	3.71E-05	1.97E-08	0.00E+00
TEEN	1.66E-06	7.36E-06	2.57E-05	7.91E-07	3.95E-07	4.99E-05	3.70E-08	0.00E+00
CHILD	3.50E-06	5.24E-06	6.27E-05	1.29E-06	6.38E-07	9.57E-05	5.63E-08	0.00E+00
MEAT								
ADULT	1.43E-07	1.11E-06	1.61E-07	7.51E-08	1.01E-08	9.95E-07	1.61E-09	0.00E+00
TEEN	1.10E-07	5.98E-07	1.35E-07	5.88E-08	8.21E-09	7.21E-07	1.53E-09	0.00E+00
CHILD	1.68E-07	3.04E-07	2.56E-07	7.18E-08	1.04E-08	1.09E-06	1.79E-09	0.00E+00
COW MILK								
ADULT	1.76E-07	3.78E-07	8.61E-07	2.21E-07	1.90E-07	2.79E-05	1.36E-08	0.00E+00
TEEN	2.42E-07	4.71E-07	1.58E-06	3.89E-07	3.39E-07	4.42E-05	2.82E-08	0.00E+00
CHILD	3.96E-07	3.39E-07	3.90E-06	6.72E-07	5.63E-07	8.76E-05	4.33E-08	0.00E+00
INFANT	6.74E-07	3.17E-07	7.35E-06	1.45E-06	9.64E-07	2.13E-04	7.84E-08	0.00E+00
GOATMILK								
ADULT	3.43E-07	3.05E-07	1.83E-06	4.69E-07	3.02E-07	3.35E-05	4.09E-08	0.00E+00
TEEN	4.06E-07	4.11E-07	3.37E-06	8.28E-07	5.37E-07	5.30E-05	8.46E-08	0.00E+00
CHILD	5.52E-07	3.26E-07	8.30E-06	1.44E-06	8.92E-07	1.05E-04	1.30E-07	0.00E+00
INFANT	8.88E-07	3.25E-07	1.55E-05	2.96E-06	1.50E-06	2.55E-04	2.35E-07	0.00E+00
INHAL								
ADULT	1.53E-08	1.72E-07	7.42E-08	2.22E-08	2.66E-08	3.37E-06	2.16E-06	0.00E+00
TEEN	1.94E-08	1.93E-07	1.06E-07	3.03E-08	3.67E-08	4.28E-06	3.23E-06	0.00E+00
CHILD	2.16E-08	3.04E-07	1.46E-07	2.92E-08	3.45E-08	5.03E-06	2.66E-06	0.00E+00
INFANT	1.37E-08	2.34E-07	9.88E-08	2.52E-08	2.27E-08	4.62E-06	1.84E-06	0.00E+00

TABLE 3. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
 AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 1.10E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.80E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.21E-04	1.21E-04	1.21E-04	1.21E-04	1.21E-04	1.21E-04	1.22E-04	2.37E-04
GROUND	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.51E-04
VEGET								
ADULT	4.05E-06	2.45E-05	5.04E-05	2.04E-06	1.00E-06	1.43E-04	7.88E-08	0.00E+00
TEEN	6.11E-06	2.74E-05	8.36E-05	3.16E-06	1.54E-06	1.93E-04	1.48E-07	0.00E+00
CHILD	1.27E-05	1.93E-05	2.04E-04	5.16E-06	2.48E-06	3.69E-04	2.25E-07	0.00E+00
MEAT								
ADULT	5.75E-07	4.49E-06	5.31E-07	3.04E-07	3.96E-08	3.84E-06	6.43E-09	0.00E+00
TEEN	4.43E-07	2.42E-06	4.47E-07	2.38E-07	3.22E-08	2.78E-06	6.09E-09	0.00E+00
CHILD	6.75E-07	1.23E-06	8.45E-07	2.90E-07	4.09E-08	4.20E-06	7.16E-09	0.00E+00
COW MILK								
ADULT	6.85E-07	1.44E-06	2.90E-06	8.71E-07	7.42E-07	1.08E-04	5.45E-08	0.00E+00
TEEN	9.30E-07	1.78E-06	5.33E-06	1.54E-06	1.32E-06	1.71E-04	1.13E-07	0.00E+00
CHILD	1.50E-06	1.27E-06	1.31E-05	2.65E-06	2.19E-06	3.39E-04	1.73E-07	0.00E+00
INFANT	2.54E-06	1.18E-06	2.47E-05	5.71E-06	3.75E-06	8.23E-04	3.13E-07	0.00E+00
GOATMILK								
ADULT	1.33E-06	1.04E-06	6.20E-06	1.86E-06	1.18E-06	1.30E-04	1.63E-07	0.00E+00
TEEN	1.55E-06	1.40E-06	1.14E-05	3.28E-06	2.11E-06	2.05E-04	3.38E-07	0.00E+00
CHILD	2.04E-06	1.10E-06	2.80E-05	5.69E-06	3.50E-06	4.06E-04	5.19E-07	0.00E+00
INFANT	3.23E-06	1.10E-06	5.21E-05	1.17E-05	5.90E-06	9.88E-04	9.39E-07	0.00E+00
INHAL								
ADULT	4.64E-08	4.66E-07	1.39E-07	7.02E-08	8.33E-08	1.06E-05	7.06E-06	0.00E+00
TEEN	5.81E-08	5.34E-07	1.98E-07	9.57E-08	1.15E-07	1.34E-05	1.05E-05	0.00E+00
CHILD	6.33E-08	1.07E-06	2.72E-07	9.21E-08	1.08E-07	1.59E-05	8.55E-06	0.00E+00
INFANT	3.96E-08	8.53E-07	1.87E-07	7.87E-08	7.10E-08	1.45E-05	5.71E-06	0.00E+00

TABLE 4. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 3.43E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 5.67E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.83E-05	7.40E-05
GROUND	2.51E-03	2.51E-03	2.51E-03	2.51E-03	2.51E-03	2.51E-03	2.51E-03	2.95E-03
VEGET								
ADULT	5.85E-05	3.23E-04	3.81E-05	5.07E-05	1.70E-05	1.30E-03	3.21E-06	0.00E+00
TEEN	7.81E-05	3.44E-04	6.25E-05	7.95E-05	2.65E-05	1.75E-03	6.01E-06	0.00E+00
CHILD	1.36E-04	2.26E-04	1.50E-04	1.31E-04	4.31E-05	3.35E-03	9.14E-06	0.00E+00
MEAT								
ADULT	1.16E-05	8.51E-05	1.92E-06	6.99E-06	9.85E-07	3.47E-05	2.64E-07	0.00E+00
TEEN	8.61E-06	4.58E-05	1.59E-06	5.50E-06	7.98E-07	2.51E-05	2.50E-07	0.00E+00
CHILD	1.27E-05	2.31E-05	2.94E-06	6.80E-06	1.01E-06	3.80E-05	2.94E-07	0.00E+00
COW MILK								
ADULT	1.68E-05	2.01E-05	1.72E-05	2.38E-05	1.21E-05	9.87E-04	2.21E-06	0.00E+00
TEEN	1.88E-05	2.38E-05	3.12E-05	4.19E-05	2.14E-05	1.56E-03	4.57E-06	0.00E+00
CHILD	2.21E-05	1.60E-05	7.53E-05	7.24E-05	3.55E-05	3.11E-03	7.03E-06	0.00E+00
INFANT	3.13E-05	1.44E-05	1.26E-04	1.46E-04	5.92E-05	7.55E-03	1.27E-05	0.00E+00
GOATMILK								
ADULT	4.09E-05	4.74E-06	4.70E-05	6.27E-05	2.64E-05	1.18E-03	6.64E-06	0.00E+00
TEEN	4.02E-05	5.97E-06	8.53E-05	1.11E-04	4.68E-05	1.88E-03	1.37E-05	0.00E+00
CHILD	3.41E-05	4.38E-06	2.06E-04	1.92E-04	7.77E-05	3.73E-03	2.11E-05	0.00E+00
INFANT	3.90E-05	4.16E-06	3.36E-04	3.80E-04	1.27E-04	9.06E-03	3.82E-05	0.00E+00
INHAL								
ADULT	1.20E-06	9.56E-06	1.03E-06	1.82E-06	1.62E-06	1.69E-04	1.85E-04	0.00E+00
TEEN	1.36E-06	1.09E-05	1.45E-06	2.47E-06	2.24E-06	2.17E-04	2.71E-04	0.00E+00
CHILD	1.34E-06	2.50E-05	1.97E-06	2.36E-06	2.10E-06	2.62E-04	2.20E-04	0.00E+00
INFANT	7.82E-07	2.03E-05	1.39E-06	1.91E-06	1.37E-06	2.40E-04	1.41E-04	0.00E+00

TABLE 4. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .65 MILES SE

ANNUAL BETA AIR DOSE = 3.32E-06 MILLRADS
 ANNUAL GAMMA AIR DOSE = 5.49E-06 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.68E-06	3.68E-06	3.68E-06	3.68E-06	3.68E-06	3.68E-06	3.71E-06	7.17E-06
GROUND	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.51E-03
VEGET								
ADULT	3.00E-05	1.66E-04	1.83E-05	2.60E-05	8.61E-06	6.44E-04	1.65E-06	0.00E+00
TEEN	4.00E-05	1.77E-04	3.00E-05	4.07E-05	1.34E-05	8.65E-04	3.09E-06	0.00E+00
CHILD	6.98E-05	1.16E-04	7.20E-05	6.71E-05	2.18E-05	1.66E-03	4.70E-06	0.00E+00
MEAT								
ADULT	5.94E-06	4.37E-05	9.70E-07	3.58E-06	5.00E-07	1.72E-05	1.35E-07	0.00E+00
TEEN	4.42E-06	2.35E-05	8.06E-07	2.82E-06	4.05E-07	1.25E-05	1.28E-07	0.00E+00
CHILD	6.53E-06	1.19E-05	1.49E-06	3.49E-06	5.13E-07	1.88E-05	1.50E-07	0.00E+00
COW MILK								
ADULT	8.60E-06	1.03E-05	8.74E-06	1.22E-05	6.09E-06	4.89E-04	1.14E-06	0.00E+00
TEEN	9.59E-06	1.22E-05	1.59E-05	2.14E-05	1.08E-05	7.74E-04	2.35E-06	0.00E+00
CHILD	1.12E-05	8.18E-06	3.83E-05	3.70E-05	1.79E-05	1.54E-03	3.62E-06	0.00E+00
INFANT	1.58E-05	7.29E-06	6.38E-05	7.47E-05	2.99E-05	3.74E-03	6.54E-06	0.00E+00
GOATMILK								
ADULT	2.10E-05	2.39E-06	2.40E-05	3.22E-05	1.35E-05	5.86E-04	3.42E-06	0.00E+00
TEEN	2.06E-05	3.01E-06	4.36E-05	5.68E-05	2.38E-05	9.29E-04	7.06E-06	0.00E+00
CHILD	1.74E-05	2.20E-06	1.05E-04	9.84E-05	3.96E-05	1.85E-03	1.08E-05	0.00E+00
INFANT	1.98E-05	2.08E-06	1.71E-04	1.95E-04	6.49E-05	4.49E-03	1.96E-05	0.00E+00
INHAL								
ADULT	1.37E-06	1.11E-05	1.17E-06	2.05E-06	1.83E-06	1.94E-04	2.15E-04	0.00E+00
TEEN	1.54E-06	1.26E-05	1.64E-06	2.79E-06	2.53E-06	2.49E-04	3.14E-04	0.00E+00
CHILD	1.51E-06	2.86E-05	2.23E-06	2.67E-06	2.37E-06	3.00E-04	2.55E-04	0.00E+00
INFANT	8.77E-07	2.32E-05	1.57E-06	2.15E-06	1.55E-06	2.76E-04	1.64E-04	0.00E+00

TABLE 4. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 1.47E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 2.43E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.63E-04	1.63E-04	1.63E-04	1.63E-04	1.63E-04	1.63E-04	1.64E-04	3.17E-04
GROUND	8.43E-04	8.43E-04	8.43E-04	8.43E-04	8.43E-04	8.43E-04	8.43E-04	9.91E-04
VEGET								
ADULT	1.97E-05	1.09E-04	1.47E-05	1.71E-05	5.89E-06	4.71E-04	1.07E-06	0.00E+00
TEEN	2.64E-05	1.16E-04	2.41E-05	2.68E-05	9.18E-06	6.33E-04	2.01E-06	0.00E+00
CHILD	4.62E-05	7.61E-05	5.80E-05	4.42E-05	1.49E-05	1.21E-03	3.06E-06	0.00E+00
MEAT								
ADULT	3.89E-06	2.86E-05	6.67E-07	2.36E-06	3.40E-07	1.26E-05	9.00E-08	0.00E+00
TEEN	2.90E-06	1.54E-05	5.54E-07	1.86E-06	2.75E-07	9.11E-06	8.51E-08	0.00E+00
CHILD	4.28E-06	7.77E-06	1.02E-06	2.30E-06	3.48E-07	1.38E-05	9.99E-08	0.00E+00
COW MILK								
ADULT	5.69E-06	6.80E-06	5.90E-06	8.08E-06	4.20E-06	3.58E-04	7.40E-07	0.00E+00
TEEN	6.40E-06	8.08E-06	1.07E-05	1.42E-05	7.46E-06	5.67E-04	1.53E-06	0.00E+00
CHILD	7.60E-06	5.43E-06	2.59E-05	2.46E-05	1.24E-05	1.13E-03	2.35E-06	0.00E+00
INFANT	1.09E-05	5.00E-06	4.34E-05	4.97E-05	2.06E-05	2.74E-03	4.25E-06	0.00E+00
GOATMILK								
ADULT	1.37E-05	1.65E-06	1.60E-05	2.11E-05	9.01E-06	4.29E-04	2.22E-06	0.00E+00
TEEN	1.35E-05	2.09E-06	2.90E-05	3.72E-05	1.60E-05	6.80E-04	4.59E-06	0.00E+00
CHILD	1.16E-05	1.54E-06	6.99E-05	6.45E-05	2.65E-05	1.35E-03	7.05E-06	0.00E+00
INFANT	1.34E-05	1.48E-06	1.15E-04	1.28E-04	4.36E-05	3.28E-03	1.28E-05	0.00E+00
INHAL								
ADULT	3.75E-07	2.37E-06	3.42E-07	6.04E-07	5.32E-07	4.33E-05	4.51E-05	0.00E+00
TEEN	4.45E-07	2.80E-06	4.80E-07	8.25E-07	7.35E-07	5.56E-05	6.60E-05	0.00E+00
CHILD	4.68E-07	7.13E-06	6.53E-07	7.94E-07	6.88E-07	6.70E-05	5.36E-05	0.00E+00
INFANT	2.92E-07	6.01E-06	4.75E-07	6.68E-07	4.51E-07	6.16E-05	3.45E-05	0.00E+00

TABLE 4. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 1.31E-04 MILLRADS
ANNUAL GAMMA AIR DOSE = 2.16E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.46E-04	2.82E-04
GROUND	5.48E-05	5.48E-05	5.48E-05	5.48E-05	5.48E-05	5.48E-05	5.48E-05	6.45E-05
VEGET								
ADULT	1.30E-06	7.14E-06	1.29E-06	1.13E-06	4.15E-07	3.67E-05	6.94E-08	0.00E+00
TEEN	1.74E-06	7.62E-06	2.13E-06	1.77E-06	6.45E-07	4.94E-05	1.30E-07	0.00E+00
CHILD	3.07E-06	5.01E-06	5.14E-06	2.91E-06	1.04E-06	9.46E-05	1.98E-07	0.00E+00
MEAT								
ADULT	2.53E-07	1.86E-06	4.74E-08	1.56E-07	2.37E-08	9.81E-07	6.07E-09	0.00E+00
TEEN	1.89E-07	1.00E-06	3.93E-08	1.22E-07	1.91E-08	7.10E-07	5.73E-09	0.00E+00
CHILD	2.80E-07	5.06E-07	7.26E-08	1.51E-07	2.41E-08	1.07E-06	6.71E-09	0.00E+00
COW MILK								
ADULT	3.77E-07	4.53E-07	4.07E-07	5.40E-07	3.00E-07	2.79E-05	4.75E-08	0.00E+00
TEEN	4.31E-07	5.39E-07	7.39E-07	9.51E-07	5.32E-07	4.42E-05	9.82E-08	0.00E+00
CHILD	5.28E-07	3.63E-07	1.78E-06	1.64E-06	8.82E-07	8.77E-05	1.51E-07	0.00E+00
INFANT	7.66E-07	3.53E-07	3.03E-06	3.34E-06	1.47E-06	2.13E-04	2.73E-07	0.00E+00
GOATMILK								
ADULT	8.94E-07	1.18E-07	1.07E-06	1.37E-06	6.11E-07	3.34E-05	1.42E-07	0.00E+00
TEEN	8.88E-07	1.50E-07	1.94E-06	2.42E-06	1.08E-06	5.30E-05	2.94E-07	0.00E+00
CHILD	7.83E-07	1.12E-07	4.69E-06	4.20E-06	1.80E-06	1.05E-04	4.52E-07	0.00E+00
INFANT	9.32E-07	1.10E-07	7.76E-06	8.35E-06	2.96E-06	2.56E-04	8.19E-07	0.00E+00
INHAL								
ADULT	9.76E-08	2.00E-07	1.01E-07	1.82E-07	1.54E-07	4.59E-06	3.16E-06	0.00E+00
TEEN	1.29E-07	2.97E-07	1.42E-07	2.50E-07	2.12E-07	5.90E-06	4.64E-06	0.00E+00
CHILD	1.55E-07	1.19E-06	1.94E-07	2.44E-07	1.99E-07	7.13E-06	3.78E-06	0.00E+00
INFANT	1.08E-07	1.16E-06	1.51E-07	2.22E-07	1.31E-07	6.54E-06	2.47E-06	0.00E+00

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TABLE 4. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
 AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 1.80E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 2.97E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.99E-04	1.99E-04	1.99E-04	1.99E-04	1.99E-04	1.99E-04	2.01E-04	3.88E-04
GROUND	2.25E-04	2.25E-04	2.25E-04	2.25E-04	2.25E-04	2.25E-04	2.25E-04	2.65E-04
VEGET								
ADULT	5.30E-06	2.92E-05	4.68E-06	4.60E-06	1.65E-06	1.40E-04	2.86E-07	0.00E+00
TEEN	7.10E-06	3.12E-05	7.70E-06	7.21E-06	2.56E-06	1.88E-04	5.35E-07	0.00E+00
CHILD	1.25E-05	2.04E-05	1.86E-05	1.19E-05	4.15E-06	3.61E-04	8.14E-07	0.00E+00
MEAT								
ADULT	1.04E-06	7.63E-06	1.87E-07	6.35E-07	9.45E-08	3.74E-06	2.45E-08	0.00E+00
TEEN	7.74E-07	4.11E-06	1.55E-07	4.99E-07	7.62E-08	2.71E-06	2.31E-08	0.00E+00
CHILD	1.15E-06	2.07E-06	2.87E-07	6.17E-07	9.62E-08	4.09E-06	2.71E-08	0.00E+00
COW MILK								
ADULT	1.54E-06	1.84E-06	1.63E-06	2.19E-06	1.19E-06	1.06E-04	1.96E-07	0.00E+00
TEEN	1.74E-06	2.19E-06	2.96E-06	3.86E-06	2.10E-06	1.69E-04	4.05E-07	0.00E+00
CHILD	2.11E-06	1.47E-06	7.14E-06	6.66E-06	3.49E-06	3.35E-04	6.23E-07	0.00E+00
INFANT	3.04E-06	1.40E-06	1.21E-05	1.35E-05	5.82E-06	8.14E-04	1.13E-06	0.00E+00
GOATMILK								
ADULT	3.67E-06	4.66E-07	4.34E-06	5.63E-06	2.46E-06	1.28E-04	5.88E-07	0.00E+00
TEEN	3.63E-06	5.91E-07	7.87E-06	9.93E-06	4.37E-06	2.02E-04	1.21E-06	0.00E+00
CHILD	3.17E-06	4.38E-07	1.90E-05	1.72E-05	7.25E-06	4.02E-04	1.87E-06	0.00E+00
INFANT	3.72E-06	4.26E-07	3.13E-05	3.42E-05	1.19E-05	9.77E-04	3.38E-06	0.00E+00
INHAL								
ADULT	1.74E-07	6.22E-07	1.73E-07	3.08E-07	2.66E-07	1.25E-05	1.10E-05	0.00E+00
TEEN	2.22E-07	8.29E-07	2.43E-07	4.23E-07	3.66E-07	1.61E-05	1.62E-05	0.00E+00
CHILD	2.55E-07	2.79E-06	3.30E-07	4.11E-07	3.43E-07	1.94E-05	1.31E-05	0.00E+00
INFANT	1.72E-07	2.54E-06	2.52E-07	3.65E-07	2.25E-07	1.78E-05	8.51E-06	0.00E+00

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .69 MILES NNW

ANNUAL BETA AIR DOSE = 1.89E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 3.03E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.04E-05	2.04E-05	2.04E-05	2.04E-05	2.04E-05	2.04E-05	2.06E-05	4.03E-05
GROUND	1.17E-02	1.17E-02	1.17E-02	1.17E-02	1.17E-02	1.17E-02	1.17E-02	1.38E-02
VEGET								
ADULT	2.14E-04	1.63E-03	3.67E-05	1.64E-04	3.85E-05	3.25E-04	4.78E-06	0.00E+00
TEEN	3.26E-04	1.73E-03	5.70E-05	2.52E-04	5.74E-05	4.38E-04	8.69E-06	0.00E+00
CHILD	6.40E-04	1.13E-03	1.28E-04	3.90E-04	8.61E-05	8.39E-04	1.30E-05	0.00E+00
MEAT								
ADULT	5.95E-05	4.53E-04	9.61E-06	4.81E-05	1.38E-05	8.75E-06	1.60E-06	0.00E+00
TEEN	4.67E-05	2.44E-04	7.13E-06	3.73E-05	1.02E-05	6.34E-06	1.45E-06	0.00E+00
CHILD	7.21E-05	1.23E-04	1.15E-05	4.41E-05	1.16E-05	9.57E-06	1.64E-06	0.00E+00
COW MILK								
ADULT	5.46E-05	1.41E-04	3.53E-05	9.60E-05	5.66E-05	2.44E-04	1.82E-06	0.00E+00
TEEN	8.69E-05	1.64E-04	5.74E-05	1.62E-04	9.18E-05	3.85E-04	3.73E-06	0.00E+00
CHILD	1.64E-04	1.07E-04	1.22E-04	2.51E-04	1.38E-04	7.62E-04	5.72E-06	0.00E+00
INFANT	2.21E-04	3.42E-04	1.79E-04	4.50E-04	1.89E-04	1.85E-03	1.05E-05	0.00E+00
GOATMILK								
ADULT	3.44E-05	1.81E-05	3.59E-05	5.42E-05	2.24E-05	2.92E-04	4.94E-06	0.00E+00
TEEN	3.69E-05	2.12E-05	6.43E-05	9.47E-05	3.86E-05	4.62E-04	1.02E-05	0.00E+00
CHILD	4.00E-05	1.39E-05	1.53E-04	1.61E-04	6.24E-05	9.15E-04	1.57E-05	0.00E+00
INFANT	4.71E-05	4.21E-05	2.44E-04	3.10E-04	9.69E-05	2.22E-03	2.84E-05	0.00E+00
INHAL								
ADULT	2.22E-06	3.25E-05	5.73E-07	2.80E-06	8.00E-07	1.97E-05	6.50E-04	0.00E+00
TEEN	2.84E-06	2.95E-05	7.60E-07	3.68E-06	1.04E-06	2.46E-05	9.49E-04	0.00E+00
CHILD	3.13E-06	1.10E-05	9.69E-07	3.23E-06	8.97E-07	2.81E-05	7.69E-04	0.00E+00
INFANT	1.61E-06	4.03E-06	5.85E-07	2.05E-06	4.81E-07	2.57E-05	4.92E-04	0.00E+00

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 1.22E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.96E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.33E-05	2.60E-05
GROUND	1.05E-02	1.05E-02	1.05E-02	1.05E-02	1.05E-02	1.05E-02	1.05E-02	1.24E-02
VEGET								
ADULT	1.92E-04	1.46E-03	3.40E-05	1.47E-04	3.46E-05	2.97E-04	4.29E-06	0.00E+00
TEEN	2.92E-04	1.55E-03	5.28E-05	2.26E-04	5.16E-05	4.00E-04	7.79E-06	0.00E+00
CHILD	5.74E-04	1.01E-03	1.19E-04	3.50E-04	7.73E-05	7.66E-04	1.16E-05	0.00E+00
MEAT								
ADULT	5.33E-05	4.06E-04	8.63E-06	4.31E-05	1.23E-05	7.98E-06	1.44E-06	0.00E+00
TEEN	4.19E-05	2.19E-04	6.40E-06	3.34E-05	9.11E-06	5.78E-06	1.30E-06	0.00E+00
CHILD	6.46E-05	1.11E-04	1.04E-05	3.95E-05	1.04E-05	8.73E-06	1.47E-06	0.00E+00
COW MILK								
ADULT	4.90E-05	1.27E-04	3.17E-05	8.61E-05	5.08E-05	2.22E-04	1.63E-06	0.00E+00
TEEN	7.80E-05	1.47E-04	5.16E-05	1.46E-04	8.24E-05	3.52E-04	3.35E-06	0.00E+00
CHILD	1.47E-04	9.56E-05	1.10E-04	2.25E-04	1.24E-04	6.96E-04	5.13E-06	0.00E+00
INFANT	1.99E-04	3.06E-04	1.61E-04	4.04E-04	1.70E-04	1.69E-03	9.40E-06	0.00E+00
GOATMILK								
ADULT	3.09E-05	1.62E-05	3.23E-05	4.86E-05	2.01E-05	2.67E-04	4.43E-06	0.00E+00
TEEN	3.32E-05	1.90E-05	5.79E-05	8.50E-05	3.47E-05	4.22E-04	9.16E-06	0.00E+00
CHILD	3.59E-05	1.25E-05	1.38E-04	1.44E-04	5.60E-05	8.35E-04	1.41E-05	0.00E+00
INFANT	4.23E-05	3.78E-05	2.20E-04	2.78E-04	8.71E-05	2.03E-03	2.55E-05	0.00E+00
INHAL								
ADULT	3.30E-06	4.87E-05	8.28E-07	4.14E-06	1.16E-06	2.97E-05	9.75E-04	0.00E+00
TEEN	4.22E-06	4.43E-05	1.10E-06	5.44E-06	1.50E-06	3.70E-05	1.42E-03	0.00E+00
CHILD	4.64E-06	1.65E-05	1.39E-06	4.77E-06	1.29E-06	4.23E-05	1.15E-03	0.00E+00
INFANT	2.38E-06	5.93E-06	8.31E-07	3.01E-06	6.85E-07	3.87E-05	7.38E-04	0.00E+00

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 8.39E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.35E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.14E-05	1.79E-04
GROUND	3.85E-03	3.85E-03	3.85E-03	3.85E-03	3.85E-03	3.85E-03	3.85E-03	4.53E-03
VEGET								
ADULT	7.05E-05	5.34E-04	1.94E-05	5.39E-05	1.29E-05	1.42E-04	1.58E-06	0.00E+00
TEEN	1.07E-04	5.68E-04	3.06E-05	8.30E-05	1.92E-05	1.91E-04	2.88E-06	0.00E+00
CHILD	2.11E-04	3.71E-04	7.08E-05	1.28E-04	2.88E-05	3.66E-04	4.29E-06	0.00E+00
MEAT								
ADULT	1.95E-05	1.48E-04	3.23E-06	1.58E-05	4.52E-06	3.81E-06	5.26E-07	0.00E+00
TEEN	1.53E-05	7.99E-05	2.40E-06	1.22E-05	3.33E-06	2.76E-06	4.74E-07	0.00E+00
CHILD	2.36E-05	4.05E-05	3.91E-06	1.45E-05	3.80E-06	4.17E-06	5.39E-07	0.00E+00
COW MILK								
ADULT	1.80E-05	4.64E-05	1.20E-05	3.16E-05	1.87E-05	1.07E-04	6.06E-07	0.00E+00
TEEN	2.86E-05	5.39E-05	1.97E-05	5.35E-05	3.04E-05	1.69E-04	1.25E-06	0.00E+00
CHILD	5.38E-05	3.50E-05	4.20E-05	8.28E-05	4.58E-05	3.35E-04	1.91E-06	0.00E+00
INFANT	7.29E-05	1.12E-04	6.22E-05	1.49E-04	6.29E-05	8.14E-04	3.49E-06	0.00E+00
GOATMILK								
ADULT	1.16E-05	6.07E-06	1.27E-05	1.81E-05	7.61E-06	1.28E-04	1.65E-06	0.00E+00
TEEN	1.24E-05	7.12E-06	2.28E-05	3.17E-05	1.31E-05	2.03E-04	3.41E-06	0.00E+00
CHILD	1.35E-05	4.72E-06	5.44E-05	5.38E-05	2.13E-05	4.02E-04	5.24E-06	0.00E+00
INFANT	1.60E-05	1.39E-05	8.77E-05	1.04E-04	3.31E-05	9.77E-04	9.49E-06	0.00E+00
INHAL								
ADULT	7.20E-07	8.52E-06	3.06E-07	1.00E-06	4.27E-07	6.50E-06	1.69E-04	0.00E+00
TEEN	9.35E-07	7.80E-06	4.18E-07	1.34E-06	5.73E-07	8.18E-06	2.47E-04	0.00E+00
CHILD	1.06E-06	3.22E-06	5.51E-07	1.21E-06	5.17E-07	9.47E-06	2.00E-04	0.00E+00
INFANT	5.93E-07	1.60E-06	3.87E-07	8.78E-07	3.12E-07	8.66E-06	1.28E-04	0.00E+00

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 5.03E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 8.09E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.43E-05	5.43E-05	5.43E-05	5.43E-05	5.43E-05	5.43E-05	5.48E-05	1.07E-04
GROUND	2.43E-04	2.43E-04	2.43E-04	2.43E-04	2.43E-04	2.43E-04	2.43E-04	2.86E-04
VEGET								
ADULT	4.49E-06	3.39E-05	1.97E-06	3.43E-06	8.37E-07	1.26E-05	1.02E-07	0.00E+00
TEEN	6.83E-06	3.61E-05	3.14E-06	5.28E-06	1.25E-06	1.70E-05	1.85E-07	0.00E+00
CHILD	1.34E-05	2.36E-05	7.36E-06	8.19E-06	1.88E-06	3.26E-05	2.76E-07	0.00E+00
MEAT								
ADULT	1.23E-06	9.38E-06	2.13E-07	9.97E-07	2.86E-07	3.38E-07	3.34E-08	0.00E+00
TEEN	9.69E-07	5.05E-06	1.59E-07	7.73E-07	2.11E-07	2.45E-07	3.01E-08	0.00E+00
CHILD	1.49E-06	2.56E-06	2.60E-07	9.15E-07	2.41E-07	3.70E-07	3.42E-08	0.00E+00
COW MILK								
ADULT	1.15E-06	2.94E-06	8.07E-07	2.02E-06	1.20E-06	9.54E-06	3.94E-08	0.00E+00
TEEN	1.82E-06	3.41E-06	1.33E-06	3.41E-06	1.95E-06	1.51E-05	8.10E-08	0.00E+00
CHILD	3.42E-06	2.22E-06	2.86E-06	5.29E-06	2.95E-06	3.00E-05	1.24E-07	0.00E+00
INFANT	4.65E-06	7.08E-06	4.31E-06	9.52E-06	4.07E-06	7.28E-05	2.27E-07	0.00E+00
GOATMILK								
ADULT	7.57E-07	3.98E-07	9.05E-07	1.19E-06	5.09E-07	1.14E-05	1.08E-07	0.00E+00
TEEN	8.16E-07	4.69E-07	1.62E-06	2.08E-06	8.81E-07	1.81E-05	2.23E-07	0.00E+00
CHILD	8.93E-07	3.14E-07	3.87E-06	3.52E-06	1.43E-06	3.60E-05	3.42E-07	0.00E+00
INFANT	1.08E-06	8.96E-07	6.32E-06	6.83E-06	2.24E-06	8.74E-05	6.19E-07	0.00E+00
INHAL								
ADULT	1.44E-07	9.39E-07	1.06E-07	2.36E-07	1.49E-07	1.36E-06	1.81E-05	0.00E+00
TEEN	1.92E-07	8.79E-07	1.48E-07	3.20E-07	2.04E-07	1.74E-06	2.64E-05	0.00E+00
CHILD	2.27E-07	5.05E-07	1.99E-07	3.04E-07	1.89E-07	2.07E-06	2.14E-05	0.00E+00
INFANT	1.45E-07	4.30E-07	1.52E-07	2.56E-07	1.22E-07	1.89E-06	1.37E-05	0.00E+00

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 8.39E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.35E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.06E-05	9.14E-05	1.79E-04
GROUND	9.73E-04	9.73E-04	9.73E-04	9.73E-04	9.73E-04	9.73E-04	9.73E-04	1.14E-03
VEGET								
ADULT	1.79E-05	1.35E-04	6.60E-06	1.37E-05	3.31E-06	4.44E-05	4.04E-07	0.00E+00
TEEN	2.72E-05	1.44E-04	1.05E-05	2.11E-05	4.93E-06	5.98E-05	7.34E-07	0.00E+00
CHILD	5.35E-05	9.41E-05	2.45E-05	3.26E-05	7.41E-06	1.14E-04	1.10E-06	0.00E+00
MEAT								
ADULT	4.93E-06	3.75E-05	8.36E-07	3.99E-06	1.14E-06	1.19E-06	1.33E-07	0.00E+00
TEEN	3.87E-06	2.02E-05	6.24E-07	3.09E-06	8.44E-07	8.62E-07	1.20E-07	0.00E+00
CHILD	5.97E-06	1.02E-05	1.02E-06	3.66E-06	9.63E-07	1.30E-06	1.37E-07	0.00E+00
COW MILK								
ADULT	4.58E-06	1.18E-05	3.15E-06	8.04E-06	4.77E-06	3.35E-05	1.56E-07	0.00E+00
TEEN	7.27E-06	1.36E-05	5.16E-06	1.36E-05	7.76E-06	5.30E-05	3.20E-07	0.00E+00
CHILD	1.36E-05	8.87E-06	1.11E-05	2.11E-05	1.17E-05	1.05E-04	4.90E-07	0.00E+00
INFANT	1.85E-05	2.83E-05	1.66E-05	3.79E-05	1.61E-05	2.56E-04	8.98E-07	0.00E+00
GOATMILK								
ADULT	2.98E-06	1.57E-06	3.45E-06	4.68E-06	1.99E-06	4.02E-05	4.25E-07	0.00E+00
TEEN	3.21E-06	1.84E-06	6.18E-06	8.18E-06	3.44E-06	6.37E-05	8.78E-07	0.00E+00
CHILD	3.50E-06	1.23E-06	1.47E-05	1.39E-05	5.56E-06	1.26E-04	1.35E-06	0.00E+00
INFANT	4.20E-06	3.56E-06	2.39E-05	2.69E-05	8.70E-06	3.07E-04	2.44E-06	0.00E+00
INHAL								
ADULT	3.69E-07	3.32E-06	2.20E-07	5.64E-07	3.08E-07	3.38E-06	6.51E-05	0.00E+00
TEEN	4.87E-07	3.06E-06	3.04E-07	7.60E-07	4.18E-07	4.30E-06	9.51E-05	0.00E+00
CHILD	5.64E-07	1.46E-06	4.07E-07	7.08E-07	3.84E-07	5.06E-06	7.71E-05	0.00E+00
INFANT	3.41E-07	9.76E-07	3.02E-07	5.62E-07	2.42E-07	4.62E-06	4.94E-05	0.00E+00

TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 4.43E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 7.24E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.86E-05	4.86E-05	4.86E-05	4.86E-05	4.86E-05	4.86E-05	4.90E-05	9.52E-05
GROUND	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.67E-02
VEGET								
ADULT	2.70E-04	1.95E-03	7.41E-05	2.12E-04	5.44E-05	1.50E-03	7.74E-06	0.00E+00
TEEN	4.02E-04	2.07E-03	1.18E-04	3.28E-04	8.22E-05	2.01E-03	1.42E-05	0.00E+00
CHILD	7.74E-04	1.35E-03	2.76E-04	5.15E-04	1.26E-04	3.86E-03	2.14E-05	0.00E+00
MEAT								
ADULT	7.09E-05	5.38E-04	1.15E-05	5.52E-05	1.49E-05	4.01E-05	1.87E-06	0.00E+00
TEEN	5.53E-05	2.89E-04	8.71E-06	4.29E-05	1.10E-05	2.90E-05	1.70E-06	0.00E+00
CHILD	8.48E-05	1.46E-04	1.44E-05	5.10E-05	1.27E-05	4.38E-05	1.93E-06	0.00E+00
COW MILK								
ADULT	7.06E-05	1.62E-04	5.14E-05	1.19E-04	6.84E-05	1.13E-03	3.83E-06	0.00E+00
TEEN	1.05E-04	1.88E-04	8.66E-05	2.03E-04	1.13E-04	1.80E-03	7.89E-06	0.00E+00
CHILD	1.86E-04	1.23E-04	1.92E-04	3.20E-04	1.72E-04	3.56E-03	1.21E-05	0.00E+00
INFANT	2.53E-04	3.60E-04	2.95E-04	5.89E-04	2.46E-04	8.66E-03	2.20E-05	0.00E+00
GOATMILK								
ADULT	7.17E-05	2.27E-05	7.89E-05	1.11E-04	4.64E-05	1.36E-03	1.10E-05	0.00E+00
TEEN	7.36E-05	2.69E-05	1.42E-04	1.95E-04	8.12E-05	2.16E-03	2.27E-05	0.00E+00
CHILD	7.13E-05	1.82E-05	3.41E-04	3.35E-04	1.33E-04	4.28E-03	3.48E-05	0.00E+00
INFANT	8.29E-05	4.66E-05	5.51E-04	6.56E-04	2.13E-04	1.04E-02	6.31E-05	0.00E+00
INHAL								
ADULT	4.69E-06	6.10E-05	1.91E-06	6.20E-06	2.85E-06	2.00E-04	1.22E-03	0.00E+00
TEEN	5.83E-06	5.77E-05	2.62E-06	8.23E-06	3.84E-06	2.56E-04	1.78E-03	0.00E+00
CHILD	6.26E-06	4.23E-05	3.45E-06	7.42E-06	3.47E-06	3.06E-04	1.44E-03	0.00E+00
INFANT	3.31E-06	2.65E-05	2.27E-06	5.10E-06	2.10E-06	2.81E-04	9.22E-04	0.00E+00

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TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .65 MILES SE

ANNUAL BETA AIR DOSE = 1.93E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 3.15E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.11E-05	2.11E-05	2.11E-05	2.11E-05	2.11E-05	2.11E-05	2.13E-05	4.14E-05
GROUND	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.47E-02
VEGET								
ADULT	2.38E-04	1.71E-03	6.18E-05	1.87E-04	4.78E-05	1.29E-03	6.81E-06	0.00E+00
TEEN	3.54E-04	1.82E-03	9.85E-05	2.89E-04	7.22E-05	1.74E-03	1.25E-05	0.00E+00
CHILD	6.82E-04	1.19E-03	2.29E-04	4.53E-04	1.11E-04	3.33E-03	1.88E-05	0.00E+00
MEAT								
ADULT	6.25E-05	4.74E-04	1.01E-05	4.86E-05	1.31E-05	3.45E-05	1.64E-06	0.00E+00
TEEN	4.87E-05	2.55E-04	7.64E-06	3.78E-05	9.73E-06	2.50E-05	1.49E-06	0.00E+00
CHILD	7.47E-05	1.29E-04	1.26E-05	4.49E-05	1.12E-05	3.77E-05	1.70E-06	0.00E+00
COW MILK								
ADULT	6.22E-05	1.43E-04	4.51E-05	1.05E-04	6.01E-05	9.77E-04	3.37E-06	0.00E+00
TEEN	9.27E-05	1.66E-04	7.59E-05	1.78E-04	9.90E-05	1.55E-03	6.95E-06	0.00E+00
CHILD	1.64E-04	1.08E-04	1.68E-04	2.82E-04	1.51E-04	3.07E-03	1.07E-05	0.00E+00
INFANT	2.23E-04	3.18E-04	2.58E-04	5.18E-04	2.16E-04	7.46E-03	1.94E-05	0.00E+00
GOATMILK								
ADULT	6.31E-05	1.99E-05	6.91E-05	9.79E-05	4.07E-05	1.17E-03	9.66E-06	0.00E+00
TEEN	6.47E-05	2.36E-05	1.25E-04	1.72E-04	7.12E-05	1.86E-03	2.00E-05	0.00E+00
CHILD	6.26E-05	1.59E-05	2.98E-04	2.95E-04	1.17E-04	3.69E-03	3.07E-05	0.00E+00
INFANT	7.26E-05	4.10E-05	4.82E-04	5.77E-04	1.87E-04	8.96E-03	5.55E-05	0.00E+00
INHAL								
ADULT	3.93E-06	5.14E-05	1.59E-06	5.19E-06	2.38E-06	1.70E-04	1.02E-03	0.00E+00
TEEN	4.89E-06	4.86E-05	2.18E-06	6.89E-06	3.20E-06	2.17E-04	1.50E-03	0.00E+00
CHILD	5.24E-06	3.55E-05	2.88E-06	6.21E-06	2.90E-06	2.60E-04	1.21E-03	0.00E+00
INFANT	2.76E-06	2.22E-05	1.89E-06	4.25E-06	1.75E-06	2.38E-04	7.76E-04	0.00E+00

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TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 2.31E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 3.78E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.53E-04	2.53E-04	2.53E-04	2.53E-04	2.53E-04	2.53E-04	2.56E-04	4.97E-04
GROUND	4.82E-03	4.82E-03	4.82E-03	4.82E-03	4.82E-03	4.82E-03	4.82E-03	5.67E-03
VEGET								
ADULT	9.23E-05	6.63E-04	3.41E-05	7.24E-05	1.89E-05	5.82E-04	2.64E-06	0.00E+00
TEEN	1.37E-04	7.05E-04	5.47E-05	1.12E-04	2.86E-05	7.83E-04	4.86E-06	0.00E+00
CHILD	2.64E-04	4.61E-04	1.29E-04	1.76E-04	4.39E-05	1.50E-03	7.31E-06	0.00E+00
MEAT								
ADULT	2.41E-05	1.83E-04	4.01E-06	1.88E-05	5.07E-06	1.56E-05	6.36E-07	0.00E+00
TEEN	1.88E-05	9.83E-05	3.04E-06	1.46E-05	3.76E-06	1.13E-05	5.78E-07	0.00E+00
CHILD	2.88E-05	4.97E-05	5.05E-06	1.73E-05	4.32E-06	1.70E-05	6.59E-07	0.00E+00
COW MILK								
ADULT	2.42E-05	5.51E-05	1.81E-05	4.07E-05	2.36E-05	4.41E-04	1.31E-06	0.00E+00
TEEN	3.60E-05	6.41E-05	3.05E-05	6.93E-05	3.88E-05	6.99E-04	2.70E-06	0.00E+00
CHILD	6.36E-05	4.19E-05	6.79E-05	1.10E-04	5.95E-05	1.39E-03	4.15E-06	0.00E+00
INFANT	8.67E-05	1.22E-04	1.05E-04	2.02E-04	8.51E-05	3.37E-03	7.55E-06	0.00E+00
GOATMILK								
ADULT	2.47E-05	7.91E-06	2.80E-05	3.83E-05	1.62E-05	5.29E-04	3.76E-06	0.00E+00
TEEN	2.54E-05	9.42E-06	5.05E-05	6.73E-05	2.84E-05	8.38E-04	7.77E-06	0.00E+00
CHILD	2.48E-05	6.38E-06	1.21E-04	1.15E-04	4.66E-05	1.66E-03	1.19E-05	0.00E+00
INFANT	2.91E-05	1.60E-05	1.97E-04	2.26E-04	7.46E-05	4.05E-03	2.16E-05	0.00E+00
INHAL								
ADULT	1.20E-06	1.27E-05	6.55E-07	1.74E-06	9.63E-07	4.48E-05	2.50E-04	0.00E+00
TEEN	1.53E-06	1.21E-05	9.06E-07	2.33E-06	1.31E-06	5.73E-05	3.65E-04	0.00E+00
CHILD	1.69E-06	1.00E-05	1.21E-06	2.15E-06	1.20E-06	6.86E-05	2.96E-04	0.00E+00
INFANT	9.70E-07	7.05E-06	8.61E-07	1.63E-06	7.53E-07	6.29E-05	1.90E-04	0.00E+00

TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 1.73E-04 MILLRADS
ANNUAL GAMMA AIR DOSE = 2.83E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.92E-04	3.73E-04
GROUND	3.15E-04	3.15E-04	3.15E-04	3.15E-04	3.15E-04	3.15E-04	3.15E-04	3.71E-04
VEGET								
ADULT	6.08E-06	4.34E-05	3.44E-06	4.77E-06	1.29E-06	4.78E-05	1.75E-07	0.00E+00
TEEN	9.03E-06	4.62E-05	5.56E-06	7.37E-06	1.95E-06	6.42E-05	3.21E-07	0.00E+00
CHILD	1.74E-05	3.02E-05	1.32E-05	1.16E-05	3.01E-06	1.23E-04	4.83E-07	0.00E+00
MEAT								
ADULT	1.57E-06	1.19E-05	2.75E-07	1.23E-06	3.32E-07	1.28E-06	4.18E-08	0.00E+00
TEEN	1.23E-06	6.41E-06	2.10E-07	9.52E-07	2.47E-07	9.25E-07	3.79E-08	0.00E+00
CHILD	1.88E-06	3.24E-06	3.51E-07	1.13E-06	2.83E-07	1.40E-06	4.33E-08	0.00E+00
COW MILK								
ADULT	1.60E-06	3.61E-06	1.26E-06	2.69E-06	1.58E-06	3.62E-05	8.70E-08	0.00E+00
TEEN	2.38E-06	4.20E-06	2.13E-06	4.58E-06	2.61E-06	5.74E-05	1.79E-07	0.00E+00
CHILD	4.20E-06	2.75E-06	4.78E-06	7.26E-06	4.01E-06	1.14E-04	2.75E-07	0.00E+00
INFANT	5.75E-06	8.00E-06	7.52E-06	1.34E-05	5.78E-06	2.77E-04	5.01E-07	0.00E+00
GOATMILK								
ADULT	1.65E-06	5.42E-07	1.99E-06	2.56E-06	1.12E-06	4.34E-05	2.50E-07	0.00E+00
TEEN	1.71E-06	6.50E-07	3.59E-06	4.51E-06	1.96E-06	6.88E-05	5.16E-07	0.00E+00
CHILD	1.70E-06	4.45E-07	8.62E-06	7.73E-06	3.22E-06	1.37E-04	7.92E-07	0.00E+00
INFANT	2.04E-06	1.07E-06	1.42E-05	1.52E-05	5.18E-06	3.32E-04	1.43E-06	0.00E+00
INHAL								
ADULT	2.73E-07	1.14E-06	2.45E-07	4.79E-07	3.53E-07	6.16E-06	2.09E-05	0.00E+00
TEEN	3.65E-07	1.17E-06	3.43E-07	6.56E-07	4.85E-07	7.92E-06	3.05E-05	0.00E+00
CHILD	4.36E-07	1.59E-06	4.63E-07	6.32E-07	4.52E-07	9.53E-06	2.48E-05	0.00E+00
INFANT	2.92E-07	1.55E-06	3.58E-07	5.56E-07	2.95E-07	8.73E-06	1.59E-05	0.00E+00

TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 2.51E-04 MILLRADS
ANNUAL GAMMA AIR DOSE = 4.09E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.74E-04	2.74E-04	2.74E-04	2.74E-04	2.74E-04	2.74E-04	2.77E-04	5.38E-04
GROUND	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.51E-03
VEGET								
ADULT	2.46E-05	1.76E-04	1.18E-05	1.93E-05	5.16E-06	1.77E-04	7.07E-07	0.00E+00
TEEN	3.66E-05	1.88E-04	1.90E-05	2.99E-05	7.79E-06	2.38E-04	1.30E-06	0.00E+00
CHILD	7.05E-05	1.23E-04	4.49E-05	4.69E-05	1.20E-05	4.56E-04	1.95E-06	0.00E+00
MEAT								
ADULT	6.40E-06	4.85E-05	1.10E-06	4.99E-06	1.35E-06	4.73E-06	1.70E-07	0.00E+00
TEEN	4.99E-06	2.61E-05	8.33E-07	3.87E-06	1.00E-06	3.43E-06	1.54E-07	0.00E+00
CHILD	7.65E-06	1.32E-05	1.39E-06	4.60E-06	1.15E-06	5.17E-06	1.76E-07	0.00E+00
COW MILK								
ADULT	6.46E-06	1.47E-05	4.98E-06	1.09E-05	6.36E-06	1.34E-04	3.51E-07	0.00E+00
TEEN	9.63E-06	1.71E-05	8.42E-06	1.85E-05	1.05E-05	2.13E-04	7.25E-07	0.00E+00
CHILD	1.70E-05	1.12E-05	1.88E-05	2.93E-05	1.61E-05	4.22E-04	1.11E-06	0.00E+00
INFANT	2.32E-05	3.25E-05	2.94E-05	5.42E-05	2.31E-05	1.03E-03	2.02E-06	0.00E+00
GOATMILK								
ADULT	6.65E-06	2.16E-06	7.80E-06	1.03E-05	4.45E-06	1.61E-04	1.01E-06	0.00E+00
TEEN	6.87E-06	2.58E-06	1.41E-05	1.81E-05	7.79E-06	2.55E-04	2.08E-06	0.00E+00
CHILD	6.77E-06	1.76E-06	3.38E-05	3.11E-05	1.28E-05	5.06E-04	3.20E-06	0.00E+00
INFANT	8.05E-06	4.32E-06	5.52E-05	6.10E-05	2.05E-05	1.23E-03	5.79E-06	0.00E+00
INHAL								
ADULT	5.74E-07	4.01E-06	4.26E-07	9.29E-07	6.18E-07	1.67E-05	7.72E-05	0.00E+00
TEEN	7.51E-07	3.95E-06	5.94E-07	1.26E-06	8.46E-07	2.14E-05	1.13E-04	0.00E+00
CHILD	8.69E-07	4.24E-06	8.00E-07	1.19E-06	7.85E-07	2.57E-05	9.15E-05	0.00E+00
INFANT	5.48E-07	3.54E-06	6.02E-07	9.97E-07	5.06E-07	2.35E-05	5.87E-05	0.00E+00

TABLE 7. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014

SPECIAL LOCATION NO. 1A Site Boundary
 AT .67 MILES N

ANNUAL BETA AIR DOSE = 1.03E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 1.67E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.13E-04	2.20E-04
GROUND	1.72E-02	1.72E-02	1.72E-02	1.72E-02	1.72E-02	1.72E-02	1.72E-02	2.02E-02
VEGET								
ADULT	3.34E-04	2.37E-03	2.65E-04	2.57E-04	7.08E-05	3.25E-03	9.43E-06	0.00E+00
TEEN	4.95E-04	2.52E-03	4.34E-04	3.97E-04	1.07E-04	4.37E-03	1.74E-05	0.00E+00
CHILD	9.54E-04	1.65E-03	1.04E-03	6.25E-04	1.66E-04	8.37E-03	2.61E-05	0.00E+00
MEAT								
ADULT	8.46E-05	6.44E-04	1.48E-05	6.40E-05	1.66E-05	8.70E-05	2.11E-06	0.00E+00
TEEN	6.59E-05	3.47E-04	1.14E-05	4.97E-05	1.24E-05	6.30E-05	1.92E-06	0.00E+00
CHILD	1.01E-04	1.75E-04	1.93E-05	5.92E-05	1.43E-05	9.52E-05	2.19E-06	0.00E+00
COW MILK								
ADULT	8.47E-05	1.91E-04	7.12E-05	1.40E-04	8.28E-05	2.45E-03	4.87E-06	0.00E+00
TEEN	1.25E-04	2.23E-04	1.22E-04	2.39E-04	1.38E-04	3.88E-03	1.01E-05	0.00E+00
CHILD	2.18E-04	1.46E-04	2.78E-04	3.81E-04	2.13E-04	7.69E-03	1.54E-05	0.00E+00
INFANT	3.01E-04	4.03E-04	4.48E-04	7.09E-04	3.10E-04	1.87E-02	2.80E-05	0.00E+00
GOATMILK								
ADULT	9.36E-05	3.06E-05	1.20E-04	1.44E-04	6.47E-05	2.94E-03	1.41E-05	0.00E+00
TEEN	9.70E-05	3.71E-05	2.17E-04	2.54E-04	1.13E-04	4.66E-03	2.91E-05	0.00E+00
CHILD	9.67E-05	2.57E-05	5.23E-04	4.36E-04	1.87E-04	9.23E-03	4.47E-05	0.00E+00
INFANT	1.18E-04	5.64E-05	8.73E-04	8.60E-04	3.02E-04	2.24E-02	8.08E-05	0.00E+00
INHAL								
ADULT	4.99E-06	6.15E-05	2.52E-06	6.71E-06	3.75E-06	3.33E-04	1.23E-03	0.00E+00
TEEN	6.19E-06	5.65E-05	3.49E-06	8.94E-06	5.08E-06	4.23E-04	1.79E-03	0.00E+00
CHILD	6.63E-06	2.51E-05	4.65E-06	8.14E-06	4.65E-06	5.01E-04	1.45E-03	0.00E+00
INFANT	3.58E-06	1.12E-05	3.16E-06	5.80E-06	2.89E-06	4.59E-04	9.29E-04	0.00E+00

TABLE 7. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 2A Site Boundary
 AT .65 MILES SE

ANNUAL BETA AIR DOSE = 3.47E-05 MILLRADS
 ANNUAL GAMMA AIR DOSE = 5.67E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.80E-05	3.84E-05	7.46E-05
GROUND	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.51E-02
VEGET								
ADULT	2.49E-04	1.77E-03	1.55E-04	1.92E-04	5.26E-05	2.35E-03	7.05E-06	0.00E+00
TEEN	3.68E-04	1.88E-03	2.52E-04	2.97E-04	7.97E-05	3.16E-03	1.30E-05	0.00E+00
CHILD	7.10E-04	1.23E-03	6.05E-04	4.68E-04	1.23E-04	6.06E-03	1.95E-05	0.00E+00
MEAT								
ADULT	6.34E-05	4.82E-04	1.07E-05	4.79E-05	1.24E-05	6.30E-05	1.58E-06	0.00E+00
TEEN	4.94E-05	2.60E-04	8.17E-06	3.72E-05	9.26E-06	4.57E-05	1.43E-06	0.00E+00
CHILD	7.57E-05	1.31E-04	1.38E-05	4.43E-05	1.07E-05	6.89E-05	1.64E-06	0.00E+00
COW MILK								
ADULT	6.33E-05	1.43E-04	5.11E-05	1.05E-04	6.17E-05	1.77E-03	3.64E-06	0.00E+00
TEEN	9.32E-05	1.67E-04	8.74E-05	1.79E-04	1.02E-04	2.81E-03	7.51E-06	0.00E+00
CHILD	1.63E-04	1.09E-04	1.98E-04	2.84E-04	1.58E-04	5.56E-03	1.15E-05	0.00E+00
INFANT	2.24E-04	3.01E-04	3.16E-04	5.30E-04	2.31E-04	1.35E-02	2.10E-05	0.00E+00
GOATMILK								
ADULT	6.97E-05	2.22E-05	8.52E-05	1.08E-04	4.80E-05	2.13E-03	1.05E-05	0.00E+00
TEEN	7.21E-05	2.67E-05	1.54E-04	1.90E-04	8.42E-05	3.37E-03	2.17E-05	0.00E+00
CHILD	7.14E-05	1.84E-05	3.71E-04	3.26E-04	1.38E-04	6.68E-03	3.34E-05	0.00E+00
INFANT	8.67E-05	4.14E-05	6.14E-04	6.42E-04	2.24E-04	1.62E-02	6.04E-05	0.00E+00
INHAL								
ADULT	3.23E-06	4.00E-05	1.60E-06	4.32E-06	2.39E-06	2.16E-04	7.99E-04	0.00E+00
TEEN	4.00E-06	3.66E-05	2.21E-06	5.75E-06	3.23E-06	2.74E-04	1.17E-03	0.00E+00
CHILD	4.28E-06	1.46E-05	2.95E-06	5.23E-06	2.96E-06	3.24E-04	9.46E-04	0.00E+00
INFANT	2.30E-06	5.73E-06	2.00E-06	3.71E-06	1.84E-06	2.97E-04	6.05E-04	0.00E+00

TABLE 7. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 3A Nearest Resident
 AT .90 MILES NW

ANNUAL BETA AIR DOSE = 3.15E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 5.15E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.46E-04	3.46E-04	3.46E-04	3.46E-04	3.46E-04	3.46E-04	3.49E-04	6.78E-04
GROUND	4.84E-03	4.84E-03	4.84E-03	4.84E-03	4.84E-03	4.84E-03	4.84E-03	5.70E-03
VEGET								
ADULT	9.66E-05	6.80E-04	1.52E-04	7.30E-05	2.07E-05	1.05E-03	2.68E-06	0.00E+00
TEEN	1.44E-04	7.26E-04	2.50E-04	1.13E-04	3.14E-05	1.41E-03	4.94E-06	0.00E+00
CHILD	2.78E-04	4.78E-04	6.07E-04	1.78E-04	4.87E-05	2.69E-03	7.44E-06	0.00E+00
MEAT								
ADULT	2.39E-05	1.82E-04	4.95E-06	1.81E-05	4.71E-06	2.80E-05	5.98E-07	0.00E+00
TEEN	1.86E-05	9.78E-05	3.86E-06	1.40E-05	3.51E-06	2.03E-05	5.43E-07	0.00E+00
CHILD	2.85E-05	4.95E-05	6.67E-06	1.67E-05	4.04E-06	3.06E-05	6.21E-07	0.00E+00
COW MILK								
ADULT	2.42E-05	5.46E-05	2.40E-05	3.99E-05	2.39E-05	7.90E-04	1.39E-06	0.00E+00
TEEN	3.57E-05	6.39E-05	4.16E-05	6.82E-05	3.98E-05	1.25E-03	2.87E-06	0.00E+00
CHILD	6.25E-05	4.20E-05	9.59E-05	1.09E-04	6.17E-05	2.48E-03	4.40E-06	0.00E+00
INFANT	8.68E-05	1.14E-04	1.60E-04	2.03E-04	9.05E-05	6.03E-03	8.00E-06	0.00E+00
GOATMILK								
ADULT	2.71E-05	9.96E-06	4.19E-05	4.15E-05	1.90E-05	9.48E-04	4.01E-06	0.00E+00
TEEN	2.84E-05	1.23E-05	7.60E-05	7.30E-05	3.34E-05	1.50E-03	8.29E-06	0.00E+00
CHILD	2.91E-05	8.71E-06	1.84E-04	1.25E-04	5.50E-05	2.98E-03	1.27E-05	0.00E+00
INFANT	3.66E-05	1.74E-05	3.15E-04	2.48E-04	8.91E-05	7.24E-03	2.31E-05	0.00E+00
INHAL								
ADULT	1.09E-06	1.10E-05	7.85E-07	1.60E-06	1.03E-06	6.62E-05	2.14E-04	0.00E+00
TEEN	1.38E-06	1.08E-05	1.09E-06	2.15E-06	1.40E-06	8.44E-05	3.13E-04	0.00E+00
CHILD	1.53E-06	1.07E-05	1.48E-06	1.99E-06	1.29E-06	1.01E-04	2.54E-04	0.00E+00
INFANT	8.90E-07	7.84E-06	1.05E-06	1.55E-06	8.23E-07	9.22E-05	1.63E-04	0.00E+00

TABLE 7. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 2.65E-05 MILLRADS
ANNUAL GAMMA AIR DOSE = 4.19E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.81E-05	2.81E-05	2.81E-05	2.81E-05	2.81E-05	2.81E-05	2.84E-05	5.35E-05
GROUND	3.24E-04	3.24E-04	3.24E-04	3.24E-04	3.24E-04	3.24E-04	3.24E-04	3.81E-04
VEGET								
ADULT	6.80E-06	4.71E-05	2.02E-05	4.96E-06	1.47E-06	8.42E-05	1.83E-07	0.00E+00
TEEN	1.01E-05	5.06E-05	3.34E-05	7.66E-06	2.23E-06	1.13E-04	3.37E-07	0.00E+00
CHILD	1.99E-05	3.36E-05	8.14E-05	1.21E-05	3.47E-06	2.17E-04	5.07E-07	0.00E+00
MEAT								
ADULT	1.60E-06	1.22E-05	4.31E-07	1.21E-06	3.17E-07	2.26E-06	4.03E-08	0.00E+00
TEEN	1.25E-06	6.56E-06	3.43E-07	9.42E-07	2.37E-07	1.63E-06	3.67E-08	0.00E+00
CHILD	1.91E-06	3.32E-06	6.06E-07	1.12E-06	2.73E-07	2.47E-06	4.19E-08	0.00E+00
COW MILK								
ADULT	1.67E-06	3.74E-06	2.11E-06	2.72E-06	1.66E-06	6.36E-05	9.52E-08	0.00E+00
TEEN	2.46E-06	4.39E-06	3.71E-06	4.65E-06	2.78E-06	1.01E-04	1.96E-07	0.00E+00
CHILD	4.30E-06	2.90E-06	8.71E-06	7.43E-06	4.31E-06	2.00E-04	3.01E-07	0.00E+00
INFANT	6.04E-06	7.73E-06	1.50E-05	1.40E-05	6.37E-06	4.85E-04	5.48E-07	0.00E+00
GOATMILK								
ADULT	1.90E-06	8.35E-07	3.85E-06	2.88E-06	1.36E-06	7.63E-05	2.75E-07	0.00E+00
TEEN	2.02E-06	1.05E-06	7.02E-06	5.06E-06	2.39E-06	1.21E-04	5.68E-07	0.00E+00
CHILD	2.17E-06	7.68E-07	1.71E-05	8.69E-06	3.94E-06	2.40E-04	8.73E-07	0.00E+00
INFANT	2.85E-06	1.35E-06	3.01E-05	1.72E-05	6.41E-06	5.82E-04	1.58E-06	0.00E+00
INHAL								
ADULT	9.66E-08	1.23E-06	1.40E-07	1.33E-07	9.25E-08	9.12E-06	2.20E-05	0.00E+00
TEEN	1.21E-07	1.18E-06	1.97E-07	1.78E-07	1.26E-07	1.16E-05	3.23E-05	0.00E+00
CHILD	1.30E-07	7.05E-07	2.68E-07	1.64E-07	1.16E-07	1.38E-05	2.62E-05	0.00E+00
INFANT	7.23E-08	3.86E-07	1.81E-07	1.21E-07	7.33E-08	1.27E-05	1.70E-05	0.00E+00

TABLE 7. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
 AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 3.47E-04 MILLRADS
 ANNUAL GAMMA AIR DOSE = 5.67E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.84E-04	7.46E-04
GROUND	1.32E-03	1.32E-03	1.32E-03	1.32E-03	1.32E-03	1.32E-03	1.32E-03	1.56E-03
VEGET								
ADULT	2.71E-05	1.89E-04	6.43E-05	2.01E-05	5.86E-06	3.20E-04	7.39E-07	0.00E+00
TEEN	4.04E-05	2.03E-04	1.06E-04	3.10E-05	8.88E-06	4.30E-04	1.36E-06	0.00E+00
CHILD	7.88E-05	1.34E-04	2.58E-04	4.89E-05	1.38E-05	8.24E-04	2.05E-06	0.00E+00
MEAT								
ADULT	6.53E-06	4.96E-05	1.58E-06	4.94E-06	1.29E-06	8.56E-06	1.64E-07	0.00E+00
TEEN	5.09E-06	2.67E-05	1.25E-06	3.84E-06	9.61E-07	6.20E-06	1.49E-07	0.00E+00
CHILD	7.79E-06	1.35E-05	2.18E-06	4.57E-06	1.11E-06	9.36E-06	1.70E-07	0.00E+00
COW MILK								
ADULT	6.72E-06	1.51E-05	7.69E-06	1.10E-05	6.68E-06	2.42E-04	3.84E-07	0.00E+00
TEEN	9.91E-06	1.77E-05	1.35E-05	1.88E-05	1.11E-05	3.83E-04	7.92E-07	0.00E+00
CHILD	1.73E-05	1.17E-05	3.14E-05	3.00E-05	1.73E-05	7.59E-04	1.22E-06	0.00E+00
INFANT	2.42E-05	3.14E-05	5.35E-05	5.63E-05	2.55E-05	1.85E-03	2.21E-06	0.00E+00
GOATMILK								
ADULT	7.59E-06	3.10E-06	1.38E-05	1.16E-05	5.40E-06	2.90E-04	1.11E-06	0.00E+00
TEEN	8.03E-06	3.87E-06	2.51E-05	2.03E-05	9.50E-06	4.59E-04	2.29E-06	0.00E+00
CHILD	8.45E-06	2.80E-06	6.11E-05	3.49E-05	1.56E-05	9.11E-04	3.52E-06	0.00E+00
INFANT	1.09E-05	5.17E-06	1.07E-04	6.92E-05	2.54E-05	2.21E-03	6.37E-06	0.00E+00
INHAL								
ADULT	5.64E-07	4.23E-06	5.46E-07	9.00E-07	6.37E-07	2.78E-05	7.93E-05	0.00E+00
TEEN	7.32E-07	4.26E-06	7.66E-07	1.22E-06	8.74E-07	3.55E-05	1.16E-04	0.00E+00
CHILD	8.41E-07	5.10E-06	1.04E-06	1.16E-06	8.12E-07	4.23E-05	9.41E-05	0.00E+00
INFANT	5.27E-07	4.17E-06	7.58E-07	9.63E-07	5.24E-07	3.88E-05	6.07E-05	0.00E+00

TABLE 8. DOSES TO POPULATION WITHIN 50 MILES, JANUARY-MARCH 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.15E-05 69.23%	7.15E-05 65.51%	7.15E-05 68.76%	7.15E-05 69.45%	7.15E-05 69.81%	7.15E-05 30.38%	7.24E-05 67.83%	1.63E-04 82.19%
GROUND	3.00E-05 29.10%	3.00E-05 27.53%	3.00E-05 28.90%	3.00E-05 29.19%	3.00E-05 29.34%	3.00E-05 12.77%	3.00E-05 28.14%	3.53E-05 17.81%
INHAL	3.33E-08 .03%	2.40E-07 .22%	4.83E-08 .05%	5.55E-08 .05%	7.51E-08 .07%	1.09E-05 4.62%	4.25E-06 3.98%	0.00E+00 .00%
VEGET	9.98E-07 .97%	4.98E-06 4.56%	1.54E-06 1.48%	5.46E-07 .53%	6.86E-08 .07%	1.45E-06 .62%	1.98E-08 .02%	0.00E+00 .00%
COW MILK	4.33E-07 .42%	6.76E-07 .62%	8.07E-07 .78%	6.77E-07 .66%	7.08E-07 .69%	1.19E-04 50.56%	3.07E-08 .03%	0.00E+00 .00%
MEAT	2.63E-07 .25%	1.71E-06 1.56%	4.25E-08 .04%	1.29E-07 .13%	1.79E-08 .02%	2.46E-06 1.04%	1.70E-09 .00%	0.00E+00 .00%
TOTAL	1.03E-04	1.09E-04	1.04E-04	1.03E-04	1.02E-04	2.35E-04	1.07E-04	1.98E-04

TABLE 9. DOSES TO POPULATION WITHIN 50 MILES, APRIL-JUNE 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	: 7.26E-06 : : 10.53% :	: 7.26E-06 : : 8.83% :	: 7.26E-06 : : 5.72% :	: 7.26E-06 : : 10.79% :	: 7.26E-06 : : 11.07% :	: 7.26E-06 : : 3.65% :	: 7.36E-06 : : 9.94% :	: 1.72E-05 : : 20.42% :
GROUND	: 5.70E-05 : : 82.71% :	: 5.70E-05 : : 69.38% :	: 5.70E-05 : : 44.93% :	: 5.70E-05 : : 84.78% :	: 5.70E-05 : : 86.95% :	: 5.70E-05 : : 28.67% :	: 5.70E-05 : : 76.97% :	: 6.70E-05 : : 79.58% :
INHAL	: 6.28E-08 : : .09% :	: 7.51E-07 : : .91% :	: 5.22E-07 : : .41% :	: 7.80E-08 : : .12% :	: 8.85E-08 : : .14% :	: 1.21E-05 : : 6.08% :	: 9.49E-06 : : 12.82% :	: 0.00E+00 : : .00% :
VEGET	: 3.12E-06 : : 4.53% :	: 1.26E-05 : : 15.33% :	: 5.12E-05 : : 40.40% :	: 1.24E-06 : : 1.84% :	: 2.31E-07 : : .35% :	: 1.46E-06 : : .73% :	: 7.68E-08 : : .10% :	: 0.00E+00 : : .00% :
COW MILK	: 1.02E-06 : : 1.48% :	: 1.77E-06 : : 2.16% :	: 9.93E-06 : : 7.83% :	: 1.43E-06 : : 2.13% :	: 9.49E-07 : : 1.45% :	: 1.19E-04 : : 59.62% :	: 1.16E-07 : : .16% :	: 0.00E+00 : : .00% :
MEAT	: 4.52E-07 : : .66% :	: 2.78E-06 : : 3.38% :	: 8.93E-07 : : .70% :	: 2.32E-07 : : .35% :	: 3.19E-08 : : .05% :	: 2.45E-06 : : 1.23% :	: 6.50E-09 : : .01% :	: 0.00E+00 : : .00% :
TOTAL	: 6.89E-05 :	: 8.21E-05 :	: 1.27E-04 :	: 6.72E-05 :	: 6.56E-05 :	: 1.99E-04 :	: 7.40E-05 :	: 8.42E-05 :

TABLE 10. DOSES TO POPULATION WITHIN 50 MILES, JANUARY-JUNE 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.07E-05 46.75%	8.07E-05 42.12%	8.07E-05 35.07%	8.07E-05 47.29%	8.07E-05 47.91%	8.07E-05 18.60%	8.18E-05 45.15%	1.85E-04 64.76%
GROUND	8.56E-05 49.58%	8.56E-05 44.66%	8.56E-05 37.19%	8.56E-05 50.15%	8.56E-05 50.81%	8.56E-05 19.73%	8.56E-05 47.24%	1.01E-04 35.24%
INHAL	9.50E-08 .05%	9.69E-07 .51%	5.50E-07 .24%	1.33E-07 .08%	1.64E-07 .10%	2.30E-05 5.30%	1.35E-05 7.47%	0.00E+00 .00%
VEGET	4.09E-06 2.37%	1.75E-05 9.11%	5.18E-05 22.53%	1.78E-06 1.04%	2.99E-07 .18%	2.90E-06 .67%	9.63E-08 .05%	0.00E+00 .00%
COW MILK	1.44E-06 .84%	2.43E-06 1.27%	1.05E-05 4.57%	2.10E-06 1.23%	1.65E-06 .98%	2.37E-04 54.58%	1.47E-07 .08%	0.00E+00 .00%
MEAT	7.14E-07 .41%	4.48E-06 2.34%	9.14E-07 .40%	3.61E-07 .21%	4.96E-08 .03%	4.89E-06 1.13%	8.17E-09 .00%	0.00E+00 .00%
TOTAL	1.73E-04	1.92E-04	2.30E-04	1.71E-04	1.69E-04	4.34E-04	1.81E-04	2.86E-04

TABLE 11. DOSES TO POPULATION WITHIN 50 MILES, JULY-SEPTEMBER 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.21E-05 41.09%	9.21E-05 37.84%	9.21E-05 40.98%	9.21E-05 40.83%	9.21E-05 41.83%	9.21E-05 21.26%	9.35E-05 37.98%	2.21E-04 60.05%
GROUND	1.25E-04 55.66%	1.25E-04 51.26%	1.25E-04 55.51%	1.25E-04 55.31%	1.25E-04 56.66%	1.25E-04 28.79%	1.25E-04 50.69%	1.47E-04 39.95%
INHAL	2.22E-07 .10%	1.45E-06 .59%	2.47E-07 .11%	3.68E-07 .16%	3.45E-07 .16%	3.37E-05 7.77%	2.72E-05 11.05%	0.00E+00 .00%
VEGET	4.05E-06 1.81%	1.70E-05 6.98%	3.68E-06 1.64%	3.57E-06 1.58%	7.89E-07 .36%	2.16E-06 .50%	2.60E-07 .11%	0.00E+00 .00%
COW MILK	2.05E-06 .91%	2.20E-06 .91%	3.77E-06 1.68%	4.17E-06 1.85%	2.10E-06 .95%	1.77E-04 40.84%	4.00E-07 .16%	0.00E+00 .00%
MEAT	9.76E-07 .44%	5.88E-06 2.42%	1.98E-07 .09%	5.87E-07 .26%	8.98E-08 .04%	3.65E-06 .84%	2.39E-08 .01%	0.00E+00 .00%
TOTAL	2.24E-04	2.43E-04	2.25E-04	2.26E-04	2.20E-04	4.33E-04	2.46E-04	3.67E-04

TABLE 12. DOSES TO POPULATION WITHIN 50 MILES, OCTOBER-DECEMBER 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.99E-05 8.90%	5.99E-05 7.61%	5.99E-05 9.15%	5.99E-05 8.90%	5.99E-05 9.18%	5.99E-05 8.26%	6.06E-05 8.12%	1.33E-04 16.40%
GROUND	5.78E-04 85.86%	5.78E-04 73.47%	5.78E-04 88.32%	5.78E-04 85.88%	5.78E-04 88.63%	5.78E-04 79.69%	5.78E-04 77.38%	6.80E-04 83.60%
INHAL	4.41E-07 .07%	4.52E-06 .58%	2.24E-07 .03%	5.81E-07 .09%	2.55E-07 .04%	9.16E-06 1.26%	1.07E-04 14.38%	0.00E+00 .00%
VEGET	1.87E-05 2.78%	9.28E-05 11.80%	7.26E-06 1.11%	1.26E-05 1.88%	2.73E-06 .42%	9.64E-07 .13%	3.32E-07 .04%	0.00E+00 .00%
COW MILK	1.05E-05 1.56%	1.68E-05 2.14%	8.04E-06 1.23%	1.76E-05 2.61%	1.01E-05 1.54%	7.57E-05 10.44%	3.86E-07 .05%	0.00E+00 .00%
MEAT	5.69E-06 .85%	3.46E-05 4.40%	9.85E-07 .15%	4.35E-06 .65%	1.22E-06 .19%	1.57E-06 .22%	1.50E-07 .02%	0.00E+00 .00%
TOTAL	6.73E-04	7.86E-04	6.54E-04	6.73E-04	6.52E-04	7.25E-04	7.47E-04	8.13E-04

TABLE 13. DOSES TO POPULATION WITHIN 50 MILES, JULY-DECEMBER 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.51E-04 16.44%	1.51E-04 14.35%	1.51E-04 16.77%	1.51E-04 16.41%	1.51E-04 16.90%	1.51E-04 12.83%	1.53E-04 14.84%	3.49E-04 29.00%
GROUND	7.27E-04 78.92%	7.27E-04 68.93%	7.27E-04 80.52%	7.27E-04 78.82%	7.27E-04 81.14%	7.27E-04 61.62%	7.27E-04 70.30%	8.55E-04 71.00%
INHAL	7.23E-07 .08%	6.66E-06 .63%	4.88E-07 .05%	1.02E-06 .11%	6.11E-07 .07%	4.04E-05 3.43%	1.52E-04 14.71%	0.00E+00 .00%
VEGET	2.28E-05 2.47%	1.10E-04 10.43%	1.10E-05 1.21%	1.62E-05 1.76%	3.52E-06 .39%	3.12E-06 .26%	5.91E-07 .06%	0.00E+00 .00%
COW MILK	1.25E-05 1.36%	1.91E-05 1.81%	1.18E-05 1.31%	2.17E-05 2.36%	1.22E-05 1.36%	2.52E-04 21.41%	7.86E-07 .08%	0.00E+00 .00%
MEAT	6.67E-06 .72%	4.06E-05 3.85%	1.18E-06 .13%	4.94E-06 .54%	1.31E-06 .15%	5.22E-06 .44%	1.74E-07 .02%	0.00E+00 .00%
TOTAL	9.21E-04	1.05E-03	9.02E-04	9.22E-04	8.95E-04	1.18E-03	1.03E-03	1.20E-03

TABLE 14. DOSES TO POPULATION WITHIN 50 MILES, JANUARY-DECEMBER 2014

ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (PERSON-REM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.24E-04 20.82%	2.24E-04 18.25%	2.24E-04 20.09%	2.24E-04 20.83%	2.24E-04 21.40%	2.24E-04 14.03%	2.27E-04 19.31%	5.15E-04 35.29%
GROUND	8.02E-04 74.64%	8.02E-04 65.42%	8.02E-04 72.03%	8.02E-04 74.69%	8.02E-04 76.72%	8.02E-04 50.32%	8.02E-04 68.31%	9.44E-04 64.71%
INHAL	7.26E-07 .07%	6.75E-06 .55%	1.06E-06 .10%	1.03E-06 .10%	7.23E-07 .07%	6.28E-05 3.94%	1.44E-04 12.23%	0.00E+00 .00%
VEGET	2.68E-05 2.49%	1.27E-04 10.37%	6.23E-05 5.60%	1.80E-05 1.67%	3.82E-06 .37%	6.02E-06 .38%	6.87E-07 .06%	0.00E+00 .00%
COW MILK	1.40E-05 1.30%	2.15E-05 1.75%	2.22E-05 1.99%	2.38E-05 2.22%	1.38E-05 1.32%	4.89E-04 30.70%	9.33E-07 .08%	0.00E+00 .00%
MEAT	7.37E-06 .69%	4.50E-05 3.67%	2.09E-06 .19%	5.29E-06 .49%	1.36E-06 .13%	1.01E-05 .63%	1.82E-07 .02%	0.00E+00 .00%
TOTAL	1.07E-03	1.23E-03	1.11E-03	1.07E-03	1.05E-03	1.59E-03	1.17E-03	1.46E-03

CARBON-14 GASEOUS EFFLUENT DOSE CALCULATIONS

Doses to the maximum individual resulting from the release of Carbon-14 in gaseous effluents from the Cooper Nuclear Station (CNS) were calculated using the latest version of the GASPARG computer code included as part of NRC Dose 2.3.20 (ORNL 2015). Four pathways were selected for individual dose calculations: the nearest site boundary for inhalation, nearest garden for vegetation ingestion, nearest animal for meat ingestion, and the nearest milk animal (cow). Based on the 2014 Land Use Census, there are no meat or milk animals identified within 5 miles of CNS. However, CNS maintains a virtual cow receptor at 3.5 miles north-northwest of the plant and conservatively includes this receptor in dose calculations.

Use of a normalized Carbon-14 source term and scaling factors based on the annual thermal gigawatts (GW_T) power generation were utilized to determine the quantity of Carbon-14 in the CNS gaseous effluent discharge for 2014. Specifically, the Boiling Water Reactor proxy production rate of 5.1 curies Carbon-14 per GW_T generation using the methodology described in EPRI, 2010 was the basis for the CNS total calculated emissions of 10.9 curies of Carbon-14 in 2014.

GASPARG implements the radiological dose models of Regulatory Guide 1.109 for determining the radiation exposure to man from four principal atmospheric exposure pathways: plume, ground, inhalation, and ingestion. Doses to the maximum individual are calculated as a function of age group and pathway for significant body organs.

Tables 15 through 21 present maximum individual doses. Note that the inhalation pathway was calculated at the closest site boundary receptor and was negligible for Carbon-14 and is not included in the tables. In addition, the doses presented were conservatively calculated based on the annual site X/Qs. These X/Qs result in doses approximately 20% higher than those calculated with the X/Qs based on growing season meteorology.

Additional assumptions and data used for input to the GASPARG code are described in a separate section of this appendix (see page C66).

TABLE 15. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	4.44E-03	4.44E-03	2.22E-02	4.44E-03	4.44E-03	4.44E-03	4.44E-03	4.44E-03
TEEN	7.42E-03	7.42E-03	3.71E-02	7.42E-03	7.42E-03	7.42E-03	7.42E-03	7.42E-03
CHILD	1.81E-02	1.81E-02	9.03E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02
MEAT								
ADULT	1.77E-03	1.77E-03	8.85E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03
TEEN	1.50E-03	1.50E-03	7.48E-03	1.50E-03	1.50E-03	1.50E-03	1.50E-03	1.50E-03
CHILD	2.81E-03	2.81E-03	1.41E-02	2.81E-03	2.81E-03	2.81E-03	2.81E-03	2.81E-03
COW MILK								
ADULT	1.93E-03	1.93E-03	9.65E-03	1.93E-03	1.93E-03	1.93E-03	1.93E-03	1.93E-03
TEEN	3.56E-03	3.56E-03	1.78E-02	3.56E-03	3.56E-03	3.56E-03	3.56E-03	3.56E-03
CHILD	8.76E-03	8.76E-03	4.38E-02	8.76E-03	8.76E-03	8.76E-03	8.76E-03	8.76E-03
INFANT	1.83E-02	1.83E-02	8.58E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02
GOATMILK								
ADULT	1.93E-03	1.93E-03	9.65E-03	1.93E-03	1.93E-03	1.93E-03	1.93E-03	1.93E-03
TEEN	3.56E-03	3.56E-03	1.78E-02	3.56E-03	3.56E-03	3.56E-03	3.56E-03	3.56E-03
CHILD	8.76E-03	8.76E-03	4.38E-02	8.76E-03	8.76E-03	8.76E-03	8.76E-03	8.76E-03
INFANT	1.83E-02	1.83E-02	8.58E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02

CS2

TABLE 15. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-MARCH 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	1.43E-02	1.43E-02	7.15E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02
TEEN	2.39E-02	2.39E-02	1.20E-01	2.39E-02	2.39E-02	2.39E-02	2.39E-02	2.39E-02
CHILD	5.82E-02	5.82E-02	2.91E-01	5.82E-02	5.82E-02	5.82E-02	5.82E-02	5.82E-02
MEAT								
ADULT	5.71E-03	5.71E-03	2.85E-02	5.71E-03	5.71E-03	5.71E-03	5.71E-03	5.71E-03
TEEN	4.82E-03	4.82E-03	2.41E-02	4.82E-03	4.82E-03	4.82E-03	4.82E-03	4.82E-03
CHILD	9.07E-03	9.07E-03	4.53E-02	9.07E-03	9.07E-03	9.07E-03	9.07E-03	9.07E-03
COW MILK								
ADULT	6.23E-03	6.23E-03	3.11E-02	6.23E-03	6.23E-03	6.23E-03	6.23E-03	6.23E-03
TEEN	1.15E-02	1.15E-02	5.75E-02	1.15E-02	1.15E-02	1.15E-02	1.15E-02	1.15E-02
CHILD	2.83E-02	2.83E-02	1.41E-01	2.83E-02	2.83E-02	2.83E-02	2.83E-02	2.83E-02
INFANT	5.91E-02	5.91E-02	2.77E-01	5.91E-02	5.91E-02	5.91E-02	5.91E-02	5.91E-02
GOATMILK								
ADULT	6.23E-03	6.23E-03	3.11E-02	6.23E-03	6.23E-03	6.23E-03	6.23E-03	6.23E-03
TEEN	1.15E-02	1.15E-02	5.75E-02	1.15E-02	1.15E-02	1.15E-02	1.15E-02	1.15E-02
CHILD	2.83E-02	2.83E-02	1.41E-01	2.83E-02	2.83E-02	2.83E-02	2.83E-02	2.83E-02
INFANT	5.91E-02	5.91E-02	2.77E-01	5.91E-02	5.91E-02	5.91E-02	5.91E-02	5.91E-02

CS3

TABLE 16. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	4.77E-03	4.77E-03	2.39E-02	4.77E-03	4.77E-03	4.77E-03	4.77E-03	4.77E-03
TEEN	7.98E-03	7.98E-03	3.99E-02	7.98E-03	7.98E-03	7.98E-03	7.98E-03	7.98E-03
CHILD	1.94E-02	1.94E-02	9.72E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02
MEAT								
ADULT	1.91E-03	1.91E-03	9.53E-03	1.91E-03	1.91E-03	1.91E-03	1.91E-03	1.91E-03
TEEN	1.61E-03	1.61E-03	8.05E-03	1.61E-03	1.61E-03	1.61E-03	1.61E-03	1.61E-03
CHILD	3.03E-03	3.03E-03	1.51E-02	3.03E-03	3.03E-03	3.03E-03	3.03E-03	3.03E-03
COW MILK								
ADULT	2.08E-03	2.08E-03	1.04E-02	2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03
TEEN	3.83E-03	3.83E-03	1.92E-02	3.83E-03	3.83E-03	3.83E-03	3.83E-03	3.83E-03
CHILD	9.43E-03	9.43E-03	4.71E-02	9.43E-03	9.43E-03	9.43E-03	9.43E-03	9.43E-03
INFANT	1.97E-02	1.97E-02	9.23E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02
GOATMILK								
ADULT	2.08E-03	2.08E-03	1.04E-02	2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03
TEEN	3.83E-03	3.83E-03	1.92E-02	3.83E-03	3.83E-03	3.83E-03	3.83E-03	3.83E-03
CHILD	9.43E-03	9.43E-03	4.71E-02	9.43E-03	9.43E-03	9.43E-03	9.43E-03	9.43E-03
INFANT	1.97E-02	1.97E-02	9.23E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02

CS4

TABLE 16. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), APRIL-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	1.59E-02	1.59E-02	7.96E-02	1.59E-02	1.59E-02	1.59E-02	1.59E-02	1.59E-02
TEEN	2.66E-02	2.66E-02	1.33E-01	2.66E-02	2.66E-02	2.66E-02	2.66E-02	2.66E-02
CHILD	6.48E-02	6.48E-02	3.24E-01	6.48E-02	6.48E-02	6.48E-02	6.48E-02	6.48E-02
MEAT								
ADULT	6.35E-03	6.35E-03	3.18E-02	6.35E-03	6.35E-03	6.35E-03	6.35E-03	6.35E-03
TEEN	5.37E-03	5.37E-03	2.68E-02	5.37E-03	5.37E-03	5.37E-03	5.37E-03	5.37E-03
CHILD	1.01E-02	1.01E-02	5.04E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02
COW MILK								
ADULT	6.93E-03	6.93E-03	3.46E-02	6.93E-03	6.93E-03	6.93E-03	6.93E-03	6.93E-03
TEEN	1.28E-02	1.28E-02	6.39E-02	1.28E-02	1.28E-02	1.28E-02	1.28E-02	1.28E-02
CHILD	3.14E-02	3.14E-02	1.57E-01	3.14E-02	3.14E-02	3.14E-02	3.14E-02	3.14E-02
INFANT	6.57E-02	6.57E-02	3.08E-01	6.57E-02	6.57E-02	6.57E-02	6.57E-02	6.57E-02
GOATMILK								
ADULT	6.93E-03	6.93E-03	3.46E-02	6.93E-03	6.93E-03	6.93E-03	6.93E-03	6.93E-03
TEEN	1.28E-02	1.28E-02	6.39E-02	1.28E-02	1.28E-02	1.28E-02	1.28E-02	1.28E-02
CHILD	3.14E-02	3.14E-02	1.57E-01	3.14E-02	3.14E-02	3.14E-02	3.14E-02	3.14E-02
INFANT	6.57E-02	6.57E-02	3.08E-01	6.57E-02	6.57E-02	6.57E-02	6.57E-02	6.57E-02

CSS

TABLE 17. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	9.50E-03	9.50E-03	4.75E-02	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03
TEEN	1.59E-02	1.59E-02	7.94E-02	1.59E-02	1.59E-02	1.59E-02	1.59E-02	1.59E-02
CHILD	3.87E-02	3.87E-02	1.93E-01	3.87E-02	3.87E-02	3.87E-02	3.87E-02	3.87E-02
MEAT								
ADULT	3.79E-03	3.79E-03	1.89E-02	3.79E-03	3.79E-03	3.79E-03	3.79E-03	3.79E-03
TEEN	3.20E-03	3.20E-03	1.60E-02	3.20E-03	3.20E-03	3.20E-03	3.20E-03	3.20E-03
CHILD	6.02E-03	6.02E-03	3.01E-02	6.02E-03	6.02E-03	6.02E-03	6.02E-03	6.02E-03
COW MILK								
ADULT	4.13E-03	4.13E-03	2.07E-02	4.13E-03	4.13E-03	4.13E-03	4.13E-03	4.13E-03
TEEN	7.63E-03	7.63E-03	3.81E-02	7.63E-03	7.63E-03	7.63E-03	7.63E-03	7.63E-03
CHILD	1.88E-02	1.88E-02	9.38E-02	1.88E-02	1.88E-02	1.88E-02	1.88E-02	1.88E-02
INFANT	3.92E-02	3.92E-02	1.84E-01	3.92E-02	3.92E-02	3.92E-02	3.92E-02	3.92E-02
GOATMILK								
ADULT	4.13E-03	4.13E-03	2.07E-02	4.13E-03	4.13E-03	4.13E-03	4.13E-03	4.13E-03
TEEN	7.63E-03	7.63E-03	3.81E-02	7.63E-03	7.63E-03	7.63E-03	7.63E-03	7.63E-03
CHILD	1.88E-02	1.88E-02	9.38E-02	1.88E-02	1.88E-02	1.88E-02	1.88E-02	1.88E-02
INFANT	3.92E-02	3.92E-02	1.84E-01	3.92E-02	3.92E-02	3.92E-02	3.92E-02	3.92E-02

CS6

TABLE 17. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-JUNE 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	3.17E-02	3.17E-02	1.58E-01	3.17E-02	3.17E-02	3.17E-02	3.17E-02	3.17E-02
TEEN	5.29E-02	5.29E-02	2.65E-01	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02
CHILD	1.29E-01	1.29E-01	6.44E-01	1.29E-01	1.29E-01	1.29E-01	1.29E-01	1.29E-01
MEAT								
ADULT	1.26E-02	1.26E-02	6.32E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02
TEEN	1.07E-02	1.07E-02	5.34E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02
CHILD	2.01E-02	2.01E-02	1.00E-01	2.01E-02	2.01E-02	2.01E-02	2.01E-02	2.01E-02
COW MILK								
ADULT	1.38E-02	1.38E-02	6.89E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02
TEEN	2.54E-02	2.54E-02	1.27E-01	2.54E-02	2.54E-02	2.54E-02	2.54E-02	2.54E-02
CHILD	6.25E-02	6.25E-02	3.13E-01	6.25E-02	6.25E-02	6.25E-02	6.25E-02	6.25E-02
INFANT	1.31E-01	1.31E-01	6.12E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01
GOATMILK								
ADULT	1.38E-02	1.38E-02	6.89E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02
TEEN	2.54E-02	2.54E-02	1.27E-01	2.54E-02	2.54E-02	2.54E-02	2.54E-02	2.54E-02
CHILD	6.25E-02	6.25E-02	3.13E-01	6.25E-02	6.25E-02	6.25E-02	6.25E-02	6.25E-02
INFANT	1.31E-01	1.31E-01	6.12E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01

CS7

TABLE 18. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	5.70E-03	5.70E-03	2.85E-02	5.70E-03	5.70E-03	5.70E-03	5.70E-03	5.70E-03
TEEN	9.54E-03	9.54E-03	4.77E-02	9.54E-03	9.54E-03	9.54E-03	9.54E-03	9.54E-03
CHILD	2.32E-02	2.32E-02	1.16E-01	2.32E-02	2.32E-02	2.32E-02	2.32E-02	2.32E-02
MEAT								
ADULT	2.28E-03	2.28E-03	1.14E-02	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03
TEEN	1.92E-03	1.92E-03	9.62E-03	1.92E-03	1.92E-03	1.92E-03	1.92E-03	1.92E-03
CHILD	3.62E-03	3.62E-03	1.81E-02	3.62E-03	3.62E-03	3.62E-03	3.62E-03	3.62E-03
COW MILK								
ADULT	2.48E-03	2.48E-03	1.24E-02	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03
TEEN	4.58E-03	4.58E-03	2.29E-02	4.58E-03	4.58E-03	4.58E-03	4.58E-03	4.58E-03
CHILD	1.13E-02	1.13E-02	5.63E-02	1.13E-02	1.13E-02	1.13E-02	1.13E-02	1.13E-02
INFANT	2.36E-02	2.36E-02	1.10E-01	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02
GOATMILK								
ADULT	2.48E-03	2.48E-03	1.24E-02	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03
TEEN	4.58E-03	4.58E-03	2.29E-02	4.58E-03	4.58E-03	4.58E-03	4.58E-03	4.58E-03
CHILD	1.13E-02	1.13E-02	5.63E-02	1.13E-02	1.13E-02	1.13E-02	1.13E-02	1.13E-02
INFANT	2.36E-02	2.36E-02	1.10E-01	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02

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TABLE 18. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	1.90E-02	1.90E-02	9.51E-02	1.90E-02	1.90E-02	1.90E-02	1.90E-02	1.90E-02
TEEN	3.18E-02	3.18E-02	1.59E-01	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02
CHILD	7.74E-02	7.74E-02	3.87E-01	7.74E-02	7.74E-02	7.74E-02	7.74E-02	7.74E-02
MEAT								
ADULT	7.59E-03	7.59E-03	3.79E-02	7.59E-03	7.59E-03	7.59E-03	7.59E-03	7.59E-03
TEEN	6.41E-03	6.41E-03	3.21E-02	6.41E-03	6.41E-03	6.41E-03	6.41E-03	6.41E-03
CHILD	1.21E-02	1.21E-02	6.03E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02
COW MILK								
ADULT	8.28E-03	8.28E-03	4.14E-02	8.28E-03	8.28E-03	8.28E-03	8.28E-03	8.28E-03
TEEN	1.53E-02	1.53E-02	7.64E-02	1.53E-02	1.53E-02	1.53E-02	1.53E-02	1.53E-02
CHILD	3.75E-02	3.75E-02	1.88E-01	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02
INFANT	7.85E-02	7.85E-02	3.68E-01	7.85E-02	7.85E-02	7.85E-02	7.85E-02	7.85E-02
GOATMILK								
ADULT	8.28E-03	8.28E-03	4.14E-02	8.28E-03	8.28E-03	8.28E-03	8.28E-03	8.28E-03
TEEN	1.53E-02	1.53E-02	7.64E-02	1.53E-02	1.53E-02	1.53E-02	1.53E-02	1.53E-02
CHILD	3.75E-02	3.75E-02	1.88E-01	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02
INFANT	7.85E-02	7.85E-02	3.68E-01	7.85E-02	7.85E-02	7.85E-02	7.85E-02	7.85E-02

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TABLE 19. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	6.14E-03	6.14E-03	3.07E-02	6.14E-03	6.14E-03	6.14E-03	6.14E-03	6.14E-03
TEEN	1.03E-02	1.03E-02	5.14E-02	1.03E-02	1.03E-02	1.03E-02	1.03E-02	1.03E-02
CHILD	2.50E-02	2.50E-02	1.25E-01	2.50E-02	2.50E-02	2.50E-02	2.50E-02	2.50E-02
MEAT								
ADULT	2.45E-03	2.45E-03	1.23E-02	2.45E-03	2.45E-03	2.45E-03	2.45E-03	2.45E-03
TEEN	2.07E-03	2.07E-03	1.04E-02	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03
CHILD	3.89E-03	3.89E-03	1.95E-02	3.89E-03	3.89E-03	3.89E-03	3.89E-03	3.89E-03
COW MILK								
ADULT	2.67E-03	2.67E-03	1.34E-02	2.67E-03	2.67E-03	2.67E-03	2.67E-03	2.67E-03
TEEN	4.93E-03	4.93E-03	2.47E-02	4.93E-03	4.93E-03	4.93E-03	4.93E-03	4.93E-03
CHILD	1.21E-02	1.21E-02	6.07E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02
INFANT	2.54E-02	2.54E-02	1.19E-01	2.54E-02	2.54E-02	2.54E-02	2.54E-02	2.54E-02
GOATMILK								
ADULT	2.67E-03	2.67E-03	1.34E-02	2.67E-03	2.67E-03	2.67E-03	2.67E-03	2.67E-03
TEEN	4.93E-03	4.93E-03	2.47E-02	4.93E-03	4.93E-03	4.93E-03	4.93E-03	4.93E-03
CHILD	1.21E-02	1.21E-02	6.07E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02
INFANT	2.54E-02	2.54E-02	1.19E-01	2.54E-02	2.54E-02	2.54E-02	2.54E-02	2.54E-02

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TABLE 19. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	2.05E-02	2.05E-02	1.02E-01	2.05E-02	2.05E-02	2.05E-02	2.05E-02	2.05E-02
TEEN	3.42E-02	3.42E-02	1.71E-01	3.42E-02	3.42E-02	3.42E-02	3.42E-02	3.42E-02
CHILD	8.34E-02	8.34E-02	4.17E-01	8.34E-02	8.34E-02	8.34E-02	8.34E-02	8.34E-02
MEAT								
ADULT	8.17E-03	8.17E-03	4.09E-02	8.17E-03	8.17E-03	8.17E-03	8.17E-03	8.17E-03
TEEN	6.90E-03	6.90E-03	3.45E-02	6.90E-03	6.90E-03	6.90E-03	6.90E-03	6.90E-03
CHILD	1.30E-02	1.30E-02	6.49E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02
COW MILK								
ADULT	8.92E-03	8.92E-03	4.46E-02	8.92E-03	8.92E-03	8.92E-03	8.92E-03	8.92E-03
TEEN	1.64E-02	1.64E-02	8.22E-02	1.64E-02	1.64E-02	1.64E-02	1.64E-02	1.64E-02
CHILD	4.04E-02	4.04E-02	2.02E-01	4.04E-02	4.04E-02	4.04E-02	4.04E-02	4.04E-02
INFANT	8.46E-02	8.46E-02	3.96E-01	8.46E-02	8.46E-02	8.46E-02	8.46E-02	8.46E-02
GOATMILK								
ADULT	8.92E-03	8.92E-03	4.46E-02	8.92E-03	8.92E-03	8.92E-03	8.92E-03	8.92E-03
TEEN	1.64E-02	1.64E-02	8.22E-02	1.64E-02	1.64E-02	1.64E-02	1.64E-02	1.64E-02
CHILD	4.04E-02	4.04E-02	2.02E-01	4.04E-02	4.04E-02	4.04E-02	4.04E-02	4.04E-02
INFANT	8.46E-02	8.46E-02	3.96E-01	8.46E-02	8.46E-02	8.46E-02	8.46E-02	8.46E-02

TABLE 20. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	1.23E-02	1.23E-02	6.14E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02
TEEN	2.05E-02	2.05E-02	1.03E-01	2.05E-02	2.05E-02	2.05E-02	2.05E-02	2.05E-02
CHILD	5.00E-02	5.00E-02	2.50E-01	5.00E-02	5.00E-02	5.00E-02	5.00E-02	5.00E-02
MEAT								
ADULT	4.90E-03	4.90E-03	2.45E-02	4.90E-03	4.90E-03	4.90E-03	4.90E-03	4.90E-03
TEEN	4.14E-03	4.14E-03	2.07E-02	4.14E-03	4.14E-03	4.14E-03	4.14E-03	4.14E-03
CHILD	7.79E-03	7.79E-03	3.89E-02	7.79E-03	7.79E-03	7.79E-03	7.79E-03	7.79E-03
COW MILK								
ADULT	5.35E-03	5.35E-03	2.67E-02	5.35E-03	5.35E-03	5.35E-03	5.35E-03	5.35E-03
TEEN	9.87E-03	9.87E-03	4.93E-02	9.87E-03	9.87E-03	9.87E-03	9.87E-03	9.87E-03
CHILD	2.43E-02	2.43E-02	1.21E-01	2.43E-02	2.43E-02	2.43E-02	2.43E-02	2.43E-02
INFANT	5.07E-02	5.07E-02	2.38E-01	5.07E-02	5.07E-02	5.07E-02	5.07E-02	5.07E-02
GOATMILK								
ADULT	5.35E-03	5.35E-03	2.67E-02	5.35E-03	5.35E-03	5.35E-03	5.35E-03	5.35E-03
TEEN	9.87E-03	9.87E-03	4.93E-02	9.87E-03	9.87E-03	9.87E-03	9.87E-03	9.87E-03
CHILD	2.43E-02	2.43E-02	1.21E-01	2.43E-02	2.43E-02	2.43E-02	2.43E-02	2.43E-02
INFANT	5.07E-02	5.07E-02	2.38E-01	5.07E-02	5.07E-02	5.07E-02	5.07E-02	5.07E-02

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TABLE 20. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
 AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
 ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	4.10E-02	4.10E-02	2.05E-01	4.10E-02	4.10E-02	4.10E-02	4.10E-02	4.10E-02
TEEN	6.85E-02	6.85E-02	3.42E-01	6.85E-02	6.85E-02	6.85E-02	6.85E-02	6.85E-02
CHILD	1.67E-01	1.67E-01	8.34E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01
MEAT								
ADULT	1.63E-02	1.63E-02	8.17E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02
TEEN	1.38E-02	1.38E-02	6.90E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02
CHILD	2.60E-02	2.60E-02	1.30E-01	2.60E-02	2.60E-02	2.60E-02	2.60E-02	2.60E-02
COW MILK								
ADULT	1.78E-02	1.78E-02	8.92E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02
TEEN	3.29E-02	3.29E-02	1.64E-01	3.29E-02	3.29E-02	3.29E-02	3.29E-02	3.29E-02
CHILD	8.09E-02	8.09E-02	4.04E-01	8.09E-02	8.09E-02	8.09E-02	8.09E-02	8.09E-02
INFANT	1.69E-01	1.69E-01	7.92E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01
GOATMILK								
ADULT	1.78E-02	1.78E-02	8.92E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02
TEEN	3.29E-02	3.29E-02	1.64E-01	3.29E-02	3.29E-02	3.29E-02	3.29E-02	3.29E-02
CHILD	8.09E-02	8.09E-02	4.04E-01	8.09E-02	8.09E-02	8.09E-02	8.09E-02	8.09E-02
INFANT	1.69E-01	1.69E-01	7.92E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01

TABLE 21. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014

SPECIAL LOCATION NO. 4A Nearest Cow
AT 3.50 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	2.21E-02	2.21E-02	1.11E-01	2.21E-02	2.21E-02	2.21E-02	2.21E-02	2.21E-02
TEEN	3.70E-02	3.70E-02	1.85E-01	3.70E-02	3.70E-02	3.70E-02	3.70E-02	3.70E-02
CHILD	9.00E-02	9.00E-02	4.50E-01	9.00E-02	9.00E-02	9.00E-02	9.00E-02	9.00E-02
MEAT								
ADULT	8.82E-03	8.82E-03	4.41E-02	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03
TEEN	7.45E-03	7.45E-03	3.73E-02	7.45E-03	7.45E-03	7.45E-03	7.45E-03	7.45E-03
CHILD	1.40E-02	1.40E-02	7.01E-02	1.40E-02	1.40E-02	1.40E-02	1.40E-02	1.40E-02
COW MILK								
ADULT	9.63E-03	9.63E-03	4.81E-02	9.63E-03	9.63E-03	9.63E-03	9.63E-03	9.63E-03
TEEN	1.78E-02	1.78E-02	8.88E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02
CHILD	4.37E-02	4.37E-02	2.18E-01	4.37E-02	4.37E-02	4.37E-02	4.37E-02	4.37E-02
INFANT	9.13E-02	9.13E-02	4.28E-01	9.13E-02	9.13E-02	9.13E-02	9.13E-02	9.13E-02
GOATMILK								
ADULT	9.63E-03	9.63E-03	4.81E-02	9.63E-03	9.63E-03	9.63E-03	9.63E-03	9.63E-03
TEEN	1.78E-02	1.78E-02	8.88E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02
CHILD	4.37E-02	4.37E-02	2.18E-01	4.37E-02	4.37E-02	4.37E-02	4.37E-02	4.37E-02
INFANT	9.13E-02	9.13E-02	4.28E-01	9.13E-02	9.13E-02	9.13E-02	9.13E-02	9.13E-02

TABLE 21. CARBON-14 DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 2014 (Continued)

SPECIAL LOCATION NO. 5A Nearest Garden
AT 1.90 MILES NNW

ANNUAL BETA AIR DOSE = 0.00E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 0.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VEGET								
ADULT	7.56E-02	7.56E-02	3.78E-01	7.56E-02	7.56E-02	7.56E-02	7.56E-02	7.56E-02
TEEN	1.27E-01	1.27E-01	6.33E-01	1.27E-01	1.27E-01	1.27E-01	1.27E-01	1.27E-01
CHILD	3.08E-01	3.08E-01	1.54E+00	3.08E-01	3.08E-01	3.08E-01	3.08E-01	3.08E-01
MEAT								
ADULT	3.02E-02	3.02E-02	1.51E-01	3.02E-02	3.02E-02	3.02E-02	3.02E-02	3.02E-02
TEEN	2.55E-02	2.55E-02	1.28E-01	2.55E-02	2.55E-02	2.55E-02	2.55E-02	2.55E-02
CHILD	4.79E-02	4.79E-02	2.40E-01	4.79E-02	4.79E-02	4.79E-02	4.79E-02	4.79E-02
COW MILK								
ADULT	3.29E-02	3.29E-02	1.65E-01	3.29E-02	3.29E-02	3.29E-02	3.29E-02	3.29E-02
TEEN	6.08E-02	6.08E-02	3.04E-01	6.08E-02	6.08E-02	6.08E-02	6.08E-02	6.08E-02
CHILD	1.49E-01	1.49E-01	7.47E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
INFANT	3.12E-01	3.12E-01	1.46E+00	3.12E-01	3.12E-01	3.12E-01	3.12E-01	3.12E-01
GOATMILK								
ADULT	3.29E-02	3.29E-02	1.65E-01	3.29E-02	3.29E-02	3.29E-02	3.29E-02	3.29E-02
TEEN	6.08E-02	6.08E-02	3.04E-01	6.08E-02	6.08E-02	6.08E-02	6.08E-02	6.08E-02
CHILD	1.49E-01	1.49E-01	7.47E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
INFANT	3.12E-01	3.12E-01	1.46E+00	3.12E-01	3.12E-01	3.12E-01	3.12E-01	3.12E-01

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DOSE CALCULATION MODELS

To evaluate the radiological consequences of the routine release of liquid and gaseous effluents from the Cooper Nuclear Station, the latest versions of two computer codes were used: LADTAP II for liquid doses and GASPAR for gaseous doses included as part of NRC Dose 2.3.20 (ORNL 2015). Both of these computer codes implement the dose calculational methodologies of U.S. NRC Regulatory Guide 1.109, Revision 1.

Source terms for each quarter are combined with station-specific demographic data and either hydrological dilution factors, for liquid dose calculations, or atmospheric diffusion estimates, for gaseous dose calculations.

For liquid dose calculations, the hydrological dilution factors used for input to LADTAP II, as well as other input parameters, are listed in Table 22. Other inputs not specifically listed in this table are taken from Regulatory Guide 1.109, Revision 1. Semiannual doses are obtained by summing the contributions from the appropriate quarters.

For gaseous dose calculations, atmospheric diffusion estimates are obtained from the reduction and processing of onsite meteorological data, as described in Appendix B. Source terms for the semiannual period are obtained by summing source terms for the appropriate quarters. Additional input to GASPAR includes the following station-supplied data:

- 0 to 50 mile population distribution
- 0 to 50 mile meat, milk, and vegetable distributions
- Absolute humidity at Cooper Nuclear Station (14.61 g/m³)
- The fraction of the year that the vegetables are grown (0.5)
- The fraction of the daily feed intake derived from pasture for milk and meat animals (0.5)

Other values used for input to GASPAR are default values from Regulatory Guide 1.109, Rev. 1.

TABLE 22. Values of Parameters Used to Make Dose Estimates Resulting From Liquid Discharges at Cooper Nuclear Station January-December 2014

Parameter	Values Assigned	
	Individual	Population
Cooling flow rate (cfs) * (Average daily value)	Q1 NR	NR
	Q2 NR	NR
	Q3 NR	NR
	Q4 NR	NR
Dilution factor*	Q1 NR	NR
	Q2 NR	NR
	Q3 NR	NR
	Q4 NR	NR
Holding time:		
Fish	24 hr ***	168 hr ***
Drinking water	12 hr ***	22.4 hr **
Shoreline exposure	0 hr ***	22.4 hr **
Swimming	0 hr ***	22.4 hr **
Boating	0 hr ***	22.4 hr **

* Q1, Q2, Q3, and Q4 represent first, second, third and fourth quarter station data for 2013, respectively.

** Based on an average Missouri River water flow of 5.5 ft/sec, 84 miles down the river.

*** Values from Regulatory Guide 1.109, Revision 1.

NR- No release

REFERENCES

Electric Power Research Institute, Technical Report 1021106, "Estimation of Carbon-14 in Nuclear Power Plant Gaseous Effluents", December 2010.

Oak Ridge National Laboratory, NRC Dose 2.3.20, "Code System for Evaluating Routine Radioactive Effluents from Nuclear Power Plants with Windows Interface", February 2015.

U.S. Nuclear Regulatory Commission, Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants", Revision 1, 1974.

U.S. Nuclear Regulatory Commission, Regulatory Guide 1.23 (Safety Guide 23), "Onsite Meteorological Programs", Revision 0, 1972.

U.S. Nuclear Regulatory Commission, Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors", Revision 1, 1977.

U.S. Nuclear Regulatory Commission, NUREG/CR-2919, "XOQDOQ: Computer Program for the Meteorological Evaluation of Routine Effluent Releases at Nuclear Power Stations", 1982.

U.S. Nuclear Regulatory Commission, Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors", Revision 0, 1976.

U.S. Nuclear Regulatory Commission, NUREG-0597, "User's Guide to GASPAR Code", December 1980.

U.S. Nuclear Regulatory Commission, NUREG/CR-1276, "User's Manual for LADTAP II: A Computer Code for Calculating Radiation Exposure to Man From Routine Release of Nuclear Reactor Liquid Effluents", 1980.

U.S. Nuclear Regulatory Commission, Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR 50, Appendix I", Revision 1, 1977.