

NLS2015058
Enclosure 1

Enclosure 1

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

CONTENTS

Introduction

Appendix A: Source Terms

Appendix B: Meteorology

Appendix C: Dose Calculations

References

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

| | <u>Page</u> |
|--|-------------|
| METEOROLOGICAL DATA SUMMARIES | B1 |
| MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA | B6 |
| JOINT FREQUENCY DISTRIBUTION TABLES | B130 |
| ATMOSPHERIC DIFFUSION ESTIMATES | B239 |
| 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 <u>2014</u> | April- June <u>2014</u> | January- June <u>2014</u> | July- Sept. <u>2014</u> | October- Dec. <u>2014</u> | July- Dec. <u>2014</u> | January- Dec. <u>2014</u> |
|--------------------------|----------------------------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|------------------------------|---------------------------------|
| 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

PROGRAM: WETTEMP
VERSION: PC-1.0

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 | |

PROGRAM: WETTEMP
VERSION: PC-1.0

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | 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 | |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | 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 |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | 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 |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | OBS | (DEG F) |
| 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 |

B12

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 |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | OBS | (DEG F) |
| 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 |

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 |

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 |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | 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 | |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | OBS | (DEG F) |
| 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 |

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 |

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 |

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 | | NUMBER | | NUMBER | | NUMBER | | NUMBER | |
| | OBS | (DEG F) | OBS | (DEG F) | OBS | (%) | OBS | (GM/M3) | 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 |

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 | (DEG F) | NUMBER | (DEG F) | NUMBER | (%) | NUMBER | (GM/M3) | NUMBER | (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 |

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 |

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 |

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 |

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

NPPD-COOPER NUCLEAR STATION 10-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 | 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

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

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

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 | 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

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 1 | 12.9 | 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

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

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APR-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 | 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

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 | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

AUGUST

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | CALM | |
| 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

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

SEPTEMBER

| | | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|-----|--------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| HR. | OF DAY | 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 | 3.3 | 10.0 | 13.3 | 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 | 3.3 | 6.7 | 10.0 | 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

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

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

| 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 | 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 | 3.3 | 6.7 | 6.7 | 10.0 | 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

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 1 | 12.9 | 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

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

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-DEC

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|-----|-----|-----|-----|-----|------|------|------|-----|-----|-----|------|-----|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

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

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

| 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 | 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

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 | 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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MARCH

| | | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|-----|--------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| HR. | OF DAY | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APRIL

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

| 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 | 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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUNE

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | CALM | |
| 1 | 6.7 | 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

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

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|------|-----|-----|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JULY

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

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 | 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 | 1.2 | 1.5 | 2.6 | 5.8 | 00.0 | 100. |

NUMBER OF OBS = 744

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 | 3.3 | 26.7 | 26.7 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 6.7 | 100. |
| 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 | 3.3 | 00.0 | 100. |
| 3 | 10.0 | 6.7 | 3.3 | 3.3 | 00.0 | 6.7 | 10.0 | 23.3 | 20.0 | 6.7 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 00.0 | 100. |
| 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 | 3.3 | 00.0 | 00.0 | 3.3 | 6.7 | 100. |
| 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 | 6.7 | 3.3 | 3.3 | 6.7 | 3.3 | 100. |
| 6 | 10.0 | 6.7 | 00.0 | 00.0 | 10.0 | 6.7 | 00.0 | 23.3 | 23.3 | 3.3 | 3.3 | 00.0 | 6.7 | 3.3 | 3.3 | 10.0 | 00.0 | 100. |
| 7 | 3.3 | 13.3 | 00.0 | 00.0 | 6.7 | 00.0 | 00.0 | 16.7 | 33.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 10.0 | 00.0 | 100. |
| 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. |
| 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. |
| 10 | 3.3 | 10.0 | 00.0 | 00.0 | 00.0 | 3.3 | 10.0 | 20.0 | 30.0 | 3.3 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 10.0 | 100. |
| 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. |
| 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 | 13.3 | 100. |
| 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. |
| 14 | 6.7 | 6.7 | 00.0 | 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 | 10.0 | 100. |
| 15 | 6.7 | 3.3 | 3.3 | 00.0 | 00.0 | 3.3 | 13.3 | 33.3 | 00.0 | 00.0 | 6.7 | 6.7 | 00.0 | 00.0 | 00.0 | 00.0 | 10.0 | 100. |
| 16 | 6.7 | 3.3 | 3.3 | 00.0 | 00.0 | 6.7 | 3.3 | 30.0 | 20.0 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.7 | 00.0 | 100. |
| 17 | 6.7 | 10.0 | 3.3 | 00.0 | 00.0 | 6.7 | 3.3 | 20.0 | 16.7 | 23.3 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 10.0 | 100. |
| 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 | 6.7 | 00.0 | 100. |
| 19 | 10.0 | 10.0 | 3.3 | 00.0 | 6.7 | 6.7 | 13.3 | 13.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 6.7 | 100. |
| 20 | 6.7 | 6.7 | 10.0 | 00.0 | 3.3 | 10.0 | 13.3 | 10.0 | 33.3 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.7 | 100. |
| 21 | 3.3 | 13.3 | 6.7 | 3.3 | 00.0 | 10.0 | 33.3 | 10.0 | 33.3 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 00.0 | 100. |
| 22 | 13.3 | 6.7 | 3.3 | 6.7 | 00.0 | 6.7 | 10.0 | 33.3 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 100. |
| 23 | 13.3 | 6.7 | 00.0 | 3.3 | 3.3 | 10.0 | 6.7 | 30.0 | 13.3 | 13.3 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 00.0 | 100. |
| 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 | 3.3 | 00.0 | 100. |
| 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. |

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

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|-----|-----|------|------|------|------|------|------|------|------|------|-----|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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 | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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 | 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

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

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2014

PROGRAM: WINPER

VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCT-DEC

| | | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|-----|--------|----------------|------|------|------|------|-----|------|------|------|------|-----|-----|------|------|------|------|------|-------|
| HR. | OF DAY | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

| HR. OF DAY | WIND DIRECTION | | | | | | | | | | | | | | | | CALM | TOTAL |
|------------|----------------|-----|-----|-----|-----|-----|------|------|------|-----|-----|-----|-----|-----|------|------|------|-------|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | | |
| 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

Precipitation

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

| YR | MON | DAY | 1AM | 2PM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MIDNT | TOTAL |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|---------|-------|
| 14 | 2 | 1 | .03 | .04 | .01 | .00 | .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 | .00 | .05 | .00 | .00 | .00 | .00 | .05 |

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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 |

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

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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 |

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12M | 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 | .00 | .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 |

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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 | .01 | .04 | .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 | .01 | .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

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 |

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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 | .00 | .41 | .09 | .10 | .03 | .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 | .12 | 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 |

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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 |

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 |

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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 |

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 |

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 |

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

B100

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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 | .00 | .00 | .00 | .00 | .00 | .00 | 1.71 |
| 14 | 8 | 7 | .00 | .00 | .00 | .00 | .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 | .00 | .03 | .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 | .00 | .00 | .05 | .02 | .00 | .00 | .00 | .08 | .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 |

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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 | .00 | .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 | .01 | .06 | .02 | .01 | .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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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 |

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 | 2AM | 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

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

| YR | MON | DAY | 1AM | 2AM | 3AM | 4AM | 5AM | 6AM | 7AM | 8AM | 9AM | 10AM | 11AM | 12MONT | 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

| 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 |

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2014

RAIN VERSION PC-1.0

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

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

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 OCCURRENCE 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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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

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

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 | E | F | F | E | D | C | B | 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 | D | 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 | D | D | D | C | C | A | A | A | B | C | 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 | C | D | E | 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 | E | D | D | D | D | C | A | A | A | C | D | E | E | E | F | F | F |
| 14 | 4 | 22 | E | E | E | E | E | F | E | D | C | B | B | B | C | C | C | C | C | D | D | D | E | E | E | E |
| 14 | 4 | 23 | E | E | E | D | D | D | D | D | D | D | D | D | E | E | D | D | D | E | 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 | E | F | G | G | G | G |
| 14 | 4 | 25 | G | G | F | F | G | G | G | G | D | D | D | D | D | C | C | B | D | D | D | E | F | F | E | E |
| 14 | 4 | 26 | E | E | E | F | F | F | F | E | D | C | B | A | 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 | D | C | D | 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 | D | C | C | C | C | C | D | D | D | E | E | E | E | E |
| 14 | 5 | 3 | F | E | E | E | F | F | E | 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 | E | D | D | D | B | A | A | B | B | B | C | D | D | E | G | G | F | G |
| 14 | 5 | 11 | G | F | F | F | E | E | E | E | E | D | D | F | E | D | D | D | D | D | E | 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 | D | C | C | C | C | C | D | D | D | D | E | E | F | F |
| 14 | 5 | 15 | E | E | E | D | E | E | E | D | D | B | A | A | A | A | B | B | C | D | D | D | E | E | E | F |

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

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 | 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 |

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 |

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 |

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 |

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 OCCURRENCE 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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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

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 | 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 | E | F | F | E | 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 | E | 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 | E | 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 | E |
| 14 10 6 | F | E | E | E | E | E | E | E | D | C | D | D | D | D | D | D | E | F | G | G | G | G | G | E | E |
| 14 10 7 | F | F | F | G | G | F | E | E | D | D | D | C | B | C | C | 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 | E | E | D | D | D | D | D | E | E |
| 14 10 10 | D | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | D | E | E | E | F | F | F | D | 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 | F | F |
| 14 10 13 | D | D | E | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | E | E | E | E | E | D | 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 | E | G | E | F | F | F | F | G | G |
| 14 10 17 | E | E | F | E | E | F | E | E | D | D | C | B | B | C | D | D | E | E | E | E | E | E | E | F | 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 | E | F | E | D | D | D | D | C | C | D | D | D | G | G | G | G | G | G | F | F |
| 14 10 21 | G | G | G | G | G | G | G | G | D | C | C | C | C | C | C | D | D | E | F | F | F | F | E | G | G |
| 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 | E | G | G | G | G | F | E | E | E |
| 14 10 24 | E | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | F | G | G | G | G | E | 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 | G |
| 14 10 26 | E | E | E | E | E | E | E | D | D | D | C | C | C | D | D | D | E | 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 | E | E | F | F | F | F | D | 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 | E | D | D | D | D | E | E | E |
| 14 10 31 | D | D | D | D | D | D | D | D | D | B | B | B | B | B | C | 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 | E | E | D | 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 | E | E | E | E | E | E | D | 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 | C | 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 | G | G |
| 14 11 8 | D | D | D | D | D | E | D | D | C | C | C | C | C | C | 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 |

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 | D | E | F | E | F | D |
| 14 | 11 | 14 | E | E | E | F | F | G | G | F | D | D | D | D | D | D | D | D | D | D | 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 | D | 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 | D | 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 | D | C | C | C | C | D | C | D | E | E | F | 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 | D | C | C | G | D | D | E | E | F | 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 | D | 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 | D | E | E | E | E | E | D | D | D | D | D | D | D | E | F | F | E | D | E | E | D |
| 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 | D | E | E | E | D | E | 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 | C | 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 | 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 | E | E | E | D |
| 14 | 12 | 25 | E | E | E | E | E | E | E | E | E | 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 | D |

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 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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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

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

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

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

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 | 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 | 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 | 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 |
| 14 | 7 | 5 | E | E | E | E | E | E | E | E | D | D | D | D | D | C | 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 | 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 | 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 | E | E | F | F | G |
| 14 | 7 | 9 | G | G | F | F | F | F | F | F | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | E | E | E | E |
| 14 | 7 | 20 | E | E | E | E | E | E | E | D | D | D | C | C | C | C | D | 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 | E | 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 | E | E | E |
| 14 | 7 | 23 | E | E | E | E | E | D | D | D | D | D | D | C | 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 | E | E | E | E | E |
| 14 | 7 | 25 | E | E | E | E | E | E | E | 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 | E | E | E | E | F |
| 14 | 7 | 27 | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | D | D | D | E | E | E | E | F |
| 14 | 7 | 28 | E | E | E | E | E | E | E | D | D | C | C | D | D | D | D | D | D | D | D | E | 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 | E | E | F | F | G |
| 14 | 7 | 30 | F | F | F | F | F | G | F | D | D | D | D | D | D | D | D | D | D | D | E | F | F | G | G | F |
| 14 | 7 | 31 | G | G | G | G | G | G | F | D | D | D | D | D | D | D | D | D | D | D | D | E | E | E | E | G |
| 14 | 8 | 1 | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | D | D | D | D | E | 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 | E | F | F | F | F |
| 14 | 8 | 3 | E | E | D | E | E | D | D | D | D | D | D | D | D | D | D | D | D | D | D | E | E | E | E | F |
| 14 | 8 | 4 | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | D | D | D | D | 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 | 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 | E | D | E | E | E | D | 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 | E |
| 14 | 8 | 8 | 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 | 8 | 9 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | E | E | D | D | E |
| 14 | 8 | 10 | D | D | E | E | E | E | D | D | D | D | D | D | D | D | D | D | D | D | D | E | 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 | E | E | 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 | E | F | F | G | G | F |
| 14 | 8 | 13 | G | G | G | G | G | G | F | D | D | D | D | D | D | D | D | D | D | D | D | F | F | G | G | G |

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 | F | D |
| 14 | 8 | 17 | F | F | F | F | F | F | F | E | E | 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 | D | 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 | D | E | E | E | E | E |
| 14 | 8 | 21 | E | E | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | E | E | E | E | F | E |
| 14 | 8 | 22 | F | F | F | F | E | F | F | E | E | E | E | D | D | E | E | D | D | D | D | E | E | E | E | F |
| 14 | 8 | 23 | E | E | D | D | E | E | E | D | D | D | D | D | D | D | D | D | D | D | D | E | E | F | F | F |
| 14 | 8 | 24 | E | E | E | E | E | E | E | E | E | E | 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 | E | D | D | D | D | D | D | D | D | D | D | D | 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 | D | E | D | D | D | E |
| 14 | 8 | 28 | D | E | E | D | D | D | E | E | D | E | D | D | D | D | D | D | D | D | E | E | F | F | F | F |
| 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 | E | D | D | D | D | D | D | D | D | D | D | D | E | F | E | F | F |
| 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 | D |
| 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 | E | D | D | B | B | B | C | C | C | C | D | D | D | 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 | E | E | E | E | E | D |
| 14 | 9 | 6 | E | E | E | E | E | E | E | E | 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 | D | E | 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 | E | F |
| 14 | 9 | 16 | F | G | G | G | G | G | G | F | E | D | D | C | D | C | 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 | C | 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 | C | 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 | G | F | E | D | D | C | C | C | C | C | D | D | E | E | F | F | F | G |
| 14 | 9 | 22 | G | G | G | G | G | G | G | F | E | D | D | C | C | D | C | D | D | D | E | F | G | F | F | G |
| 14 | 9 | 23 | E | E | E | E | E | E | E | E | D | D | D | D | D | D | E | E | E | E | 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 | E | E | E | F | E | D | D | D | D | C | C | D | G | D | E | 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 | F | G |

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 | E | D | 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 | E | E | F | F | 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 | F | F | F |
| 14 | 10 | 6 | | F | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | E | E | F | G | F | 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 | E |
| 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 | E | E | 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 | E | F | E | E | F | 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 | E | F | F | F | G | F | E | E |
| 14 | 10 | 24 | | E | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | E | G | F | G | 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 | E | 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 | E | E | E | E | F | E | 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 | 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 | F | F | E | 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 | E | 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 | E | 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 | C | D | D | D | D | D | D | D | D | D | D | D |

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 | E | F | F | E | E | D | 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 | F | G | F | G | F | E | 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 | 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 | E | E | E | D | D | D | D | D | E |
| 14 | 11 | 23 | D | D | D | D | E | 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 | E | E | E | E | D | 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 | D | D | D | D | D | D | D | D | E | F | F | F | E | E | E | E |
| 14 | 11 | 29 | E | E | E | E | E | E | E | F | F | E | D | D | D | D | D | D | E | E | F | F | F | G | G | E |
| 14 | 11 | 30 | E | D | D | D | D | D | D | D | D | D | D | C | C | 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 | E | E | E | E | E | D |
| 14 | 12 | 2 | E | E | E | E | E | E | E | E | D | D | D | D | D | D | D | D | D | F | F | G | G | G | F | E |
| 14 | 12 | 3 | F | G | G | G | G | G | G | F | E | D | D | D | D | D | D | D | D | E | 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 | 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 | E | 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 | E | E | E | E | D | 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 | E | D | E | D | D | D |
| 14 | 12 | 15 | D | E | E | E | D | E | D | D | E | 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 |
| 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 |

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 |

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 |

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 |

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 |

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 |

B238

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, January-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

| 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 | 4.432E-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 | |

| 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 | 1.392E-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 | 6.245E-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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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

| 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 | 4.427E-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 | |

| 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 | 1.361E-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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|---------------------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION FROM SITE | 0.5-1 | 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 | 1.156E-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 | |

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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 |

| ***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS ***** | | | | | | | | | | | |
|--|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | | SEGMENT BOUNDARIES IN MILES | | | | | | | | | |
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 TYPE | 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 | 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 | |

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 | 4.500 | |
| 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 | 50.000 | |
| 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 | | | | | | | | | | | |
|--|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | SECTOR | .250 | .500 | .750 | 1.000 | 1.500 | 2.000 | 2.500 | 3.000 | 3.500 | 4.000 | 4.500 |
| 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 | | | | | | | | | | | |
|--|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | SECTOR | 5.000 | 7.500 | 10.000 | 15.000 | 20.000 | 25.000 | 30.000 | 35.000 | 40.000 | 45.000 | 50.000 |
| S | | 1.379E-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 |

VENTS GROUND LEVEL RELEASES - APR-JUN 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 | | 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 |

| 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 | | 1.054E-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 |

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 | 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 | 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 | 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 | 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 |

***** 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 | 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 | 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 | 6.2E-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 |

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

| 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 | 4.264E-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 | |

| 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 | 1.406E-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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 | |

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) | | | | | | | | | | 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 | 4.258E-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) | | | | | | | | | | 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 | 1.366E-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 | 6.620E-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 |

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 |

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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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 |

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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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, 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 | 5.498E-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 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 | 1.809E-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 | 1.360E-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 |

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) | | | | | | | | | | 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 | 5.212E-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) | | | | | | | | | | 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 | 1.395E-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 |

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 | | 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 | | 2.006E-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 | | 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 | | 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 | | SEGMENT BOUNDARIES IN MILES | | | | | | | | |
| FROM SITE | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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

SPECIFIC POINTS OF INTEREST

| RELEASE TYPE | 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 | 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 | |

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

| 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 | | | |
| 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 | 1.267E-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 | | | |

| 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 | | | |
| 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 | | | |

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 | 6.550E-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 | 4.104E-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 |

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) | | | | | | | | | | 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 | 3.723E-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) | | | | | | | | | | 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 | 1.176E-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 |

VENTS GROUND LEVEL RELEASES - OCT-DEC 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 | 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 | |

| 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 | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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 | | 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 | | 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 |
| 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 | | 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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

VENTS GROUND LEVEL 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) | |
| | | | | | NO | 2.26 DAY | 8.0 DAY |
| | | | | | DECAY | DECAY | DECAY |
| | | | | | UNDEPLETED | UNDEPLETED | DEPLETED |
| 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 |

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

| 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 | 4.591E-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 | |

| 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 | 1.550E-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 |

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) | | | | | | | | | | 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 | 4.581E-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) | | | | | | | | | | 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 | 1.483E-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 |

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) | | | | | | | | | | 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 | 4.342E-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) | | | | | | | | | | 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 | 1.141E-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 | 1.343E-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-07 | 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 |

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 | 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 | 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 | 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 | 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 | 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 | 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 |

VENTS GROUND LEVEL RELEASES - JUL-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) | |
| | | | NO | 2.26 DAY | 8.0 DAY | | |
| | | | DECAY | DECAY | 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 |

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

| 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 | 4.494E-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 | 4.842E-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 |

| 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 | 1.502E-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 |

B277

VENTS GROUND LEVEL RELEASES - JAN-DEC 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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | .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 | |

| 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 | 1.446E-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 |

VENTS GROUND LEVEL RELEASES - JAN-DEC 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 | 4.251E-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 | 2.244E-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 |

| 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 | 1.107E-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

| | | 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 | 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-08 | 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 | |

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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

VENTS GROUND LEVEL 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 |
|--------------|-------------------|----------------|------------|----------|----------|----------|----------|----------------|
| ID | LOCATION | FROM SITE (MI) | (SEC/M3) | (SEC/M3) | (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 | 6.9E-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 | | |

Atmospheric Diffusion Estimates

Elevated Releases

January-March 2014

ERP ELEVATED STACK RELEASES - JAN-MAR 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 | 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 | |

| 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 | 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-09 | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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-08 | 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 | |

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 | | | | | | | | |
|--|-----------|-----------|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | .250 | .500 | .750 | 1.000 | 1.500 | 2.000 | 2.500 | 3.000 | 3.500 | 4.000 | 4.500 | |
| 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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | 5.000 | 7.500 | 10.000 | 15.000 | 20.000 | 25.000 | 30.000 | 35.000 | 40.000 | 45.000 | 50.000 | |
| 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 |

ERP ELEVATED STACK 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 | 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 | |

| 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 | 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 |

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 | 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 | 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 | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| NE | 1.266E-09 | 6.416E-10 | 2.816E-10 | 1.540E-10 | 9.435E-11 | 9.618E-11 | 4.300E-11 | 1.729E-11 | 9.199E-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 |
| 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 |
| 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 |
| 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 |
| 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 |

ERP ELEVATED STACK RELEASES - JAN-MAR 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 | 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 |

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 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 | 4.187E-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 | 1.882E-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 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 | 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 |

ERP ELEVATED STACK 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 | | | | | | | | | | | |
|--|--|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | | .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 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 | | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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 |

ERP ELEVATED STACK RELEASES - APR-JUN 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 | 4.186E-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 | |

| 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 | 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 | 8.076E-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 | 3.102E-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 |

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 | | DISTANCES IN MILES | | | | | | | | | |
| FROM SITE | | .25 | .50 | .75 | 1.00 | 1.50 | 2.00 | 2.50 | 3.00 | 3.50 | 4.00 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| DIRECTION | | DISTANCES IN MILES | | | | | | | | | |
| FROM SITE | | 5.00 | 7.50 | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| N | | 2.787E-10 | 1.332E-10 | 8.204E-11 | 4.420E-11 | 8.283E-11 | 5.222E-11 | 3.736E-11 | 2.806E-11 | 2.182E-11 | 1.743E-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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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 | FROM SITE (MI) | X/Q | | D/Q |
|----|---------------|----------------|------------|------------|----------|
| | | | (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 | 4.4E-08 |
| A | Site Boundary | SSW | .82 | 4.9E-08 | 4.8E-08 |
| A | Site Boundary | SW | .97 | 1.1E-07 | 1.1E-07 |
| A | Site Boundary | WSW | .93 | 1.1E-07 | 1.1E-07 |
| A | Site Boundary | W | .91 | 2.1E-07 | 2.1E-07 |
| A | Site Boundary | WNW | .94 | 2.6E-07 | 2.6E-07 |
| A | Site Boundary | NW | .81 | 1.6E-07 | 1.6E-07 |
| A | Site Boundary | NNW | .69 | 1.5E-07 | 1.5E-07 |
| A | Site Boundary | N | .67 | 1.3E-07 | 1.2E-07 |
| A | Site Boundary | NNE | .60 | 3.3E-08 | 3.2E-08 |
| A | Site Boundary | NE | .62 | 8.3E-09 | 8.3E-09 |
| A | Site Boundary | ENE | .59 | 5.1E-09 | 5.1E-09 |
| A | Site Boundary | E | .53 | 7.7E-09 | 7.6E-09 |
| A | Site Boundary | ESE | .54 | 1.2E-08 | 1.2E-08 |
| A | Site Boundary | SE | .65 | 2.0E-08 | 2.0E-08 |
| A | Site Boundary | SSE | .81 | 1.0E-07 | 1.0E-07 |
| A | Nearest Res | SSW | 3.00 | 3.5E-08 | 3.4E-08 |
| A | Nearest Res | SW | 1.30 | 1.4E-07 | 1.4E-07 |
| A | Nearest Res | WSW | 1.90 | 1.4E-07 | 1.4E-07 |
| A | Nearest Res | W | 1.00 | 2.2E-07 | 2.2E-07 |
| A | Nearest Res | WNW | 1.70 | 2.5E-07 | 2.4E-07 |
| A | Nearest Res | NW | .90 | 2.1E-07 | 2.0E-07 |
| A | Nearest Res | NNW | 1.90 | 2.2E-07 | 2.2E-07 |
| A | Nearest Res | N | 2.50 | 6.9E-08 | 6.7E-08 |
| A | Nearest Res | NNE | 1.70 | 4.3E-08 | 4.2E-08 |
| A | Nearest Res | ENE | 1.70 | 2.3E-08 | 2.2E-08 |
| A | Nearest Res | E | 2.20 | 1.8E-08 | 1.8E-08 |
| A | Nearest Res | ESE | 2.80 | 2.1E-08 | 2.0E-08 |
| A | Nearest Res | SE | 3.00 | 3.0E-08 | 2.8E-08 |
| A | Nearest Res | SSE | 3.00 | 4.6E-08 | 4.5E-08 |
| A | Nearest Cow | NNW | 3.50 | 1.4E-07 | 1.4E-07 |
| A | Nearest Garde | SSW | 3.00 | 3.5E-08 | 3.4E-08 |
| A | Nearest Garde | SW | 1.30 | 1.4E-07 | 1.4E-07 |
| A | Nearest Garde | WSW | 1.90 | 1.4E-07 | 1.4E-07 |
| A | Nearest Garde | W | 2.80 | 7.7E-08 | 7.4E-08 |
| A | Nearest Garde | WNW | 1.70 | 2.5E-07 | 2.4E-07 |
| A | Nearest Garde | NW | 1.90 | 2.8E-07 | 2.8E-07 |
| A | Nearest Garde | NNW | 1.90 | 2.2E-07 | 2.2E-07 |
| A | Nearest Garde | ENE | 1.70 | 2.3E-08 | 2.2E-08 |
| A | Nearest Garde | ESE | 2.30 | 2.5E-08 | 2.4E-08 |
| A | Nearest Garde | SSE | 3.00 | 4.6E-08 | 4.5E-08 |
| A | MAXIMUM CHI/Q | S | 1.50 | 5.7E-08 | 5.6E-08 |
| A | MAXIMUM CHI/Q | SSW | 1.00 | 5.0E-08 | 4.9E-08 |
| A | MAXIMUM CHI/Q | SW | 1.50 | 1.5E-07 | 1.5E-07 |
| A | MAXIMUM CHI/Q | WSW | 1.50 | 2.0E-07 | 2.0E-07 |
| A | MAXIMUM CHI/Q | W | 1.00 | 2.2E-07 | 2.2E-07 |
| A | MAXIMUM CHI/Q | WNW | 1.50 | 3.1E-07 | 3.1E-07 |
| A | MAXIMUM CHI/Q | NW | 1.50 | 4.3E-07 | 4.3E-07 |
| A | MAXIMUM CHI/Q | NNW | 1.50 | 2.3E-07 | 2.3E-07 |
| A | MAXIMUM CHI/Q | N | .75 | 1.3E-07 | 1.3E-07 |
| A | MAXIMUM CHI/Q | NNE | 1.00 | 4.7E-08 | 4.6E-08 |
| A | MAXIMUM CHI/Q | NE | 1.50 | 3.0E-08 | 3.0E-08 |
| A | MAXIMUM CHI/Q | ENE | 1.50 | 2.3E-08 | 2.3E-08 |
| A | MAXIMUM CHI/Q | E | 1.50 | 2.3E-08 | 2.2E-08 |
| A | MAXIMUM CHI/Q | ESE | 1.00 | 3.2E-08 | 3.2E-08 |
| A | MAXIMUM CHI/Q | SE | 1.50 | 5.1E-08 | 5.0E-08 |
| A | MAXIMUM CHI/Q | SSE | .75 | 1.0E-07 | 1.0E-07 |

Atmospheric Diffusion Estimates

Elevated Releases

January-June 2014

ERP ELEVATED STACK RELEASES - JAN-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 | 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 | |

| 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 | 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 | |

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 | 5.785E-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 |

ERP ELEVATED STACK RELEASES - JAN-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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | .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 | |

| 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 | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 | 9.806E-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 | 1.049E-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 | |

ERP ELEVATED STACK RELEASES - JAN-JUN 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 |

| 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 2.536E-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 |

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 |
| 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 | 8.874E-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 |

| ***** 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 |
| 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 |
| 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 |
| SW | | 1.569E-09 | 1.009E-09 | 4.300E-10 | 2.066E-10 | 1.215E-10 | 6.349E-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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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)

| | | NO DECAY | | 2.26 DAY DECAY | | 8.0 DAY 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 | |

Atmospheric Diffusion Estimates

Elevated Releases

July-September 2014

ERP ELEVATED STACK 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 | | 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 |

| 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 | | 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 |

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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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 |

ERP ELEVATED STACK RELEASES - JUL-SEP 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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | .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 | |

| 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 | 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 |

ERP ELEVATED STACK RELEASES - JUL-SEP 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 | | 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 |

| 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 | | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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 | 2.651E-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 | 7.151E-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 |

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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

B305

| RELEASE TYPE | | DIRECTION | DIST. | X/Q | X/Q | X/Q | D/Q |
|--------------|---------------|----------------|----------|------------|------------|----------|-----------------|
| ID | LOCATION | FROM SITE (MI) | (SEC/M3) | (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 | 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. | | | | |

Atmospheric Diffusion Estimates

Elevated Releases

October-December 2014

ERP ELEVATED STACK RELEASES - OCT-DEC 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 | | 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 | |

| 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 | | 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

| | | 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 | 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 | 7.540E-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 | 1.598E-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 |

ERP ELEVATED STACK RELEASES - OCT-DEC 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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| SECTOR | | .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 | |

| 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 | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| DIRECTION | | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| FROM SITE | | | | | | | | | | | |
| 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 | |

ERP ELEVATED STACK RELEASES - OCT-DEC 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 | 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 | 3.588E-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 | |

| 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 | 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-07 | 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 |

B309

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 | | | | | | | | | |
| | | .25 | .50 | .75 | 1.00 | 1.50 | 2.00 | 2.50 | 3.00 | 3.50 | 4.00 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| ENE | | 5.151E-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 |
| 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 |
| 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 |
| 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 |
| 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 |

| ***** 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

B311

| RELEASE TYPE OF LOCATION | | DIRECTION FROM SITE (MI) | DIST. (SEC/M3) | X/Q NO | X/Q (SEC/M3) | X/Q (SEC/M3) | D/Q (PER SQ. METER) |
|--------------------------|---------------|--------------------------|----------------|------------|--------------|--------------|---------------------|
| ID | LOCATION | FROM SITE (MI) | DIST. (SEC/M3) | NO | (SEC/M3) | (SEC/M3) | (PER SQ. METER) |
| | | | | 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. | | |

Atmospheric Diffusion Estimates

Elevated Releases

July-December 2014

ERP ELEVATED STACK RELEASES - JUL-DEC 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 | 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 | |

| 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 | 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 | 5.587E-09 | 4.370E-09 | 3.403E-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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 | 8.168E-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 | |

ERP ELEVATED STACK RELEASES - JUL-DEC 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 | | | | | | | | | | |
|--|-----------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SECTOR | 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 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 | 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 | 40-50 | |
| 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 | |

ERP ELEVATED STACK RELEASES - JUL-DEC 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 | | 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 |

| 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 | | 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 |

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

| DIRECTION | 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 |
| FROM SITE | | | | | | | | | | |
| 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 |

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 | 6.855E-11 | 4.335E-11 | 3.106E-11 | 2.333E-11 | 1.814E-11 | 1.449E-11 | 1.183E-11 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| E | | 3.309E-10 | 2.353E-10 | 1.134E-10 | 6.321E-11 | 3.884E-11 | 3.12E-11 | 1.763E-11 | 7.750E-12 | 3.964E-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 |
| 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 |
| 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 |

ERP ELEVATED STACK RELEASES - JUL-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)

| | | | NO | 2.26 DAY | 8.0 DAY | |
|---|-------------------|------------|------------|----------|---------|---------|
| | | DECAY | DECAY | DECAY | | |
| | | 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 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 | 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 | |
| SSW | 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 | |
| SW | 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 | |
| WSW | 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 | |
| W | 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 | |
| WNW | 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 | |
| NW | 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 | |
| NNW | 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 | |
| N | 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 | |
| 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 | |
| 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 | |
| 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 | 2.260E-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 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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

| 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 | 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 | |

| 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 | 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

| | | SEGMENT BOUNDARIES IN MILES FROM THE SITE | | | | | | | | | |
|-----------|-----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| DIRECTION | .5-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | |
| FROM SITE | | | | | | | | | | | |
| 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 | |

ERP ELEVATED STACK RELEASES - JAN-DEC 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 | 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 | |

| 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 | 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 |

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 |

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

| RELEASE TYPE | 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 | 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 |

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; |
| $\frac{\bar{X}}{Q}$ | = | 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 \bar{X}/Q values, using the default values of Regulatory Guide 1.111, Rev. 0.

APPENDIX C

DOSE CALCULATIONS

CONTENTS

| | <u>Page</u> |
|---|-------------|
| LIQUID EFFLUENT DOSE CALCULATIONS | C1 |
| 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 |
| 1st <u>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 |
| 2nd <u>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 |
| 3rd <u>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 |
| 4th <u>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 |

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 |
| 3rd Quarter | | | | | | | | |
| 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 |
| 4th Quarter | | | | | | | | |
| 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 |
| 1st <u>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 |
| 2nd <u>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 |
| 3rd <u>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 |
| 4th <u>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 |

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 GASPARD 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. GASPARD 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 GASPARD 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 |

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 |

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 |

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 |

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 |

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 GASPAR 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.

GASPAR 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 GASPAR 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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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.