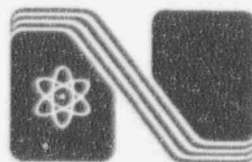


NEBRASKA PUBLIC POWER DISTRICT

**COOPER NUCLEAR STATION  
SEMI-ANNUAL OPERATING REPORT  
RADIOACTIVE EFFLUENTS  
DOCKET NUMBER 50-298**

July 1, 1992 through December 31, 1992



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## Nebraska Public Power District

GENERAL OFFICE  
P.O. BOX 499, COLUMBUS, NEBRASKA 68602-0499  
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NSD930259  
February 22, 1993

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Subject: Semi-Annual Radioactive Material Release Report  
Cooper Nuclear Station  
NRC Docket No. 50-298, DPR-46

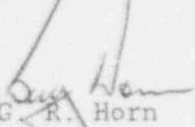
Gentlemen:

In accordance with Specification 6.5.1.F of the Cooper Nuclear Station Technical Specifications, the Nebraska Public Power District submits the Cooper Nuclear Station Semi-Annual Radioactive Material Release Report for the period July 1, 1992, through December 31, 1992.

In accordance with 10CFR 50.4(b)(1), we are enclosing one signed original of the report for your use, one copy to the Regional Office and one copy to the NRC Resident Inspector.

Should you have any questions or comments regarding this report, please contact my office.

Sincerely,

  
G. R. Horn  
Nuclear Power  
Group Manager

/dls  
Enclosures

cc: U.S. Nuclear Regulatory Commission  
Regional Office - Region IV

NRC Senior Resident Inspector  
Cooper Nuclear Station

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NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

SEMIANNUAL OPERATING REPORT

RADIOACTIVE EFFLUENTS

JULY 1, 1992 THROUGH DECEMBER 31, 1992

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 July through December 1992. The data presented meet the reporting requirements of regulatory Guide 1.21 of the U.S. Nuclear Regulatory Commission (Revision 1, June 1974).

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.

APPENDIX A

SOURCE TERMS

EFFLUENT AND WASTE DISPOSAL REPORTS

SUPPLEMENTAL INFORMATION

## EFFLUENT AND WASTE DISPOSAL

July - December 1992

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 Semiannual 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. The concentration of radioactive material in water offsite due to radioactive liquid effluents shall not exceed the concentration specified in 10 CFR Part 20.106 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall not exceed  $2 \times 10^{-4}$   $\mu\text{Ci/ml}$  total activity.

- 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 ( $\bar{E}$ ) 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 GeLi 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 GeLi 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 GeLi 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.

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 GeLi 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 gas flow proportional counting.

e. Fe-55:

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

E. Batch Releases

The following information relates to batch releases of radioactive materials in liquid and gaseous effluents:

a. Liquid

1. Number of batch releases: 53
2. Total time period for batch releases: 1.34 E+04 minutes
3. Maximum time period for batch release: 2.96 E+02 minutes
4. Average time period for batch releases: 2.52 E+02 minutes
5. Minimum time period for a batch release: 3.80 E+01 minutes
6. Average stream flow during periods of release of effluent into a flowing stream: 5.74 E+07 liters/minute

b. Gaseous

1. Number of batch releases: None
2. Total time period for batch releases: N/A
3. Maximum time period for a batch release: N/A
4. Average time period for batch releases: N/A
5. Minimum time period for a batch release: N/A

F. Abnormal Release

a. Liquid

1. Number of releases: 0
2. Total activity released: None

b. Gaseous

1. Number of releases: 0
2. Total activity released: None

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

	<u>Unit</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>	<u>EST. TOTAL ERROR %</u>
A. Fission and activation gases				
1. Total release	Ci	5.85 E+00	9.21 E-01	2.0 E+01
2. Average release rate for period	μCi/sec	7.36 E-01	1.16 E-01	
B. Iodines				
1. Total iodine 131	Ci	3.70 E-05	3.71 E-06	3.0 E+01
2. Average release rate for period	μCi/sec	4.65 E-06	4.67 E-07	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	0.00 E+00	0.00 E+00	5.0 E+01
2. Average release rate for period	μCi/sec	0.00 E+00	0.00 E+00	
3. Gross alpha radioactivity	Ci	0.00 E+00	0.00 E+00	
D. Tritium				
1. Total release	Ci	0.00 E+00	0.00 E+00	3.0 E+01
2. Average release rate for period	μCi/sec	0.00 E+00	0.00 E+00	

TABLE 1B  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
GASEOUS EFFLUENT-ELEVATED RELEASE

<u>NUCLIDES RELEASED</u>	<u>UNIT</u>	CONTINUOUS MODE		*BATCH
		<u>3rd QUARTER</u>	<u>4th QUARTER</u>	
1. Fission gases.				
krypton-83m	Ci	4.90 E-02	7.70 E-03	
krypton-85m	Ci	8.80 E-02	1.40 E-02	
krypton-85	Ci	2.70 E-01	4.30 E-02	
krypton-87	Ci	2.90 E-01	4.60 E-02	
krypton-88	Ci	2.90 E-01	4.60 E-02	
krypton-89	Ci	1.40 E+00	2.10 E-01	
xenon-133m	Ci	4.10 E-03	6.40 E-04	
xenon-133	Ci	2.00 E-01	3.20 E-02	
xenon-135m	Ci	9.80 E-02	1.50 E-02	
xenon-135	Ci	3.60 E-01	5.70 E-02	
xenon-137	Ci	1.60 E+00	2.60 E-01	
xenon-138	Ci	1.20 E+00	1.90 E-01	
Total for period	Ci	5.85 E+00	9.21 E-01	
2. Iodines.				
iodine-131	Ci	3.70 E-05	3.71 E-06	
Total for period	Ci	3.70 E-05	3.71 E-06	

\* No batch discharges were made

TABLE 1B  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
GASEOUS EFFLUENT-ELEVATED RELEASE (continued)

		CONTINUOUS MODE	*BATCH
<u>NUCLIDES RELEASED</u>	<u>UNIT</u>	<u>3rd QUARTER</u>	<u>4th QUARTER</u>
3. Particulates.			
Total for period	Ci	0.00 E+00	0.00 E+00

\*No batch discharges were made.

TABLE 1C  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
GASEOUS EFFLUENT-BUILDING VENT RELEASES

	<u>NUCLIDES RELEASED</u>	<u>UNIT</u>	<u>3rd QUARTER</u>	<u>4th QUARTER</u>
1.	Fission gases.			
	krypton-85m	Ci	0.00 E+00	0.00 E+00
	krypton-87	Ci	0.00 E+00	0.00 E+00
	krypton-88	Ci	0.00 E+00	0.00 E+00
	xenon-133	Ci	0.00 E+00	0.00 E+00
	xenon-135m	Ci	0.00 E+00	0.00 E+00
	xenon-135	Ci	0.00 E+00	0.00 E+00
	xenon-138	Ci	0.00 E+00	0.00 E+00
	Total for period	Ci	0.00 E+00	0.00 E+00
2.	Iodines.			
	Iodine-131	Ci	0.00 E+00	0.00 E+00
	Iodine-133	Ci	0.00 E+00	0.00 E+00
	Total for period	Ci	0.00 E+00	0.00 E+00
3.	Particulates.			
	Total for period	Ci	0.00 E+00	0.00 E+00



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

	UNIT	3rd QUARTER	4th QUARTER	EST. TOTAL ERROR %
A. Fission and activation products.				
1. Total release (not including tritium, gases, alpha)	Ci	8.64 E-01	4.38 E-01	2.0 E+01
2. Average diluted concentration during period	μCi/ml	5.43 E-08	3.98 E-08	
B. Tritium.				
1. Total release	Ci	2.18 E+00	3.24 E+00	2.0 E+01
2. Average diluted concentration during period	μCi/ml	1.37 E-07	2.95 E-07	
C. Dissolved and entrained gases.				
1. Total release	Ci	0.00 E+00	0.00 E+00	5.0 E+01
2. Average diluted concentration during period	μCi/ml	0.00 E+00	0.00 E+00	
D. Gross alpha radioactivity.				
1. Total release	Ci	7.61 E-05	8.67 E-05	5.0 E+01
E. Volume of waste released (prior to dilution).	liters	1.91 E+06	1.62 E+06	1.0 E+01
F. Volume of dilution water used during period.	liters	1.59 E+10	1.10 E+10	1.0 E+01

TABLE 2B  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
LIQUID EFFLUENTS

<u>NUCLIDES RELEASED</u>	<u>UNIT</u>	CONTINUOUS MODE*	BATCH MODE
		<u>3rd QUARTER</u>	<u>4th QUARTER</u>
chromium-51	Ci	4.76 E-02	1.08 E-02
manganese-54	Ci	1.54 E-01	9.23 E-02
iron-55	Ci	2.82 E-02	1.54 E-02
cobalt-58	Ci	1.84 E-02	1.09 E-02
cobalt-60	Ci	5.80 E-01	2.80 E-01
strontium-89	Ci	2.21 E-03	8.31 E-04
cesium-134	Ci	6.37 E-03	5.66 E-03
cesium-137	Ci	2.23 E-02	1.84 E-02
sodium-24	Ci	5.25 E-04	0.00 E+00
silver-110m	Ci	3.89 E-03	2.51 E-03
zinc-65	Ci	5.24 E-04	1.55 E-03
Total for period above	Ci	8.64 E-01	4.38 E-01
xenon-133	Ci	0.00 E+00	0.00 E+00
xenon-135	Ci	0.00 E+00	0.00 E+00

\*No continuous mode discharges made

TABLE 3  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS  
PERIOD July 1, 1992 TO December 31, 1992

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (Not Irradiated Fuel).

1. Type of Waste	UNIT	6-MONTH PERIOD	EST. TOTAL ERROR*
a. Spent resins, filter sludges, evaporator bottoms, etc.	m <sup>3</sup> Ci	4.76 E+01 1.06 E+03	1.5 E+01
b. Dry compressible waste, con- taminated equip, etc.	m <sup>3</sup> Ci	8.82 E+01 4.56 E+00	2.5 E+01
c. Irradiated components, con- trol rods, etc.	m <sup>3</sup> Ci	1.15 E+01 9.94 E+04	1.5 E+01
d. Other.	m <sup>3</sup> Ci		

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

a. carbon-14	1.30 E-01
technetium-99	8.29 E-05
plutonium-241	6.41 E-05
curium-242	9.16 E-07
nickel-59	7.78 E-03
tritium	2.12 E-03
nickel-63	5.23 E-01
strontium-90	2.41 E-03
cobalt-60	3.08 E+01
cesium-137	3.40 E-01
iron-55	1.18 E+01
silver-110m	1.15 E+00
cobalt-58	5.09 E+00
cesium-134	1.28 E-02
manganese-54	1.35 E+01
chromium-51	3.55 E+01
iron-59	2.92 E-01
zinc-65	8.39 E-01
transuranics	6.37 E-06

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

b. tritium	3.95 E-03
carbon-14	7.70 E-02
zinc-65	3.42 E-01
manganese-54	6.01 E+00
iron-55	4.21 E+01
technetium-99	1.42 E-02
cobalt-58	1.43 E+00
cobalt-60	4.30 E+01
nickel-59	3.77 E-02
nickel-63	4.58 E+00
strontium-90	8.68 E-04
silver-110m	3.18 E-01
cerium-144	3.03 E-01
cesium-134	5.48 E-01
cesium-137	1.12 E+00
plutonium-238	3.05 E-06
plutonium-241	2.81 E-04
curium-242	4.32 E-06
plutonium-239/240	1.25 E-06
americium-241	9.39 E-07
curium-243/244	3.18 E-06
niobium-94	9.63 E-06
chromium-51	1.20 E-01
cobalt-57	5.70 E-04
antimony-125	1.30 E-02
cerium-141	1.15 E-03
strontium-90	6.58 E-06

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

c. tritium	6.94 E-05
carbon-14	5.09 E-03
chromium-51	3.80 E-02
manganese-54	1.53 E+00
iron-55	4.61 E+01
cobalt-60	4.91 E+01
nickel-59	1.55 E-02
nickel-63	2.88 E+00
antimony-125	3.61 E-01
plutonium-241	9.05 E-07
curium-242	1.24 E-07
niobium-94	6.05 E-05
zirconium-95	4.70 E-03
technetium-99	2.28 E-05
neptunium-237	5.90 E-10
plutonium-238	6.10 E-06
plutonium-239/240	6.80 E-09
americium-241	8.18 E-10
curium-243/244	1.87 E-08
plutonium-242	6.22 E-12
americium-243	6.29 E-11

### 3. SOLID WASTE DISPOSITION

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
3	Exclusive Use Vehicle	Richland, WA
5	Exclusive Use Vehicle	Beatty, NV
21	Exclusive Use Vehicle	Barnwell, SC

### 4. Solidification Agent

No shipments during this semiannual period required solidification.

### B. IRRADIATED FUEL SHIPMENTS (Disposition)

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
0	N/A	N/A



# GASEOUS RADIOACTIVE WASTES

## CUMULATIVE DOSE DATA

A. Maximum gamma air dose	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
Site boundary (0.67 mi N)(0.80 mi S)( 0.67 miles N )					
1. Total mrad	2.42E-5	8.71E-5	2.22E-4	1.07E-5	2.52E-4
2. Percent of Technical					
Specification Limit %	0.00	0.00	0.00	0.00	0.00
Most Exposed Resident ( 0.9 miles Northwest )					
1. Total mrad	4.35E-5	1.43E-4	2.02E-4	1.53E-5	3.26E-4
2. Percent of Technical					
Specification Limit %	0.00	0.00	0.00	0.00	0.00
B. Maximum beta air dose					
Site boundary (0.67 mi N)(0.80 mi S)( 0.67 miles N )					
1. Total mrad	2.42E-5	8.46E-5	2.14E-4	1.05E-5	2.43E-4
2. Percent of Technical					
Specification Limit %	0.00	0.00	0.00	0.00	0.00
Most Exposed Resident ( 0.9 miles Northwest )					
1. Total mrad	4.18E-5	1.26E-4	1.88E-4	1.39E-5	2.93E-4
2. Percent of Technical					
Specification 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 (0.67 mi N)(0.80 mi S)( 0.67 miles N )					
1. Total mrem	6.60E-4	1.30E-3	4.99E-3	1.56E-4	5.78E-3
2. Percent of Technical					
Specification Limit %	0.01	0.02	0.07	0.00	0.08
3. Organ	Thyroid	Thyroid	Thyroid	Thyroid	Thyroid
4. Exposed Individual	Infant	Infant	Infant	Infant	Infant
Most Exposed Resident ( 0.9 miles Northwest )					
1. Total mrem	6.53E-4	1.56E-3	2.12E-3	1.32E-4	4.14E-3
2. Percent of Technical					
Specification Limit %	0.01	0.02	0.03	0.00	0.06
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 5.78 E-03 mrem/year which was 0.08 % of the Technical Specification Limit.
- E. All radioactive noble gas effluent monitors were set to automatically alarm when the monitor alarm setpoint, determined as specified in the Offsite Dose Assessment Manual (ODAM), was exceeded. This is required to ensure that the limits to the skin (3000 mrem/yr) are not exceeded.

## LIQUID RADIOACTIVE WASTES

### CUMULATIVE DOSE DATA

A. Maximum whole body dose		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
1. Total	mrem	5.15E-3	4.76E-3	6.09E-3	4.88E-3	2.09E-2
2. Percent of Technical Specification Limit	%	0.34	0.32	0.41	0.33	0.70
B. Maximum organ dose						
1. Total	mrem	3.22E-2	1.90E-2	1.68E-2	1.05E-2	7.85E-2
2. Percent of Technical Specification Limit	%	0.64	0.38	0.34	0.21	0.79
C. All radioactive liquid effluents were diluted, at time of discharge to concentrations below the concentrations specified in 10 CFR Part 20.106 for radionuclides other than dissolved and entrained noble gases. For dissolved and entrained noble gases the concentrations were diluted below 2.00 E-04 uCi/ml total activity.						

SUPPLEMENTAL INFORMATION

A. Unplanned Releases:

None.

B. District Initiated Changes to the Process Control Program:

See Following Pages.

C. District Initiated Changes to the Offsite Dose Assessment Manual:

See Following Pages.

District Initiated Changes to the Offsite Dose Assessment Manual

Several changes were made to the Cooper Nuclear Station Offsite Dose Assessment Manual (ODAM) during this period. These changes were to the active environmental sampling stations contained in Appendix C to the ODAM.

Per Cooper Nuclear Station Technical Specification 6.7.2, the following District initiated changes to the ODAM are included in the Semi-Annual Report. This includes a description of the changes with their justification. A copy of the revised ODAM pages with revision bars in the right hand margin added for clarity is also included. These changes have been reviewed and approved by the Station Operations Review Committee (SORC) as required by plant Technical Specification 6.7.2.B.

List of Effective Pages

Change: Change the effective date of the following pages:

	<u>Page</u>	<u>Old Effective Date</u>	<u>New Effective Date</u>
Appendix C:	C-3	8/30/90	7/9/92
	C-4	8/30/90	7/9/92
	C-5	8/30/90	7/9/92
	C-7	10/31/91	7/9/92
	C-10	10/31/91	7/9/92

Justification: SORC approved revisions to the pages listed above during SORC Meeting S92-076 on July 9, 1992.

Page C-3

Change: Clarify the location description of Sample Station No. 9 by replacing the second "on" with the word "of".

Justification: This change is editorial in nature. It does not involve a change to the physical location of the sample station.

Page C-4

Change: Clarify the location description of Sample Station No. 47 by replacing the phrase "TIN" with "T1N".

Justification: This change is editorial in nature. It does not involve a change to the physical location of the sample station.

Page C-5

Change: Delete Sample Station No. 61 (Milk-Nearest Producer).

Justification: Sample Station No. 61 became inactive in April of 1992 because the dairy herd has been sold. A replacement sampling location has been established at Station No. 99.

Page C-7

Change:

- 1) Sample Station No. 99 has been designated as Milk-Nearest Producer.
- 2) Sample Station No. 100 has been established as a location for Milk-Other Producer.

Justification:

- 1) Sample Station No. 61 became inactive in April of 1992 because the dairy herd had been sold, Station No. 99 has been established as a replacement sampling location.
- 2) Sample Station No. 100 has been established as a sampling location for Milk-Other Producer to replace Station No. 99 in that capacity.

The radiological environmental monitoring program requirement of plant Technical Specification 3.21.F continues to be met with these implemented changes.

Page C-10

Change: Delete Sample Station No. 61 and add Sample Station No. 100 to Figure C-2.

Justification: Sample Station No. 61 has been placed on inactive status and Sample Station No. 100 has been activated per the justifications given above. Figure C-2 on Page C-10 has been revised to reflect this.

District Initiated Changes to the Process Control Program

During this period, there were no changes to the Cooper Nuclear Station Process Control Program.



APPENDIX B

METEOROLOGY



## CONTENTS

	<u>Page</u>
METEOROLOGICAL DATA SUMMARIES	B1
MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA	B5
JOINT FREQUENCY DISTRIBUTION TABLES	B72
ATMOSPHERIC DIFFUSION ESTIMATES	B133
ATMOSPHERIC DIFFUSION MODEL	B182

## METEOROLOGICAL DATA SUMMARIES

Meteorological data collected onsite for the period July 1, 1992, through December 31, 1992, 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.

	<u>Lowest Data Recovery</u>	<u>Average Data Data Recovery</u>
July 1 - September 30, 1992 (Q3)	99.5%	99.5%
October 1 - December 31, 1992 (Q4)	98.5%	98.8%
Sec. 1 Semiannual Period -		
July 1 - December 31, 1992 (SEM2)	99.0%	99.2%
Annual Period - January 1 - December 31, 1992	97.3%	98.1%

### 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>
Q3	South 16.4%	South 16.4%
Q4	NorthNorthwest 12.8%	South 15.6%
Sem2	South 13.9%	South 16.0%
ANN	South 11.6%	South 13.1%
	<u>Mean Wind Speed at 100m Level</u>	<u>Mean Wind Speed at 10m Level</u>
Q3	11.6 MPH	6.5 MPH
Q4	12.7 MPH	7.4 MPH
SEM2	12.2 MPH	7.0 MPH
ANN	12.7 MPH	7.6 MPH
	<u>Maximum Hourly Average Wind Speed/(Date at 100m Level)</u>	<u>Maximum Hourly Average Wind Speed/(Date at 10m Level)</u>
Q3	31.6 MPH/(92/07/30)	21.0 MPH/(92/07/07)
Q4	31.1 MPH/(92/10/07)	23.2 MPH/(92/12/23)
SEM2	31.6 MPH/(92/07/30)	23.2 MPH/(92/12/23)
ANN	39.2 MPH/(92/03/09)	30.9 MPH/(92/01/15)

# TEMPERATURE AT 10-METER LEVEL

	<u>Mean Hourly Average Temperature</u>	<u>Average Daily Maximum</u>	<u>Average Daily Minimum</u>
Q3	20.3 Degrees Celsius	25.4 Degrees Celsius	15.5 Degrees Celsius
Q4	4.6 Degrees Celsius	8.8 Degrees Celsius	0.6 Degrees Celsius
SEM2	12.5 Degrees Celsius	17.1 Degrees Celsius	8.0 Degrees Celsius
ANN	11.4 Degrees Celsius	16.2 Degrees Celsius	6.6 Degrees Celsius

	<u>Maximum Temperature (Date)</u>	<u>Minimum Temperature (Date)</u>
Q3	32.3 Degrees Celsius (92/08/08)	2.2 Degrees Celsius (92/09/29)
Q4	28.4 Degrees Celsius (92/10/03)	-17.0 Degrees Celsius (92/12/31)
SEM2	32.3 Degrees Celsius (92/08/08)	-17.0 Degrees Celsius (92/12/31)
ANN	32.5 Degrees Celsius (92/06/16)	-18.5 Degrees Celsius (92/01/15)

# PRECIPITATION

	<u>Total Precipitation</u>	<u>Maximum Daily Precipitation Total/(Date)</u>	<u>Maximum Hourly Precipitation Total/(Date)</u>
Q3	17.99 Inches	3.25 Inches (92/09/05)	1.15 Inches (92/09/01)
Q4	8.11 Inches	1.68 Inches (92/11/01)	.50 Inches (92/11/01)
SEM2	26.10 Inches	3.25 Inches (92/09/05)	1.15 Inches (92/09/01)
ANN	40.91 Inches	3.25 Inches (92/09/05)	1.15 Inches (92/09/01)

### 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</u> <u>Classes A-C</u>	<u>Neutral Conditions</u> <u>Class D</u>	<u>Stable Conditions</u> <u>Classes E-G</u>
Q3	15%	32%	53%
Q4	3%	42%	55%
SEM2	9%	37%	54%
ANN	11%	37%	52%

Table 1. Meteorological Data Recovery

Data Recovery (% of total Observations)

	July- September 1992	October- December 1992	July- December 1992	January- December 1992
100m wind speed	99.5	98.7	99.1	98.4
100m wind direction	99.5	98.7	99.1	98.4
100m ambient temperature	99.5	98.7	99.1	98.1
60m wind speed	99.5	98.5	99.0	98.4
60m wind direction	99.5	98.5	99.0	98.4
60m ambient temperature	99.5	98.7	99.1	98.3
10m wind speed	99.5	98.7	99.1	98.2
10m direction	99.5	98.7	99.1	98.4
10m ambient temperature	99.5	98.7	99.1	97.3
10m dew point	99.5	98.7	99.1	97.8
100m-10m delta T	99.5	98.7	99.1	97.3
100m-60m delta T	99.5	98.7	99.1	98.4
60m-10m delta T	99.5	98.7	99.1	97.3
Precipitation	100.0	99.9	100.0	100.0
100m JFD	99.6	98.7	99.2	97.4
10m JFD	99.6	98.7	99.2	97.4

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 semiannual period July through December, 1992. Summaries for the first quarter, second quarter, and semiannual period 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: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 7/ 1/92 TO 9/30/92

JULY

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG C)	NUMBER OBS	(DEG C)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG C)
1	31.	20.2	31.	16.5	31.	79.4	31.	14.0	31.	18.0
2	31.	19.8	31.	16.3	31.	80.9	31.	13.9	31.	17.7
3	31.	19.3	31.	16.0	31.	81.6	31.	13.7	31.	17.3
4	31.	18.7	31.	15.7	31.	82.6	31.	13.4	31.	16.9
5	31.	18.4	31.	15.5	31.	83.4	31.	13.2	31.	16.6
6	31.	18.3	31.	15.3	31.	83.0	31.	13.1	31.	16.5
7	31.	18.7	31.	15.7	31.	82.8	31.	13.4	31.	16.9
8	31.	19.7	31.	16.2	31.	80.2	31.	13.8	31.	17.6
9	31.	21.0	31.	16.7	31.	76.4	31.	14.1	31.	18.3
10	31.	22.3	31.	17.1	31.	73.0	31.	14.5	31.	19.1
11	31.	23.4	31.	17.3	31.	69.4	31.	14.7	31.	19.6
12	31.	24.3	31.	17.4	31.	66.6	31.	14.8	31.	20.0
13	31.	25.0	31.	17.4	31.	64.0	31.	14.8	31.	20.2
14	31.	25.5	31.	17.6	31.	62.8	31.	14.9	31.	20.5
15	31.	25.9	31.	17.6	31.	61.5	31.	14.9	31.	20.6
16	31.	25.7	31.	17.7	31.	62.3	31.	15.0	31.	20.6
17	31.	25.4	31.	17.6	31.	63.5	31.	14.9	31.	20.5
18	31.	25.1	31.	17.6	31.	64.7	31.	14.9	31.	20.4
19	31.	24.2	31.	17.5	31.	67.1	31.	14.7	31.	20.0
20	31.	22.9	31.	17.4	31.	71.6	31.	14.7	31.	19.5
21	31.	21.9	31.	17.1	31.	74.8	31.	14.5	31.	19.0
22	31.	21.3	31.	16.9	31.	76.5	31.	14.3	31.	18.6
23	31.	20.8	31.	16.8	31.	78.6	31.	14.3	31.	18.4
24	31.	20.4	31.	16.5	31.	78.8	31.	14.1	31.	18.1
HOURLY MEAN		22.0		16.8		73.6		14.3		18.8
AVG DAILY MAX		26.7		19.3		86.4		16.5		21.4
AVG DAILY MIN		17.8		14.4		58.4		12.3		16.0
ABSOLUTE MAX		32.3		23.6		90.0		21.0		25.4
ABSOLUTE MIN		12.8		8.8		32.6		8.2		11.1
TOTAL OBS		744		744		744		744		744

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 7/ 1/92 TO 9/30/92

AUGUST

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG C)	NUMBER OBS	(DEG C)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG C)
1	31.	17.9	31.	13.9	31.	77.8	31.	12.1	31.	15.6
2	31.	17.4	31.	13.6	31.	78.8	31.	11.9	31.	15.3
3	31.	16.8	31.	13.4	31.	80.6	31.	11.8	31.	14.9
4	30.	16.6	30.	13.3	30.	81.2	30.	11.7	30.	14.7
5	31.	16.4	31.	13.2	31.	81.5	31.	11.6	31.	14.5
6	30.	16.2	30.	13.1	30.	81.8	30.	11.5	30.	14.4
7	30.	16.3	30.	13.3	30.	82.4	30.	11.7	30.	14.6
8	30.	17.7	30.	13.9	30.	79.0	30.	12.1	30.	15.5
9	29.	19.5	29.	14.4	29.	72.7	29.	12.5	29.	16.6
10	30.	21.2	30.	14.7	30.	67.3	30.	12.7	30.	17.4
11	31.	22.4	31.	15.0	31.	63.7	31.	12.9	31.	18.0
12	31.	23.4	31.	15.0	31.	59.9	31.	12.8	31.	18.3
13	31.	24.1	31.	14.9	31.	57.5	31.	12.7	31.	18.5
14	30.	24.6	30.	14.9	30.	55.6	30.	12.7	30.	18.7
15	31.	25.1	31.	14.9	31.	54.1	31.	12.7	31.	18.9
16	31.	25.2	31.	15.1	31.	54.3	31.	12.9	31.	19.0
17	31.	25.0	31.	15.1	31.	55.0	31.	12.8	31.	18.9
18	31.	24.3	31.	15.1	31.	56.9	31.	12.8	31.	18.7
19	31.	23.2	31.	15.2	31.	61.3	31.	13.0	31.	18.4
20	31.	21.7	31.	15.2	31.	66.7	31.	13.0	31.	17.8
21	31.	20.6	31.	14.9	31.	70.2	31.	12.8	31.	17.2
22	31.	19.8	31.	14.5	31.	72.1	31.	12.5	31.	16.7
23	31.	19.2	31.	14.3	31.	73.5	31.	12.3	31.	16.3
24	31.	18.5	31.	14.0	31.	75.5	31.	12.2	31.	15.9
HOURLY MEAN		20.6		14.4		69.1		12.4		16.9
AVG DAILY MAX		25.6		16.5		84.6		14.0		19.5
AVG DAILY MIN		15.6		12.0		52.6		10.7		13.8
ABSOLUTE MAX		32.3		25.3		94.6		23.1		26.7
ABSOLUTE MIN		9.4		5.6		36.7		6.7		8.3
TOTAL OBS		736		736		736		736		736

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 7/ 1/92 TO 9/30/92

SEPTEMBER

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER	(DEG C)	NUMBER	(DEG C)	NUMBER	(%)	NUMBER	(GM/M3)	NUMBER	(DEG C)
	OBS		OBS		OBS		OBS		OBS	
1	30.	16.1	30.	11.6	30.	75.2	30.	10.7	30.	13.6
2	30.	15.6	30.	11.3	30.	76.0	30.	10.5	30.	13.2
3	30.	15.2	30.	10.9	30.	76.2	30.	10.3	30.	12.9
4	30.	14.8	30.	10.7	30.	76.9	30.	10.2	30.	12.6
5	30.	14.5	30.	10.6	30.	78.0	30.	10.2	30.	12.4
6	30.	14.3	30.	10.6	30.	78.6	30.	10.1	30.	12.3
7	30.	14.2	30.	10.4	30.	78.6	30.	10.1	30.	12.2
8	30.	14.9	30.	10.8	30.	77.0	30.	10.3	30.	12.7
9	29.	16.1	29.	11.0	29.	72.6	29.	10.4	29.	13.4
10	30.	18.0	30.	11.4	30.	66.3	30.	10.7	30.	14.4
11	30.	19.7	30.	11.6	30.	61.0	30.	10.8	30.	15.2
12	30.	20.9	30.	11.6	30.	56.9	30.	10.8	30.	15.8
13	30.	22.0	30.	11.6	30.	53.1	30.	10.7	30.	16.2
14	30.	22.9	30.	11.5	30.	50.1	30.	10.6	30.	16.4
15	30.	23.5	30.	11.6	30.	48.2	30.	10.7	30.	16.7
16	30.	23.7	30.	11.6	30.	48.0	30.	10.7	30.	16.8
17	30.	23.2	30.	11.6	30.	49.6	30.	10.6	30.	16.6
18	30.	22.0	30.	12.0	30.	54.1	30.	10.9	30.	16.3
19	30.	20.3	30.	12.2	30.	60.3	30.	11.0	30.	15.7
20	30.	19.1	30.	12.0	30.	64.2	30.	10.9	30.	15.1
21	30.	18.4	30.	11.9	30.	66.6	30.	10.9	30.	14.8
22	30.	17.7	30.	11.9	30.	69.0	30.	10.8	30.	14.4
23	30.	17.1	30.	11.7	30.	71.0	30.	10.7	30.	14.1
24	29.	16.6	29.	11.7	29.	73.4	29.	10.7	29.	13.9
HOURLY MEAN		18.4		11.4		65.9		10.6		14.5
AVG DAILY MAX		23.9		14.4		83.3		12.5		17.6
AVG DAILY MIN		12.9		8.6		46.8		8.9		10.9
ABSOLUTE MAX		30.8		20.6		94.5		17.6		23.4
ABSOLUTE MIN		2.2		-2.3		30.9		4.0		1.7
TOTAL OBS	718		718		718		718		718	

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-SEP 1992

JUL-SEP HOUR AVERAGES FOR THE PERIOD 7/ 1/92 TO 9/30/92

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	92.	18.1	92.	14.0	92.	77.5	92.	12.3	92.	15.7
2	92.	17.6	92.	13.8	92.	78.6	92.	12.1	92.	15.4
3	92.	17.1	92.	13.5	92.	79.5	92.	11.9	92.	15.1
4	91.	16.7	91.	13.2	91.	80.2	91.	11.8	91.	14.8
5	92.	16.4	92.	13.1	92.	81.0	92.	11.7	92.	14.6
6	91.	16.3	91.	13.0	91.	81.1	91.	11.6	91.	14.4
7	91.	16.4	91.	13.2	91.	81.3	91.	11.7	91.	14.6
8	91.	17.5	91.	13.7	91.	78.7	91.	12.1	91.	15.3
9	89.	18.9	89.	14.1	89.	73.9	89.	12.4	89.	16.1
10	91.	20.5	91.	14.4	91.	68.9	91.	12.6	91.	17.0
11	92.	21.9	92.	14.7	92.	64.8	92.	12.8	92.	17.6
12	92.	22.9	92.	14.7	92.	61.2	92.	12.8	92.	18.0
13	92.	23.7	92.	14.7	92.	58.2	92.	12.8	92.	18.3
14	91.	24.3	91.	14.7	91.	56.2	91.	12.8	91.	18.6
15	92.	24.9	92.	14.7	92.	54.7	92.	12.8	92.	18.8
16	92.	24.9	92.	14.8	92.	55.0	92.	12.9	92.	18.8
17	92.	24.5	92.	14.8	92.	56.1	92.	12.8	92.	18.7
18	92.	23.8	92.	14.9	92.	58.6	92.	12.9	92.	18.5
19	92.	22.6	92.	15.0	92.	62.9	92.	12.9	92.	18.0
20	92.	21.3	92.	14.9	92.	67.5	92.	12.9	92.	17.5
21	92.	20.3	92.	14.7	92.	70.6	92.	12.7	92.	17.0
22	92.	19.6	92.	14.5	92.	72.6	92.	12.6	92.	16.6
23	92.	19.1	92.	14.3	92.	74.4	92.	12.5	92.	16.3
24	91.	18.5	91.	14.1	91.	76.0	91.	12.4	91.	16.0
HOURLY MEAN		20.3		14.2		69.5		12.4		16.7
AVG DAILY MAX		25.4		16.7		84.7		14.4		19.5
AVG DAILY MIN		15.5		11.7		52.6		10.6		13.6
ABSOLUTE MAX		32.3		25.3		94.6		23.1		26.7
ABSOLUTE MIN		2.2		-2.3		30.9		4.0		1.7
TOTAL OBS		2198		2198		2198		2198		2198

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 10/ 1/92 TO 12/31/92

OCTOBER

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	31.	10.3	31.	4.9	31.	69.4	31.	6.9	31.	7.8
2	31.	9.9	31.	4.7	31.	70.9	31.	6.9	31.	7.5
3	31.	9.5	31.	4.6	31.	72.1	31.	6.8	31.	7.2
4	31.	9.3	31.	4.3	31.	72.0	31.	6.7	31.	7.0
5	30.	8.9	30.	3.9	30.	72.0	30.	6.5	30.	6.6
6	31.	8.5	31.	3.8	31.	73.5	31.	6.5	31.	6.4
7	31.	8.1	31.	3.6	31.	74.5	31.	6.4	31.	6.1
8	30.	8.6	30.	3.8	30.	72.8	30.	6.5	30.	6.5
9	29.	10.4	29.	4.5	29.	67.8	29.	6.8	29.	7.7
10	29.	12.6	29.	4.8	29.	59.9	29.	6.9	29.	8.8
11	29.	14.7	29.	4.8	29.	52.7	29.	6.9	29.	9.9
12	29.	16.2	29.	4.7	29.	48.4	29.	6.8	29.	10.5
13	29.	17.3	29.	4.4	29.	44.6	29.	6.6	29.	10.8
14	28.	17.6	28.	4.0	28.	43.2	28.	6.5	28.	10.8
15	31.	17.5	31.	3.6	31.	42.8	31.	6.4	31.	10.6
16	31.	17.8	31.	3.8	31.	42.8	31.	6.4	31.	10.8
17	31.	17.4	31.	4.2	31.	44.6	31.	6.6	31.	10.8
18	31.	15.9	31.	4.8	31.	50.1	31.	6.9	31.	10.4
19	31.	14.1	31.	5.0	31.	55.9	31.	7.0	31.	9.6
20	31.	13.0	31.	5.2	31.	60.5	31.	7.1	31.	9.2
21	31.	12.1	31.	5.2	31.	63.6	31.	7.1	31.	8.8
22	31.	11.7	31.	5.0	31.	64.7	31.	7.0	31.	8.5
23	31.	11.2	31.	5.0	31.	66.4	31.	7.0	31.	8.2
24	31.	10.7	31.	5.0	31.	68.3	31.	7.0	31.	8.0
HOURLY MEAN		12.6		4.5		60.7		6.7		8.7
AVG DAILY MAX		18.2		7.7		80.3		8.2		11.6
AVG DAILY MIN		6.9		1.2		39.4		5.4		5.0
ABSOLUTE MAX		28.4		14.5		91.3		12.0		18.8
ABSOLUTE MIN		-1.0		-13.3		22.9		1.7		-1.7
TOTAL OBS		729		729		729		729		729

118

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 10/ 1/92 TO 12/31/92

NOVEMBER

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	30.	1.9	30.	-2.4	30.	74.3	30.	4.2	30.	0.3
2	30.	1.7	30.	-2.4	30.	74.9	30.	4.2	30.	0.2
3	30.	1.5	30.	-2.5	30.	75.6	30.	4.2	30.	0.0
4	30.	1.4	30.	-2.6	30.	75.7	30.	4.2	30.	-0.1
5	30.	1.2	30.	-2.7	30.	75.7	30.	4.1	30.	-0.3
6	30.	1.0	30.	-2.8	30.	75.9	30.	4.1	30.	-0.4
7	30.	1.0	30.	-2.9	30.	76.0	30.	4.1	30.	-0.5
8	30.	0.8	30.	-2.9	30.	76.5	30.	4.0	30.	-0.6
9	30.	1.1	30.	-2.9	30.	75.4	30.	4.0	30.	-0.4
10	30.	1.8	30.	-2.7	30.	72.4	30.	4.1	30.	0.1
11	30.	2.7	30.	-2.6	30.	69.0	30.	4.1	30.	0.7
12	30.	3.4	30.	-2.6	30.	66.2	30.	4.1	30.	1.1
13	30.	3.9	30.	-2.5	30.	64.6	30.	4.1	30.	1.4
14	29.	4.3	29.	-2.5	29.	63.1	29.	4.1	29.	1.6
15	30.	4.5	30.	-2.5	30.	62.5	30.	4.2	30.	1.8
16	30.	4.2	30.	-2.4	30.	62.6	30.	4.2	30.	1.8
17	30.	4.3	30.	-2.4	30.	63.6	30.	4.2	30.	1.7
18	30.	3.8	30.	-2.4	30.	65.7	30.	4.2	30.	1.4
19	30.	3.1	30.	-2.4	30.	68.2	30.	4.2	30.	1.0
20	30.	2.7	30.	-2.3	30.	70.3	30.	4.2	30.	0.8
21	30.	2.4	30.	-2.5	30.	70.6	30.	4.2	30.	0.6
22	30.	2.1	30.	-2.5	30.	72.0	30.	4.1	30.	0.3
23	29.	1.6	29.	-2.8	29.	73.2	29.	4.1	29.	-0.1
24	30.	1.6	30.	-2.8	30.	73.3	30.	4.1	30.	0.0
HOURLY MEAN		2.4		-2.6		70.7		4.1		0.5
AVG DAILY MAX		5.2		-0.3		80.5		4.9		2.6
AVG DAILY MIN		-0.3		-4.7		59.5		3.5		-1.7
ABSOLUTE MAX		17.0		10.4		88.3		9.5		12.0
ABSOLUTE MIN		-8.6		-13.0		28.6		1.8		-9.2
TOTAL OBS		718		718		718		718		718

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 1992

MONTHLY HOUR AVERAGES FOR THE PERIOD 10/ 1/92 TO 12/31/92

DECEMBER

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/H3)	OBS	(DEG C)
1	31.	-2.0	31.	-6.2	31.	73.5	31.	3.2	31.	-3.4
2	31.	-2.1	31.	-6.3	31.	73.9	31.	3.2	31.	-3.5
3	31.	-2.1	31.	-6.3	31.	73.6	31.	3.2	31.	-3.5
4	31.	-2.3	31.	-6.5	31.	73.7	31.	3.2	31.	-3.7
5	31.	-2.7	31.	-6.8	31.	74.0	31.	3.1	31.	-4.1
6	31.	-3.0	31.	-7.2	31.	73.6	31.	3.0	31.	-4.4
7	31.	-3.3	31.	-7.5	31.	73.6	31.	3.0	31.	-4.6
8	30.	-3.7	30.	-7.9	30.	73.4	30.	2.9	30.	-5.0
9	31.	-3.2	31.	-7.4	31.	73.3	31.	2.9	31.	-4.5
10	31.	-2.3	31.	-7.0	31.	71.0	31.	3.0	31.	-3.8
11	31.	-1.2	31.	-6.6	31.	67.6	31.	3.1	31.	-3.0
12	31.	-0.2	31.	-6.5	31.	64.3	31.	3.1	31.	-2.3
13	31.	0.6	31.	-6.2	31.	62.2	31.	3.2	31.	-1.7
14	29.	0.9	29.	-6.3	29.	60.6	29.	3.2	29.	-1.6
15	30.	1.2	30.	-6.2	30.	60.4	30.	3.2	30.	-1.4
16	29.	1.3	29.	-6.3	29.	59.8	29.	3.2	29.	-1.4
17	30.	0.8	30.	-6.3	30.	61.1	30.	3.2	30.	-1.6
18	30.	0.2	30.	-6.4	30.	63.0	30.	3.2	30.	-2.0
19	30.	-0.3	30.	-6.4	30.	65.0	30.	3.2	30.	-2.3
20	30.	-0.7	30.	-6.4	30.	66.6	30.	3.2	30.	-2.6
21	31.	-0.9	31.	-6.2	31.	68.0	31.	3.2	31.	-2.7
22	30.	-1.1	30.	-6.0	30.	69.7	30.	3.3	30.	-2.7
23	31.	-1.6	31.	-6.2	31.	71.2	31.	3.2	31.	-3.2
24	31.	-2.0	31.	-6.5	31.	71.8	31.	3.2	31.	-3.5
HOURLY MEAN		-1.3			-6.6	68.6			3.1	-3.0
AVG DAILY MAX		2.7			-3.4	79.0			3.9	0.1
AVG DAILY MIN		-4.9			-9.1	56.4			2.6	-6.1
ABSOLUTE MAX		9.8			2.2	89.3			5.6	5.4
ABSOLUTE MIN		-17.0			-21.8	24.3			0.9	-17.6
TOTAL OBS		733	733		733		733			733



PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY OCT-DEC 1992

OCT-DEC HOUR AVERAGES FOR THE PERIOD 10/ 1/92 TO 12/31/92

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	92.	3.4	92.	-1.2	92.	72.4	92.	4.8	92.	1.5
2	92.	3.2	92.	-1.3	92.	73.2	92.	4.8	92.	1.4
3	92.	3.0	92.	-1.4	92.	73.7	92.	4.7	92.	1.3
4	92.	2.8	92.	-1.5	92.	73.8	92.	4.7	92.	1.1
5	91.	2.4	91.	-1.9	91.	73.9	91.	4.6	91.	0.7
6	92.	2.2	92.	-2.1	92.	74.3	92.	4.5	92.	0.5
7	92.	1.9	92.	-2.2	92.	74.7	92.	4.5	92.	0.3
8	90.	1.9	90.	-2.3	90.	74.3	90.	4.5	90.	0.3
9	90.	2.6	90.	-2.1	90.	72.2	90.	4.6	90.	0.8
10	90.	3.9	90.	-1.8	90.	67.9	90.	4.6	90.	1.6
11	90.	5.2	90.	-1.6	90.	63.3	90.	4.7	90.	2.4
12	90.	6.3	90.	-1.6	90.	59.8	90.	4.7	90.	2.9
13	90.	7.1	90.	-1.6	90.	57.3	90.	4.6	90.	3.4
14	86.	7.5	86.	-1.7	86.	55.8	86.	4.6	86.	3.5
15	91.	7.8	91.	-1.6	91.	55.1	91.	4.6	91.	3.7
16	90.	8.0	90.	-1.5	90.	54.9	90.	4.6	90.	3.9
17	91.	7.6	91.	-1.4	91.	56.3	91.	4.7	91.	3.7
18	91.	6.7	91.	-1.2	91.	59.5	91.	4.8	91.	3.3
19	91.	5.8	91.	-1.2	91.	62.9	91.	4.8	91.	2.8
20	91.	5.1	91.	-1.1	91.	65.7	91.	4.8	91.	2.5
21	92.	4.6	92.	-1.1	92.	67.4	92.	4.8	92.	2.2
22	91.	4.3	91.	-1.1	91.	68.7	91.	4.8	91.	2.1
23	91.	3.8	91.	-1.3	91.	70.2	91.	4.8	91.	1.7
24	92.	3.5	92.	-1.4	92.	71.1	92.	4.8	92.	1.5
HOURLY MEAN		4.6		-1.6		66.7		4.7		2.0
AVG DAILY MAX		8.8		1.3		79.9		5.7		4.8
AVG DAILY MIN		0.6		-4.2		51.7		3.9		-0.9
ABSOLUTE MAX		28.4		14.5		91.3		12.0		18.8
ABSOLUTE MIN		-17.0		-21.8		22.9		0.9		-17.6
TOTAL OBS	2180		2180		2180		2180		2180	

B14

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JUL-DEC 1992

JUL-DEC HOUR AVERAGES FOR THE PERIOD 7/ 1/92 TO 12/31/92

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	184.	10.7	184.	6.4	184.	75.0	184.	8.5	184.	8.6
2	184.	10.4	184.	6.2	184.	75.9	184.	8.5	184.	8.4
3	184.	10.1	184.	6.1	184.	76.6	184.	8.3	184.	8.2
4	183.	9.7	183.	5.8	183.	77.0	183.	8.2	183.	7.9
5	183.	9.4	183.	5.6	183.	77.5	183.	8.1	183.	7.7
6	183.	9.2	183.	5.4	183.	77.7	183.	8.0	183.	7.4
7	183.	9.1	183.	5.4	183.	78.0	183.	8.1	183.	7.4
8	181.	9.7	181.	5.7	181.	76.5	181.	8.3	181.	7.9
9	179.	10.7	179.	6.0	179.	73.1	179.	8.4	179.	8.4
10	181.	12.2	181.	6.4	181.	68.4	181.	8.7	181.	9.3
11	182.	13.6	182.	6.6	182.	64.0	182.	8.8	182.	10.1
12	182.	14.7	182.	6.7	182.	60.5	182.	8.8	182.	10.6
13	182.	15.5	182.	6.6	182.	57.8	182.	8.7	182.	10.9
14	177.	16.2	177.	6.7	177.	56.0	177.	8.8	177.	11.3
15	183.	16.4	183.	6.6	183.	54.9	183.	8.7	183.	11.3
16	182.	16.6	182.	6.7	182.	54.9	182.	8.8	182.	11.4
17	183.	16.1	183.	6.7	183.	56.2	183.	8.8	183.	11.2
18	183.	15.3	183.	6.9	183.	59.1	183.	8.9	183.	10.9
19	183.	14.2	183.	7.0	183.	62.9	183.	8.9	183.	10.5
20	183.	13.2	183.	6.9	183.	66.6	183.	8.9	183.	10.0
21	184.	12.5	184.	6.8	184.	69.0	184.	8.8	184.	9.6
22	183.	12.0	183.	6.7	183.	70.7	183.	8.7	183.	9.4
23	183.	11.5	183.	6.5	183.	72.3	183.	8.7	183.	9.0
24	184.	11.0	184.	6.3	184.	73.5	184.	8.5	184.	8.7
HOURLY MEAN		12.5		6.4		68.1		8.6		9.4
AVG DAILY MAX		17.1		9.0		82.3		10.0		12.2
AVG DAILY MIN		8.0		3.8		52.2		7.2		6.4
ABSOLUTE MAX		32.3		25.3		94.6		23.1		26.7
ABSOLUTE MIN		-17.0		-21.8		22.9		0.9		-17.6
TOTAL OBS		4379		4379		4379		4379		4379

PROGRAM: WETTEMP  
VERSION: 3P

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY JAN-DEC 1992

JAN-DEC HOUR AVERAGES FOR THE PERIOD 1/ 1/92 TO 12/31/92

10.0 METERS LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER		NUMBER		NUMBER		NUMBER		NUMBER	
	OBS	(DEG C)	OBS	(DEG C)	OBS	(%)	OBS	(GM/M3)	OBS	(DEG C)
1	359.	9.5	359.	4.4	359.	71.4	359.	7.4	359.	7.2
2	360.	9.1	361.	4.3	360.	72.7	360.	7.4	360.	6.9
3	360.	8.8	361.	4.2	360.	73.6	360.	7.3	360.	6.7
4	359.	8.4	360.	4.0	359.	74.5	359.	7.2	359.	6.4
5	359.	8.1	360.	3.8	359.	75.2	359.	7.1	359.	6.2
6	359.	7.8	360.	3.7	359.	75.7	359.	7.1	359.	6.0
7	359.	7.9	360.	3.7	359.	75.5	359.	7.1	359.	6.0
8	358.	8.5	357.	3.9	357.	73.8	357.	7.3	357.	6.4
9	355.	9.6	354.	4.2	354.	70.6	354.	7.4	354.	7.0
10	351.	10.9	353.	4.6	349.	66.4	349.	7.6	349.	7.9
11	348.	12.1	353.	4.8	346.	62.3	346.	7.6	346.	8.5
12	347.	13.2	353.	4.9	345.	58.8	345.	7.6	345.	9.0
13	347.	14.1	353.	4.9	345.	56.1	345.	7.6	345.	9.5
14	340.	14.8	349.	4.9	340.	54.0	340.	7.6	340.	9.8
15	350.	15.3	356.	4.8	349.	52.5	349.	7.6	349.	10.0
16	354.	15.5	359.	4.8	354.	52.1	354.	7.6	354.	10.1
17	360.	15.3	361.	4.8	360.	52.6	360.	7.5	360.	10.0
18	361.	14.7	361.	4.8	361.	54.6	361.	7.6	361.	9.7
19	361.	13.7	361.	4.8	361.	57.7	361.	7.6	361.	9.3
20	361.	12.6	361.	4.8	361.	61.2	361.	7.6	361.	8.8
21	362.	11.7	362.	4.8	362.	64.8	362.	7.6	362.	8.4
22	361.	11.1	361.	4.8	361.	66.3	361.	7.6	361.	8.1
23	360.	10.5	360.	4.6	360.	68.1	360.	7.5	360.	7.8
24	359.	10.0	359.	4.5	359.	69.8	359.	7.5	359.	7.4
HOURLY MEAN		11.4		4.5		65.1		7.5		8.0
AVG DAILY MAX		16.2		7.2		80.1		8.8		10.9
AVG DAILY MIN		6.6		1.7		49.0		6.2		4.8
ABSOLUTE MAX		32.5		25.3		97.0		23.1		26.7
ABSOLUTE MIN		-18.5		-25.1		19.0		0.7		-19.2
TOTAL OBS	8550		8594		8539		8539		8539	

Wind Direction Frequencies

10-Meter Level

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WIMPER  
VERSION: 2F

HOURLY WIND ROSES (PERCENT)

JULY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	0.0	0.0	6.5	0.0	3.2	12.9	12.9	19.4	3.2	0.0	3.2	6.5	6.5	9.7	9.7	0.0	100.
2	6.5	6.5	0.0	6.5	0.0	0.0	16.1	6.5	6.5	12.9	3.2	6.5	6.5	3.2	6.5	12.9	0.0	100.
3	6.5	6.5	0.0	0.0	3.2	6.5	6.5	3.2	16.1	12.9	6.5	6.5	0.0	3.2	9.7	12.9	0.0	100.
4	6.5	0.0	0.0	0.0	9.7	3.2	0.0	9.7	12.9	9.7	6.5	6.5	3.2	3.2	6.5	22.6	0.0	100.
5	9.7	3.2	0.0	6.5	3.2	6.5	6.5	12.9	3.2	9.7	3.2	0.0	6.5	3.2	6.5	19.4	0.0	100.
6	9.7	6.5	0.0	3.2	0.0	3.2	9.7	19.4	0.0	12.9	6.5	0.0	6.5	0.0	19.4	3.2	0.0	100.
7	16.1	3.2	3.2	3.2	0.0	6.5	6.5	12.9	0.0	9.7	9.7	3.2	3.2	3.2	16.1	3.2	0.0	100.
8	6.5	3.2	0.0	3.2	0.0	3.2	22.6	6.5	12.9	9.7	0.0	3.2	0.0	6.5	6.5	16.1	0.0	100.
9	19.4	6.5	0.0	3.2	0.0	3.2	9.7	19.4	9.7	9.7	0.0	3.2	0.0	3.2	3.2	9.7	0.0	100.
10	16.1	3.2	0.0	3.2	0.0	0.0	9.7	6.5	12.9	16.1	6.5	0.0	3.2	0.0	6.5	16.1	0.0	100.
11	22.6	6.5	0.0	3.2	0.0	0.0	12.9	3.2	16.1	9.7	0.0	16.1	0.0	0.0	6.5	3.2	0.0	100.
12	12.9	6.5	3.2	3.2	0.0	0.0	19.4	3.2	12.9	6.5	0.0	6.5	0.0	6.5	6.5	12.9	0.0	100.
13	9.7	3.2	0.0	3.2	6.5	3.2	9.7	6.5	9.7	9.7	6.5	9.7	0.0	3.2	6.5	12.9	0.0	100.
14	19.4	0.0	6.5	3.2	0.0	3.2	12.9	6.5	9.7	9.7	3.2	0.0	3.2	9.7	6.5	6.5	0.0	100.
15	16.1	6.5	0.0	3.2	3.2	3.2	9.7	9.7	3.2	3.2	9.7	0.0	9.7	0.0	12.9	9.7	0.0	100.
16	16.1	6.5	6.5	0.0	3.2	12.9	3.2	9.7	3.2	3.2	0.0	3.2	0.0	6.5	12.9	12.9	0.0	100.
17	19.4	16.1	0.0	3.2	0.0	9.7	9.7	6.5	3.2	0.0	3.2	0.0	6.5	3.2	0.0	19.4	0.0	100.
18	16.1	9.7	6.5	3.2	0.0	3.2	22.6	6.5	9.7	0.0	6.5	0.0	0.0	0.0	3.2	12.9	0.0	100.
19	16.1	6.5	3.2	0.0	0.0	12.9	19.4	6.5	9.7	0.0	3.2	3.2	3.2	0.0	3.2	12.9	0.0	100.
20	12.9	6.5	0.0	0.0	3.2	9.7	25.8	3.2	3.2	9.7	0.0	3.2	0.0	9.7	0.0	12.9	0.0	100.
21	16.1	6.5	0.0	3.2	3.2	6.5	19.4	12.9	9.7	3.2	3.2	0.0	3.2	0.0	3.2	9.7	0.0	100.
22	19.4	6.5	3.2	6.5	0.0	3.2	9.7	16.1	12.9	0.0	0.0	3.2	0.0	3.2	3.2	12.9	0.0	100.
23	19.4	9.7	3.2	0.0	0.0	3.2	19.4	6.5	9.7	9.7	3.2	3.2	3.2	3.2	0.0	6.5	0.0	100.
24	16.1	3.2	0.0	6.5	0.0	3.2	9.7	9.7	19.4	3.2	6.5	9.7	0.0	0.0	6.5	6.5	0.0	100.
ALL	14.0	5.5	1.5	3.1	1.5	4.6	12.6	9.0	9.4	7.3	3.6	3.8	2.7	3.2	6.7	11.6	0.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

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	6.5	0.0	0.0	0.0	6.5	9.7	19.4	22.6	0.0	6.5	6.5	3.2	0.0	9.7	6.5	0.0	100.
2	3.2	3.2	3.2	3.2	3.2	0.0	6.5	19.4	19.4	3.2	12.9	0.0	0.0	6.5	0.0	16.1	0.0	100.
3	6.5	9.7	0.0	0.0	3.2	0.0	6.5	16.1	25.8	6.5	3.2	6.5	6.5	0.0	6.5	3.2	0.0	100.
4	6.7	6.7	0.0	0.0	0.0	6.7	3.3	13.3	26.7	6.7	6.7	3.3	0.0	0.0	6.7	13.3	0.0	100.
5	16.1	3.2	0.0	6.5	0.0	3.2	3.2	12.9	22.6	6.5	12.9	0.0	0.0	0.0	3.2	9.7	0.0	100.
6	10.0	6.7	10.0	0.0	3.3	0.0	6.7	23.3	16.7	6.7	0.0	0.0	0.0	0.0	6.7	10.0	0.0	100.
7	16.7	0.0	3.3	0.0	0.0	3.3	6.7	23.3	20.0	0.0	3.3	3.3	0.0	0.0	13.3	6.7	0.0	100.
8	10.0	0.0	6.7	3.3	0.0	3.3	10.0	23.3	16.7	10.0	0.0	3.3	0.0	3.3	6.7	3.3	0.0	100.
9	6.9	0.0	6.9	3.4	6.9	10.3	6.9	13.8	27.6	0.0	3.4	3.4	0.0	3.4	6.9	0.0	0.0	100.
10	6.7	3.3	3.3	3.3	10.0	0.0	23.3	6.7	20.0	10.0	0.0	0.0	0.0	0.0	3.3	10.0	0.0	100.
11	12.9	3.2	0.0	3.2	3.2	9.7	12.9	16.1	12.9	12.9	0.0	0.0	3.2	3.2	0.0	3.2	0.0	100.
12	6.5	12.9	3.2	3.2	3.2	6.5	16.1	6.5	22.6	9.7	0.0	0.0	3.2	3.2	0.0	3.2	0.0	100.
13	3.2	12.9	3.2	3.2	0.0	6.5	9.7	22.6	9.7	9.7	6.5	0.0	0.0	6.5	0.0	6.5	0.0	100.
14	10.0	10.0	3.2	6.7	0.0	6.7	16.7	13.3	10.0	10.0	0.0	0.0	3.3	6.7	0.0	3.3	0.0	100.
15	16.1	6.5	3.2	0.0	0.0	16.1	6.5	16.1	12.9	9.7	0.0	0.0	0.0	6.5	3.2	3.2	0.0	100.
16	12.9	9.7	6.5	0.0	3.2	12.9	3.2	19.4	16.1	3.2	0.0	0.0	0.0	3.2	6.5	3.2	0.0	100.
17	12.9	3.2	6.5	3.2	3.2	3.2	16.1	22.6	12.9	0.0	3.2	0.0	0.0	0.0	0.0	12.9	0.0	100.
18	19.4	3.2	3.2	3.2	0.0	3.2	25.8	16.1	9.7	0.0	3.2	0.0	0.0	0.0	0.0	12.9	0.0	100.
19	19.4	3.2	0.0	3.2	9.7	3.2	19.4	19.4	3.2	3.2	3.2	0.0	0.0	0.0	0.0	12.9	0.0	100.
20	16.1	0.0	3.2	0.0	0.0	6.5	19.4	19.4	6.5	0.0	3.2	0.0	0.0	0.0	9.7	16.1	0.0	100.
21	19.4	0.0	3.2	3.0	0.0	9.7	6.5	25.8	9.7	6.5	0.0	0.0	0.0	0.0	3.2	16.1	0.0	100.
22	12.9	0.0	0.0	0.0	0.0	3.2	16.1	16.1	12.9	6.5	0.0	0.0	0.0	6.5	0.0	22.6	3.2	100.
23	12.9	6.5	0.0	0.0	0.0	0.0	16.1	12.9	19.4	9.7	0.0	6.5	0.0	0.0	6.5	9.7	0.0	100.
24	9.7	3.2	0.0	6.5	0.0	3.2	6.5	22.6	12.9	6.5	6.5	3.2	0.0	3.2	6.5	6.5	3.2	100.
ALL	11.3	4.8	2.9	2.2	2.8	5.2	11.4	17.5	16.2	5.7	3.1	1.5	0.8	2.0	4.2	9.0	0.3	100.

NUMBER OF OBS = 736

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

SEPTEMBR

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	0.0	3.3	0.0	0.0	0.0	3.3	6.7	23.3	30.0	3.3	3.3	6.7	0.0	3.3	0.0	16.7	0.0	100.
2	13.3	0.0	0.0	0.0	3.3	0.0	6.7	26.7	16.7	6.7	6.7	0.0	0.0	0.0	6.7	10.0	3.3	100.
3	6.7	0.0	0.0	0.0	0.0	3.3	10.0	20.0	26.7	10.0	0.0	3.3	6.7	0.0	3.3	10.0	0.0	100.
4	16.7	3.3	0.0	0.0	0.0	0.0	10.0	23.3	23.3	10.0	6.7	3.3	0.0	0.0	0.0	3.3	0.0	100.
5	6.7	0.0	0.0	0.0	0.0	0.0	10.0	26.7	33.3	0.0	0.0	6.7	0.0	6.7	0.0	10.0	0.0	100.
6	13.3	0.0	3.3	0.0	0.0	3.3	6.7	23.3	26.7	3.3	3.3	10.0	0.0	3.3	0.0	3.3	0.0	100.
7	3.3	0.0	0.0	0.0	3.3	3.3	10.0	23.3	26.7	3.3	6.7	3.3	0.0	3.3	0.0	13.3	0.0	100.
8	13.3	0.0	3.3	0.0	0.0	3.3	16.7	13.3	30.0	0.0	6.7	0.0	0.0	0.0	6.7	6.7	0.0	100.
9	6.9	6.9	3.4	3.4	3.4	0.0	13.8	17.2	24.1	0.0	0.0	0.0	3.4	3.4	3.4	10.3	0.0	100.
10	6.7	3.3	3.3	3.3	0.0	6.7	10.0	13.3	26.7	10.0	0.0	0.0	0.0	3.3	6.7	6.7	0.0	100.
11	3.3	6.7	6.7	0.0	0.0	3.3	10.0	13.3	30.0	3.3	6.7	0.0	0.0	3.3	6.7	6.7	0.0	100.
12	6.7	10.0	0.0	0.0	6.7	3.3	6.7	10.0	30.0	6.7	6.7	0.0	3.3	0.0	3.3	6.7	0.0	100.
13	6.7	3.3	6.7	3.3	0.0	3.3	6.7	20.0	26.7	6.7	3.3	0.0	0.0	3.3	3.3	6.7	0.0	100.
14	6.7	0.0	0.0	6.7	3.3	0.0	10.0	10.0	36.7	0.0	6.7	0.0	3.3	3.3	3.3	10.0	0.0	100.
15	6.7	0.0	0.0	6.7	0.0	3.3	16.7	13.3	23.3	6.7	0.0	0.0	3.3	0.0	6.7	13.3	0.0	100.
16	6.7	0.0	0.0	0.0	6.7	3.3	13.3	6.7	30.0	6.7	0.0	0.0	3.3	0.0	3.3	20.0	0.0	100.
17	6.7	3.3	0.0	0.0	3.3	6.7	16.7	6.7	20.0	10.0	0.0	0.0	3.3	0.0	0.0	23.3	0.0	100.
18	10.0	0.0	0.0	3.3	0.0	3.3	23.3	10.0	23.3	3.3	0.0	0.0	3.3	0.0	3.3	16.7	0.0	100.
19	3.3	0.0	3.3	0.0	3.3	0.0	20.0	23.3	10.0	3.3	6.7	0.0	0.0	3.3	0.0	23.3	0.0	100.
20	0.0	3.3	0.0	0.0	0.0	3.3	16.7	30.0	6.7	10.0	0.0	0.0	3.3	0.0	10.0	16.7	0.0	100.
21	3.3	3.3	0.0	0.0	0.0	6.7	20.0	26.7	6.7	6.7	3.3	0.0	0.0	3.3	0.0	20.0	0.0	100.
22	20.0	0.0	0.0	0.0	3.3	0.0	16.7	26.7	13.3	6.7	0.0	0.0	0.0	0.0	6.7	6.7	0.0	100.
23	10.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	23.3	3.3	6.7	3.3	3.3	0.0	3.3	6.7	0.0	100.
24	3.4	0.0	0.0	0.0	0.0	0.0	3.4	17.2	31.0	10.3	3.4	0.0	10.3	0.0	6.9	13.8	0.0	100.
ALL	7.5	1.9	1.3	1.1	1.5	2.5	12.5	18.5	24.0	5.4	3.2	1.5	1.9	1.7	3.5	11.7	0.1	100.

NUMBER OF OBS = 718

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

JUL-SEP

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.3	3.3	0.0	2.2	0.0	4.3	9.8	18.5	23.9	2.2	3.3	5.4	3.3	3.3	6.5	10.9	0.0	100.
2	7.6	3.3	1.1	3.3	2.2	0.0	9.8	17.4	14.1	7.6	7.6	2.2	2.2	3.3	4.3	13.0	1.1	100.
3	6.5	5.4	0.0	0.0	2.2	3.3	7.6	13.0	22.8	9.8	3.3	5.4	4.3	1.1	6.5	8.7	0.0	100.
4	9.9	3.3	0.0	0.0	3.3	3.3	4.4	15.4	20.9	8.8	6.6	4.4	1.1	1.1	4.4	13.2	0.0	100.
5	10.9	2.2	0.0	4.3	1.1	3.3	6.5	17.4	19.6	5.4	5.4	2.2	2.2	3.3	3.3	13.0	0.0	100.
6	11.0	4.4	4.4	1.1	1.1	2.2	7.7	22.0	14.3	7.7	3.3	3.3	2.2	1.1	8.8	5.5	0.0	100.
7	12.1	1.1	2.2	1.1	1.1	4.4	7.7	19.8	15.4	4.4	6.6	3.3	1.1	2.2	9.9	7.7	0.0	100.
8	9.9	1.1	3.3	2.2	0.0	3.3	16.5	14.3	19.8	6.6	2.2	2.2	0.0	3.3	6.6	8.8	0.0	100.
9	11.2	4.5	3.4	3.4	3.4	4.5	10.1	16.9	20.2	3.4	1.1	2.2	1.1	3.4	4.5	6.7	0.0	100.
10	9.9	3.3	2.2	3.3	3.3	2.2	14.3	8.8	19.8	12.1	2.2	0.0	1.1	1.1	5.5	11.0	0.0	100.
11	13.0	5.4	2.2	2.2	1.1	4.3	12.0	10.9	19.6	8.7	2.2	5.4	1.1	1.1	5.4	5.4	0.0	100.
12	8.7	9.8	2.2	2.2	3.3	3.3	14.1	6.5	21.7	7.6	2.2	2.2	2.2	3.3	3.3	7.6	0.0	100.
13	6.5	6.5	3.3	3.3	2.2	4.3	8.7	16.3	15.2	8.7	5.4	3.3	0.0	4.3	3.3	8.7	0.0	100.
14	12.1	3.3	3.3	5.5	1.1	3.3	13.2	9.9	18.7	6.6	3.3	0.0	3.3	6.6	3.3	6.6	0.0	100.
15	13.0	4.3	1.1	3.3	1.1	7.6	10.9	13.0	13.0	6.5	3.3	0.0	4.3	2.2	7.6	8.7	0.0	100.
16	12.0	5.4	4.3	0.0	4.3	9.8	6.5	12.0	16.3	4.3	0.0	1.1	1.1	3.3	7.6	12.0	0.0	100.
17	13.0	7.6	2.2	2.2	2.2	6.5	14.1	12.0	12.0	3.3	2.2	0.0	3.3	1.1	0.0	18.5	0.0	100.
18	15.2	4.3	3.3	3.3	0.0	3.3	23.9	10.9	14.1	1.1	3.3	0.0	1.1	0.0	2.2	14.1	0.0	100.
19	13.0	3.3	2.2	1.1	4.3	5.4	19.6	16.3	7.6	2.2	4.3	1.1	1.1	1.1	1.1	16.3	0.0	100.
20	9.8	3.3	1.1	0.0	1.1	6.5	20.7	17.4	5.4	6.5	1.1	1.1	1.1	3.3	6.5	15.2	0.0	100.
21	13.0	3.3	1.1	1.1	1.1	7.6	15.2	21.7	8.7	5.4	2.2	0.0	1.1	1.1	2.2	15.2	0.0	100.
22	17.4	2.2	1.1	2.2	1.1	2.2	14.1	19.6	13.0	4.3	0.0	1.1	0.0	3.3	3.3	14.1	1.1	100.
23	14.1	5.4	1.1	0.0	0.0	1.1	18.5	13.0	17.4	7.6	3.3	4.3	2.2	1.1	3.3	7.6	0.0	100.
24	9.9	2.2	0.0	4.4	0.0	2.2	6.6	16.5	20.9	6.6	5.5	4.4	3.3	1.1	6.6	8.8	1.1	100.
ALL	11.0	4.1	1.9	2.1	1.7	4.1	12.2	15.0	16.4	6.1	3.3	2.3	1.8	2.3	4.8	10.7	0.1	100.

NUMBER OF OBS = 2196



NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION OCT-DEC 1962

PROGRAM: WINPER  
VERSION: 2P

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	22.6	0.0	3.2	0.0	0.0	0.0	9.7	6.5	19.4	9.7	3.2	3.2	3.2	3.2	12.9	0.0	3.2	100.
2	25.8	0.0	0.0	0.0	0.0	0.0	16.1	3.2	12.9	9.7	9.7	0.0	6.5	3.2	3.2	9.7	0.0	100.
3	25.8	3.2	0.0	0.0	0.0	0.0	16.1	3.2	12.9	6.5	9.7	3.2	3.2	3.2	6.5	6.5	0.0	100.
4	12.9	9.7	0.0	0.0	0.0	0.0	12.9	16.1	3.2	12.9	3.2	6.5	0.0	0.0	3.2	19.4	0.0	100.
5	13.3	10.0	0.0	0.0	0.0	0.0	13.3	13.3	23.3	3.3	3.3	3.3	3.3	0.0	6.7	6.7	0.0	100.
6	22.6	3.2	6.5	3.2	0.0	0.0	12.9	12.9	19.4	3.2	3.2	3.2	0.0	0.0	6.5	3.2	0.0	100.
7	16.1	9.7	0.0	3.2	0.0	0.0	9.7	9.7	19.4	0.0	3.2	3.2	0.0	3.2	3.2	12.9	6.5	100.
8	16.7	0.0	13.3	0.0	3.3	0.0	13.3	20.0	10.0	3.3	0.0	3.3	3.3	0.0	6.7	6.7	0.0	100.
9	6.9	6.9	6.9	6.9	3.4	10.3	3.4	20.7	13.8	3.4	0.0	6.9	3.4	3.4	0.0	3.4	0.0	100.
10	10.3	6.9	13.8	0.0	0.0	6.9	13.8	6.9	6.9	10.3	6.9	6.9	3.4	3.4	0.0	3.4	0.0	100.
11	3.4	10.3	3.4	10.3	0.0	6.9	3.4	13.8	6.9	17.2	10.3	0.0	0.0	3.4	3.4	6.9	0.0	100.
12	0.0	10.3	3.4	10.3	0.0	6.9	3.4	6.9	17.2	17.2	0.0	0.0	3.4	0.0	10.3	10.3	0.0	100.
13	6.9	6.9	3.4	3.4	3.4	6.9	3.4	6.9	20.7	6.9	6.9	0.0	3.4	0.0	6.9	13.8	0.0	100.
14	7.1	0.0	7.1	3.6	10.7	3.6	0.0	7.1	17.9	14.3	3.6	0.0	3.6	0.0	14.3	7.1	0.0	100.
15	6.5	6.5	3.2	3.2	6.5	6.5	0.0	6.5	16.1	9.7	12.9	3.2	0.0	0.0	9.7	9.7	0.0	100.
16	12.9	6.5	3.2	3.2	6.5	3.2	3.2	3.2	12.9	16.1	6.5	0.0	6.5	3.2	9.7	3.2	0.0	100.
17	9.7	6.5	3.2	0.0	3.2	6.5	6.5	6.5	16.1	9.7	9.7	0.0	0.0	6.5	12.9	3.2	0.0	100.
18	6.5	3.2	3.2	3.2	3.2	3.2	6.5	9.7	16.1	9.7	3.2	0.0	3.2	3.2	16.1	9.7	0.0	100.
19	9.7	0.0	0.0	6.5	3.2	0.0	9.7	3.2	16.1	6.5	12.9	0.0	3.2	3.2	6.5	19.4	0.0	100.
20	19.4	3.2	3.2	0.0	3.2	6.5	9.7	6.5	12.9	0.0	3.2	0.0	3.2	6.5	0.0	19.4	3.2	100.
21	6.5	9.7	6.5	3.2	0.0	0.0	9.7	12.9	12.9	0.0	6.5	0.0	0.0	3.2	12.9	9.7	6.5	100.
22	16.1	9.7	3.2	3.2	3.2	0.0	12.9	9.7	9.7	6.5	0.0	9.7	6.5	3.2	3.2	3.2	0.0	100.
23	12.9	3.2	9.7	0.0	0.0	3.2	3.2	12.9	16.1	9.7	3.2	0.0	3.2	9.7	9.7	3.2	0.0	100.
24	12.9	6.5	3.2	0.0	0.0	0.0	6.5	9.7	19.4	12.9	0.0	0.0	6.5	6.5	12.9	3.2	0.0	100.
ALL	12.8	5.5	4.1	2.6	2.1	2.9	8.4	9.5	14.7	8.2	5.1	2.2	2.9	2.9	7.4	8.1	0.8	100.

NUMBER OF OBS = 729

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

NOVEMBER

		WIND DIRECTION																
HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.0	10.0	10.0	3.3	0.0	0.0	6.7	6.7	13.3	3.3	3.3	3.3	3.3	3.3	16.7	6.7	0.0	100.
2	6.7	10.0	10.0	3.3	0.0	0.0	6.7	3.3	13.3	6.7	0.0	3.3	6.7	0.0	20.0	10.0	0.0	100.
3	16.7	3.3	10.0	3.3	0.0	0.0	6.7	6.7	10.0	3.3	3.3	0.0	6.7	13.3	13.3	3.3	0.0	100.
4	10.0	6.7	3.3	6.7	0.0	0.0	6.7	3.3	10.0	3.3	3.3	3.3	3.3	10.0	16.7	13.3	0.0	100.
5	6.7	10.0	10.0	3.3	0.0	0.0	0.0	16.7	6.7	0.0	3.3	3.3	0.0	6.7	20.0	13.3	0.0	100.
6	20.0	3.3	0.0	10.0	3.3	0.0	3.3	13.3	6.7	0.0	0.0	3.3	3.3	10.0	10.0	13.3	0.0	100.
7	10.0	6.7	3.3	6.7	0.0	3.3	0.0	6.7	10.0	3.3	3.3	0.0	6.7	10.0	13.3	16.7	0.0	100.
8	10.0	6.7	6.7	3.3	0.0	0.0	6.7	3.3	10.0	6.7	6.0	3.3	6.7	6.7	10.0	20.0	0.0	100.
9	26.7	0.0	6.7	6.7	0.0	0.0	6.7	3.3	13.3	0.0	0.0	0.0	10.0	6.7	13.3	6.7	0.0	100.
10	16.7	10.0	6.7	6.7	0.0	3.3	3.3	10.0	3.3	3.3	0.0	0.0	0.0	13.3	10.0	13.3	0.0	100.
11	6.7	16.7	10.0	3.3	0.0	0.0	6.7	6.7	6.7	3.3	0.0	0.0	0.0	13.3	13.3	13.3	0.0	100.
12	13.3	3.3	13.3	3.3	3.3	0.0	3.3	3.3	10.0	3.3	3.3	0.0	0.0	13.3	13.3	13.3	0.0	100.
13	13.3	13.3	3.3	0.0	3.3	0.0	3.3	3.3	6.7	6.7	3.3	0.0	0.0	13.3	10.0	20.0	0.0	100.
14	13.8	3.4	6.9	0.0	3.4	0.0	6.9	0.0	10.3	3.4	3.4	0.0	0.0	13.8	10.3	24.1	0.0	100.
15	13.3	6.7	3.3	3.3	0.0	0.0	6.7	3.3	10.0	0.0	3.3	0.0	3.3	13.3	20.0	13.3	0.0	100.
16	16.7	3.3	6.7	0.0	3.3	0.0	6.7	6.7	6.7	0.0	3.3	3.3	0.0	16.7	16.7	10.0	0.0	100.
17	13.3	6.7	3.3	3.3	3.3	0.0	6.7	3.3	6.7	0.0	0.0	3.3	3.3	16.7	16.7	13.3	0.0	100.
18	13.3	6.7	6.7	0.0	6.7	3.3	3.3	3.3	6.7	0.0	0.0	0.0	20.0	10.0	10.0	10.0	0.0	100.
19	13.3	6.7	6.7	3.3	3.3	0.0	3.3	3.3	10.0	0.0	0.0	6.7	10.0	13.3	3.3	16.7	0.0	100.
20	16.7	3.3	6.7	6.7	0.0	0.0	0.0	10.0	10.0	6.7	3.3	6.7	6.7	6.7	6.7	10.0	0.0	100.
21	10.0	10.0	6.7	3.3	3.3	3.3	3.3	3.3	13.3	6.7	0.0	6.7	3.3	6.7	3.3	16.7	0.0	100.
22	10.0	10.0	3.3	0.0	10.0	0.0	3.3	0.0	23.3	3.3	0.0	6.7	3.3	3.3	13.3	10.0	0.0	100.
23	6.9	6.9	6.9	10.3	0.0	0.0	6.9	0.0	10.3	6.9	3.4	0.0	6.9	6.9	17.2	10.3	0.0	100.
24	3.3	6.7	13.3	3.3	0.0	0.0	6	0.0	13.3	3.3	6.7	3.3	3.3	6.7	16.7	13.3	0.0	100.
ALL	12.4	7.1	6.8	3.9	1.8	0.6	4.7	5.0	10.0	3.1	1.9	2.4	4.5	9.7	13.1	13.0	0.0	100.

NUMBER OF OBS = 718

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	0.0	0.0	0.0	0.0	3.2	9.7	16.1	19.4	3.2	6.5	3.2	6.5	9.7	3.2	9.7	0.0	100.
2	3.2	0.0	0.0	3.2	0.0	0.0	12.9	6.5	25.8	0.0	9.7	3.2	9.7	3.2	12.9	9.7	0.0	100.
3	6.5	3.2	0.0	0.0	0.0	0.0	9.7	12.9	22.6	3.2	9.7	0.0	3.2	16.1	6.5	6.5	0.0	100.
4	0.0	0.0	0.0	0.0	0.0	0.0	12.9	6.5	29.0	6.5	0.0	6.5	3.2	0.0	9.7	25.8	0.0	100.
5	0.0	0.0	0.0	0.0	0.0	0.0	12.9	12.9	19.4	3.2	3.2	3.2	3.2	0.0	16.1	25.8	0.0	100.
6	0.0	0.0	0.0	0.0	0.0	0.0	12.9	9.7	22.6	9.7	3.2	0.0	3.2	3.2	12.9	22.6	0.0	100.
7	0.0	0.0	0.0	0.0	3.2	3.2	9.7	3.2	29.0	6.5	6.5	0.0	3.2	3.2	9.7	22.6	0.0	100.
8	3.3	0.0	0.0	3.3	0.0	3.2	10.0	6.7	23.3	6.7	10.0	0.0	0.0	3.2	10.0	20.0	0.0	100.
9	0.0	6.5	0.0	0.0	0.0	3.2	6.5	9.7	29.0	3.2	3.2	3.2	0.0	6.5	9.7	19.4	0.0	100.
10	3.2	3.2	0.0	0.0	3.2	3.2	6.5	12.9	22.6	6.5	0.0	6.5	3.2	0.0	12.9	16.1	0.0	100.
11	6.5	0.0	0.0	0.0	0.0	0.0	16.1	0.0	25.8	6.5	0.0	6.5	3.2	3.2	12.9	19.4	0.0	100.
12	3.2	3.2	0.0	0.0	0.0	0.0	9.7	9.7	19.4	9.7	3.2	0.0	3.2	6.5	16.1	16.1	0.0	100.
13	3.2	3.2	0.0	0.0	0.0	3.2	6.5	3.2	16.1	19.4	3.2	0.0	3.2	3.2	16.1	19.4	0.0	100.
14	3.4	3.4	0.0	0.0	0.0	0.0	6.9	3.4	17.2	15.8	3.4	6.9	0.0	6.9	17.2	17.2	0.0	100.
15	3.3	3.3	3.3	0.0	3.3	0.0	3.3	3.3	16.7	10.0	6.7	3.3	3.3	10.0	13.3	16.7	0.0	100.
16	3.4	0.0	3.4	3.4	0.0	0.0	6.9	6.9	13.8	10.3	3.4	0.0	3.4	13.8	10.3	20.7	0.0	100.
17	3.4	0.0	0.0	3.3	0.0	0.0	6.7	3.3	23.3	3.3	3.3	0.0	6.7	13.3	6.7	26.7	0.0	100.
18	6.7	0.0	0.0	3.3	0.0	0.0	3.3	10.0	23.3	3.3	0.0	6.7	3.3	10.0	6.7	23.3	0.0	100.
19	10.0	0.0	0.0	0.0	0.0	3.3	6.7	10.0	16.7	3.3	3.3	10.0	0.0	10.0	13.3	13.3	0.0	100.
20	3.2	3.3	0.0	3.3	0.0	0.0	6.7	6.7	26.7	3.3	0.0	3.3	0.0	10.0	6.7	23.3	0.0	100.
21	3.2	0.0	0.0	0.0	3.2	0.0	9.7	3.2	22.6	6.5	0.0	6.5	0.0	12.9	6.5	25.8	0.0	100.
22	0.0	0.0	0.0	0.0	0.0	3.3	10.0	6.7	20.0	6.7	3.3	3.3	0.0	10.0	13.3	23.3	0.0	100.
23	0.0	0.0	0.0	3.2	0.0	3.2	9.7	9.7	19.4	3.2	3.2	6.5	0.0	9.7	12.9	19.4	0.0	100.
24	10.0	6.7	0.0	0.0	0.0	0.0	10.0	13.3	23.3	0.0	3.3	6.7	3.3	6.7	6.7	10.0	0.0	100.
ALL	3.6	1.5	0.3	1.0	0.5	1.4	9.0	7.8	22.0	6.1	3.7	3.6	2.7	7.1	10.9	18.9	0.0	100.

NUMBER OF OBS = 732

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

OCT-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	14.1	3.3	4.3	1.1	0.0	1.1	8.7	9.8	17.4	5.4	4.3	3.3	4.3	5.4	10.9	5.4	1.1	100.	
2	12.0	3.3	3.3	2.2	0.0	0.0	12.0	4.3	17.4	5.4	6.5	2.2	7.6	2.2	12.0	9.8	0.0	100.	
3	16.3	3.3	3.3	1.1	0.0	0.0	10.9	7.6	15.2	4.3	7.6	1.1	4.3	10.9	8.7	5.4	0.0	100.	
4	7.6	5.4	1.1	2.2	0.0	0.0	10.9	8.7	14.1	7.6	2.2	5.4	2.2	3.3	9.8	19.6	0.0	100.	
5	6.6	6.6	3.3	1.1	0.0	0.0	8.8	14.3	16.5	2.2	3.3	3.3	2.2	2.2	14.3	15.4	0.0	100.	
6	14.1	2.2	2.2	4.3	1.1	0.0	9.8	12.0	16.3	4.3	2.2	2.2	2.2	4.3	9.8	13.0	0.0	100.	
7	8.7	5.4	1.1	3.3	1.1	2.2	6.5	6.5	19.6	3.3	4.3	1.1	3.3	5.4	8.7	17.4	2.2	100.	
8	10.0	2.2	6.7	2.2	1.1	1.1	10.0	10.0	14.4	5.6	3.3	2.2	3.3	3.3	8.9	15.6	0.0	100.	
9	11.1	4.4	4.4	4.4	1.1	4.4	5.6	11.1	18.9	2.2	1.1	3.3	4.4	5.6	7.8	10.0	0.0	100.	
10	10.0	6.7	6.7	2.2	1.1	4.4	7.8	10.0	11.1	6.7	2.2	4.4	2.2	5.6	7.8	11.1	0.0	100.	
11	5.6	8.9	4.4	4.4	0.0	2.2	8.9	6.7	13.3	8.9	3.3	2.2	1.1	6.7	10.0	13.3	0.0	100.	
12	5.6	5.6	5.6	4.4	1.1	2.2	5.6	6.7	15.6	10.0	2.2	0.0	2.2	6.7	13.3	13.3	0.0	100.	
13	7.8	7.8	2.2	1.1	2.2	3.3	4.4	4.4	14.4	11.1	4.4	0.0	2.2	5.6	11.1	17.8	0.0	100.	
14	8.1	2.3	4.7	1.2	4.7	1.2	4.7	3.5	15.1	10.5	3.5	2.3	1.2	7.0	14.0	16.3	0.0	100.	
15	7.7	5.5	3.3	2.2	3.3	2.2	3.3	4.4	14.3	6.6	7.7	2.2	2.2	7.7	14.3	13.2	0.0	100.	
16	11.1	3.3	4.4	2.2	3.3	1.1	5.6	5.6	11.1	8.9	4.4	1.1	3.3	11.1	12.2	11.1	0.0	100.	
17	8.8	4.4	2.2	2.2	2.2	2.2	6.6	4.4	15.4	4.4	4.4	1.1	3.3	12.1	12.1	14.3	0.0	100.	
18	8.8	3.3	3.3	2.2	3.3	2.2	4.4	7.7	15.4	4.4	1.1	2.2	8.8	7.7	11.0	14.3	0.0	100.	
19	11.0	2.2	2.2	3.3	2.2	1.1	6.6	5.5	14.3	3.3	5.5	5.5	4.4	8.8	7.7	16.5	0.0	100.	
20	13.2	3.3	3.3	3.3	1.1	3.3	5.5	7.7	16.5	3.3	2.2	3.3	3.3	7.7	4.4	17.6	1.1	100.	
21	6.5	6.5	4.3	2.2	2.2	1.1	7.6	6.5	16.3	4.3	2.2	4.3	1.1	7.6	7.6	17.4	2.2	100.	
22	8.8	6.6	2.2	1.1	4.4	1.1	8.8	5.5	17.6	5.5	1.1	6.6	3.3	5.5	9.9	12.1	0.0	100.	
23	6.6	3.3	5.5	4.4	0.0	2.2	6.6	7.7	15.4	6.6	3.3	2.2	3.3	8.8	13.2	11.0	0.0	100.	
24	8.8	6.6	5.5	1.1	0.0	0.0	7.7	7.7	18.7	5.5	3.3	3.3	4.4	6.6	12.1	8.8	0.0	100.	
ALL	9.5	4.7	3.7	2.5	1.5	1.6	7.4	7.4	15.6	5.8	3.6	2.7	3.4	6.6	10.5	13.3	0.3	100.	

NUMBER OF OBS = 2177

## NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JUL-DEC 1992

PROGRAM: WINPER

VERSION: 2P

## 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	8.7	3.3	2.2	1.6	0.0	2.7	9.2	14.1	20.7	3.8	3.8	4.3	3.8	4.3	8.7	8.2	0.5	100.
2	9.8	3.3	2.2	2.7	1.1	0.0	10.9	10.9	15.8	6.5	7.1	2.2	4.9	2.7	8.2	11.4	0.5	100.
3	11.4	4.3	1.6	0.5	1.1	1.6	9.2	10.3	19.0	7.1	5.4	3.3	4.3	6.0	7.6	7.1	0.0	100.
4	8.7	4.4	0.5	1.1	1.6	1.6	7.7	12.0	17.5	8.2	4.4	4.9	1.6	2.2	7.1	16.4	0.0	100.
5	8.7	4.4	1.6	2.7	0.5	1.6	7.7	15.8	18.0	3.8	4.4	2.7	2.2	2.7	8.7	14.2	0.0	100.
6	12.6	3.3	3.3	2.7	1.1	1.1	8.7	16.9	15.3	6.0	2.7	2.7	2.2	2.7	9.3	9.3	0.0	100.
7	10.4	3.3	1.6	2.2	1.1	3.3	7.1	13.1	17.5	3.8	5.5	2.2	2.2	3.8	9.3	12.6	1.1	100.
8	9.9	1.7	5.0	2.2	0.6	2.2	13.3	12.2	1.1	6.1	2.8	2.2	1.7	3.3	7.7	12.2	0.0	100.
9	11.2	4.5	3.9	3.9	2.2	4.5	7.8	14.6	1.6	2.8	1.1	2.8	2.8	4.5	6.1	8.4	0.0	100.
10	9.9	5.0	4.4	2.8	2.2	3.3	11.0	9.4	15.5	9.4	2.2	2.2	1.7	3.3	6.6	11.0	0.0	100.
11	9.3	7.1	3.3	3.3	0.5	3.3	10.4	8.8	16.5	8.8	2.7	3.8	1.1	3.8	7.7	9.3	0.0	100.
12	7.1	7.7	3.8	3.3	2.2	2.7	9.9	6.6	18.7	8.8	2.2	1.1	2.2	4.9	8.2	10.4	0.0	100.
13	7.1	7.1	2.7	2.2	2.2	3.8	6.6	10.4	14.8	9.9	4.9	1.6	1.1	4.9	7.1	13.2	0.0	100.
14	10.2	2.8	4.0	3.4	2.8	2.3	9.0	6.8	16.9	8.5	3.4	1.1	2.3	6.8	8.5	11.3	0.0	100.
15	10.4	4.9	2.2	2.7	2.2	4.9	7.1	8.7	13.7	6.6	5.5	1.1	3.3	4.9	10.9	10.9	0.0	100.
16	11.5	4.4	4.4	1.1	3.8	5.5	6.0	8.8	13.7	6.6	2.2	1.1	2.2	7.1	9.9	11.5	0.0	100.
17	10.9	6.0	2.2	2.2	2.2	4.4	10.4	8.2	13.7	3.8	3.3	0.5	3.3	6.6	6.0	16.4	0.0	100.
18	12.0	3.8	3.3	2.7	1.6	2.7	14.2	9.3	14.8	2.7	2.2	1.1	4.9	3.8	6.6	14.2	0.0	100.
19	12.0	2.7	2.2	2.2	3.3	3.3	13.1	10.9	10.9	2.7	4.9	3.3	2.7	4.9	4.4	16.4	0.0	100.
20	11.5	3.3	2.2	1.6	1.1	4.9	13.1	12.6	10.9	4.9	1.6	2.2	2.2	5.5	5.5	16.4	0.5	100.
21	9.8	4.9	2.7	1.6	1.6	4.3	11.4	14.1	12.5	4.9	2.2	2.2	1.1	4.3	4.9	16.3	1.1	100.
22	13.1	4.4	1.6	1.6	2.7	1.6	11.5	12.6	15.3	4.9	0.5	3.8	1.6	4.4	6.6	13.1	0.5	100.
23	10.4	4.4	3.3	2.2	0.0	1.6	12.6	10.4	16.4	7.1	3.3	3.3	2.7	4.9	8.2	9.3	0.0	100.
24	9.3	4.4	2.7	2.7	0.0	1.1	7.1	12.0	20.2	6.0	4.4	3.8	3.8	3.8	9.3	8.7	0.5	100.
ALL	10.3	4.4	2.8	2.3	1.6	2.9	9.8	11.2	16.0	6.0	3.4	2.5	2.6	4.4	7.6	12.0	0.2	100.

NUMBER OF OBS = 4378

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION JAN-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	10.5	5.3	1.4	2.5	1.1	1.9	9.4	11.6	16.1	5.3	5.0	3.9	2.8	4.2	8.9	10.0	0.3	100.
2	10.5	5.2	2.2	2.2	1.9	1.7	9.6	11.8	13.5	7.2	6.1	2.2	3.3	3.0	8.5	10.5	0.6	100.
3	12.4	4.1	2.8	1.9	1.9	3.0	8.5	8.8	16.0	7.7	4.1	3.9	3.6	5.0	8.8	7.4	0.0	100.
4	9.7	4.1	1.7	0.8	2.2	3.0	7.7	11.9	13.5	9.1	4.4	3.9	1.7	4.1	7.7	14.1	0.3	100.
5	11.6	3.3	2.5	1.9	0.8	3.6	8.0	13.0	15.5	4.7	3.0	4.1	2.2	4.1	7.7	13.5	0.3	100.
6	14.1	4.4	2.5	1.9	1.9	2.2	9.4	13.8	13.0	6.6	3.3	1.9	2.2	3.6	9.1	9.7	0.3	100.
7	11.3	6.1	1.4	1.7	2.2	4.1	8.0	13.3	14.1	4.7	5.5	1.4	2.8	3.9	7.7	11.0	0.8	100.
8	10.8	3.9	4.2	2.5	1.1	4.2	14.2	10.0	14.2	5.6	3.9	1.1	1.4	3.1	8.9	10.8	0.3	100.
9	11.7	4.7	4.5	3.9	3.1	3.9	10.1	13.1	14.2	3.9	2.8	2.5	2.5	3.9	5.9	8.9	0.3	100.
10	12.0	4.2	4.2	2.2	3.6	3.1	12.9	8.7	13.2	7.6	3.6	2.2	2.2	2.8	5.9	11.2	0.3	100.
11	10.9	7.0	2.5	3.1	2.2	3.6	12.3	7.6	13.4	7.8	3.9	3.6	1.1	4.2	6.7	9.5	0.3	100.
12	9.8	5.0	4.5	2.8	3.6	3.6	10.1	7.3	14.3	8.7	3.4	2.8	2.0	4.2	7.3	10.1	0.6	100.
13	8.7	5.3	3.1	2.2	3.4	4.8	7.3	11.2	11.2	9.0	5.3	1.7	1.7	5.3	7.6	11.8	0.6	100.
14	10.0	3.1	2.6	3.1	3.4	4.0	8.8	9.1	12.8	7.7	4.6	1.7	2.3	6.8	8.5	11.4	0.0	100.
15	9.7	3.9	2.2	2.5	3.6	5.6	7.2	10.0	12.0	6.1	5.0	2.2	2.5	6.7	8.9	11.7	0.0	100.
16	11.1	3.6	3.3	2.2	5.3	4.4	6.7	9.2	11.1	6.9	3.3	2.5	1.9	7.8	9.2	11.4	0.0	100.
17	11.3	5.2	1.4	3.0	3.0	5.2	9.9	8.8	11.0	5.0	3.3	0.8	3.6	6.4	7.2	14.6	0.0	100.
18	12.4	2.8	2.8	2.8	3.0	3.9	13.0	9.4	11.9	3.9	2.5	2.2	3.9	5.2	6.9	13.5	0.0	100.
19	11.0	3.9	2.5	3.0	2.8	3.3	14.6	8.8	11.0	3.9	3.3	4.4	2.2	3.9	5.2	16.0	0.0	100.
20	11.3	4.1	3.0	2.5	1.7	4.4	12.2	10.5	10.5	6.4	2.2	2.5	2.8	3.9	6.4	15.5	0.3	100.
21	10.7	5.5	3.0	2.2	1.7	3.9	9.6	11.6	11.3	6.1	3.0	2.8	2.8	3.6	6.3	15.4	0.6	100.
22	14.4	3.6	2.2	1.9	2.8	2.2	9.7	11.9	12.4	6.6	2.2	3.0	3.0	3.3	8.0	12.4	0.3	100.
23	12.7	5.0	2.5	2.2	0.6	1.9	11.4	11.4	13.0	7.2	3.3	3.0	3.9	3.9	8.0	10.0	0.0	100.
24	10.0	4.5	3.9	1.9	1.4	1.4	8.9	11.7	15.0	6.4	4.7	2.5	4.5	3.3	8.6	10.9	0.3	100.
ALL	11.2	4.5	2.8	2.4	2.4	3.5	10.0	10.6	13.1	6.4	3.8	2.6	2.6	4.4	7.7	11.7	0.3	100.

NUMBER OF OBS = 8644

B27

Wind Direction Frequencies

100-Meter Level

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

JULY

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNW	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	6.5	0.0	3.2	6.5	6.5	3.2	6.5	19.4	16.1	3.2	6.5	0.0	3.2	3.2	3.2	12.9	0.0	100.
2	0.0	3.2	6.5	3.2	6.5	3.2	9.7	12.9	0.0	16.1	6.5	6.5	6.5	3.2	3.2	12.9	0.0	100.
3	9.7	3.2	3.2	0.0	3.2	6.5	6.5	6.5	9.7	12.9	6.5	6.5	6.5	0.0	6.5	12.9	0.0	100.
4	12.9	0.0	3.2	0.0	0.0	12.9	6.5	3.2	3.2	12.9	9.7	3.2	3.2	12.9	6.5	9.7	0.0	100.
5	6.5	6.5	3.2	0.0	3.2	9.7	3.2	12.9	0.0	6.5	9.7	0.0	3.2	9.7	6.5	19.4	0.0	100.
6	9.7	6.5	3.2	3.2	0.0	9.7	16.1	3.2	3.2	9.7	3.2	0.0	3.2	6.5	6.5	16.1	0.0	100.
7	6.5	6.5	0.0	3.2	3.2	3.2	12.9	9.7	3.2	9.7	0.0	3.2	0.0	9.7	9.7	19.4	0.0	100.
8	9.7	3.2	0.0	0.0	3.2	3.2	16.1	16.1	6.5	6.5	0.0	3.2	3.2	3.2	12.9	12.9	0.0	100.
9	19.4	3.2	0.0	0.0	0.0	3.2	16.1	12.9	9.7	9.7	6.5	0.0	0.0	3.2	6.5	9.7	0.0	100.
10	25.8	3.2	0.0	0.0	3.2	3.2	3.2	9.7	9.7	16.1	9.7	0.0	3.2	0.0	6.5	6.5	0.0	100.
11	25.8	3.2	0.0	3.2	0.0	0.0	6.5	6.5	16.1	12.9	3.2	6.5	6.5	0.0	6.5	3.2	0.0	100.
12	12.9	6.5	3.2	0.0	3.2	0.0	16.1	6.5	9.7	6.5	6.5	3.2	0.0	9.7	6.5	9.7	0.0	100.
13	9.7	3.2	0.0	3.2	3.2	6.5	9.7	6.5	6.5	12.9	6.5	6.5	3.2	3.2	6.5	12.9	0.0	100.
14	12.9	6.5	3.2	3.2	3.2	0.0	12.9	9.7	6.5	9.7	6.5	0.0	3.2	9.7	0.0	12.9	0.0	100.
15	16.1	6.5	0.0	0.0	3.2	6.5	12.9	6.5	6.5	0.0	9.7	3.2	6.5	3.2	9.7	9.7	0.0	100.
16	16.1	6.5	0.0	6.5	0.0	16.1	3.2	9.7	3.2	0.0	3.2	0.0	3.2	6.5	12.9	12.9	0.0	100.
17	19.4	16.1	3.2	0.0	3.2	9.7	6.5	9.7	3.2	3.2	3.2	0.0	3.2	3.2	3.2	12.9	0.0	100.
18	19.4	9.7	3.2	3.2	3.2	3.2	19.4	12.9	3.2	6.5	3.2	0.0	0.0	0.0	3.2	9.7	0.0	100.
19	19.4	3.2	6.5	0.0	3.2	6.5	19.4	12.9	6.5	0.0	3.2	0.0	3.2	3.2	3.2	9.7	0.0	100.
20	19.4	3.2	6.5	0.0	3.2	3.2	25.8	16.1	3.2	6.5	0.0	0.0	0.0	3.2	0.0	9.7	0.0	100.
21	6.5	16.1	6.5	3.2	0.0	12.9	19.4	16.1	6.5	3.2	0.0	0.0	0.0	0.0	6.5	3.2	0.0	100.
22	6.5	6.5	12.9	3.2	3.2	9.7	19.4	3.2	19.4	0.0	3.2	0.0	0.0	0.0	3.2	9.7	0.0	100.
23	16.1	3.2	9.7	6.5	0.0	3.2	22.6	6.5	9.7	9.7	3.2	3.2	0.0	0.0	3.2	3.2	0.0	100.
24	12.9	3.2	9.7	0.0	6.5	3.2	12.9	9.7	19.4	3.2	0.0	6.5	3.2	3.2	3.2	3.2	0.0	100.
ALL	13.3	5.4	3.6	2.0	2.7	5.8	12.6	9.9	7.5	7.4	4.6	2.2	2.7	4.0	5.6	10.6	0.0	100.

NUMBER OF OBS = 744



## NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

## HOURLY WIND ROSES (PERCENT)

AUGUST

## WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	3.2	6.5	3.2	6.5	6.5	9.7	22.6	12.9	3.2	9.7	0.0	3.2	0.0	0.0	9.7	0.0	100.
2	6.5	3.2	3.2	6.5	6.5	6.5	3.2	25.8	16.1	3.2	6.5	3.2	0.0	0.0	3.2	6.5	0.0	100.
3	6.5	3.2	3.2	3.2	9.7	6.5	3.2	12.9	25.8	9.7	3.2	0.0	3.2	0.0	6.5	3.2	0.0	100.
4	3.3	6.7	0.0	6.7	3.3	13.3	0.0	3.3	33.3	13.3	3.3	0.0	3.3	3.3	6.7	0.0	0.0	100.
5	3.2	6.5	3.2	3.2	0.0	16.1	0.0	6.5	29.0	3.2	12.9	0.0	6.5	3.2	3.2	3.2	0.0	100.
6	3.3	6.7	6.7	0.0	10.0	13.3	0.0	3.3	23.3	3.3	6.7	3.3	6.7	3.3	6.7	3.3	0.0	100.
7	13.3	0.0	0.0	3.3	0.0	16.7	6.7	10.0	23.3	10.0	3.3	0.0	3.3	0.0	3.3	6.7	0.0	100.
8	3.3	0.0	3.3	3.3	3.3	10.0	10.0	10.0	33.3	3.3	0.0	0.0	0.0	0.0	10.0	10.0	0.0	100.
9	6.9	0.0	3.4	3.4	6.9	6.9	10.3	10.3	27.6	6.9	3.4	0.0	0.0	0.0	10.3	3.4	0.0	100.
10	10.0	3.3	3.3	0.0	10.0	3.3	10.0	16.7	23.3	10.0	0.0	0.0	0.0	0.0	3.3	6.7	0.0	100.
11	9.7	9.7	0.0	3.2	0.0	12.9	9.7	16.1	19.4	9.7	0.0	0.0	0.0	3.2	3.2	3.2	0.0	100.
12	9.7	6.5	6.5	3.2	3.2	6.5	12.9	12.9	16.1	12.9	0.0	0.0	3.2	3.2	0.0	3.2	0.0	100.
13	3.2	12.9	9.7	0.0	0.0	6.5	6.5	22.6	12.9	9.7	6.5	0.0	0.0	6.5	0.0	3.2	0.0	100.
14	13.3	10.0	3.3	3.3	3.3	6.7	13.3	13.3	10.0	10.0	3.3	0.0	3.3	6.7	0.0	0.0	0.0	100.
15	12.9	9.7	3.2	0.0	0.0	19.4	0.0	19.4	9.7	12.9	0.0	0.0	0.0	6.5	3.2	3.2	0.0	100.
16	9.7	12.9	3.2	3.2	3.2	6.5	6.5	22.6	16.1	3.2	0.0	0.0	0.0	3.2	6.5	3.2	0.0	100.
17	12.9	3.2	3.2	6.5	0.0	6.5	12.9	22.6	16.1	0.0	3.2	0.0	0.0	0.0	3.2	9.7	0.0	100.
18	9.7	6.5	3.2	3.2	3.2	6.5	9.7	29.0	9.7	0.0	3.2	0.0	0.0	0.0	6.0	16.1	0.0	100.
19	12.9	9.7	0.0	0.0	3.2	12.9	9.7	32.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	12.9	0.0	100.
20	12.9	12.9	0.0	0.0	3.2	9.7	16.1	25.8	9.7	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	100.
21	3.2	19.4	3.2	0.0	3.2	9.7	9.7	22.6	19.4	0.0	0.0	0.0	0.0	0.0	3.2	6.5	0.0	100.
22	12.9	3.2	9.7	0.0	3.2	6.5	12.9	19.4	16.1	6.5	0.0	0.0	0.0	0.0	3.2	6.5	0.0	100.
23	6.5	6.5	3.2	9.7	3.2	0.0	12.9	22.6	16.1	6.5	3.2	3.2	0.0	0.0	0.0	6.5	0.0	100.
24	3.2	6.5	6.5	3.2	6.5	0.0	16.1	19.4	16.1	6.5	6.5	0.0	0.0	0.0	3.2	6.5	0.0	100.
ALL	8.0	6.8	3.7	2.9	3.8	8.7	8.4	17.7	18.2	6.1	3.1	0.4	1.4	1.6	3.3	6.0	0.0	100.

NUMBER OF OBS = 736

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

HOURLY WIND ROSES (PERCENT)

SEPTEMBR

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	0.0	0.0	3.3	0.0	3.3	16.7	20.0	20.0	10.0	0.0	3.3	0.0	3.3	3.3	10.0	0.0	100.
2	16.7	0.0	0.0	0.0	3.3	0.0	16.7	16.7	20.0	10.0	3.3	0.0	0.0	6.7	3.3	3.3	0.0	100.
3	16.7	0.0	0.0	0.0	3.3	0.0	10.0	23.3	23.3	3.3	6.7	3.3	0.0	0.0	3.3	6.7	0.0	100.
4	16.7	3.3	0.0	0.0	0.0	3.3	10.0	30.0	16.7	6.7	0.0	10.0	0.0	0.0	0.0	3.3	0.0	100.
5	16.7	3.3	3.3	0.0	0.0	3.3	10.0	23.3	26.7	3.3	3.3	0.0	6.7	0.0	0.0	0.0	0.0	100.
6	10.0	0.0	6.7	0.0	0.0	0.0	10.0	26.7	26.7	3.3	3.3	0.0	6.7	0.0	0.0	6.7	0.0	100.
7	6.7	0.0	6.7	3.3	0.0	3.3	6.7	23.3	20.0	10.0	6.7	0.0	0.0	6.7	0.0	6.7	0.0	100.
8	6.7	6.7	3.3	3.3	0.0	3.3	6.7	16.7	23.3	10.0	3.3	0.0	3.3	3.3	6.7	3.3	0.0	100.
9	6.9	6.9	0.0	0.0	3.4	6.9	3.4	17.2	20.7	13.8	0.0	0.0	3.4	0.0	10.3	6.9	0.0	100.
10	6.7	6.7	0.0	0.0	6.7	3.3	6.7	10.0	33.3	6.7	3.3	0.0	0.0	3.3	6.7	6.7	0.0	100.
11	3.3	6.7	3.3	3.3	0.0	3.3	6.7	16.7	23.3	10.0	6.7	0.0	3.3	0.0	3.3	10.0	0.0	100.
12	10.0	3.3	3.3	0.0	6.7	6.7	0.0	13.3	30.0	6.7	6.7	0.0	3.3	0.0	3.3	6.7	0.0	100.
13	6.7	6.7	0.0	3.3	3.3	3.3	6.7	16.7	30.0	3.3	3.3	3.3	0.0	3.3	3.3	6.7	0.0	100.
14	6.7	0.0	0.0	6.7	6.7	0.0	3.3	16.7	26.7	10.0	3.3	0.0	3.3	3.3	3.3	10.0	0.0	100.
15	6.7	0.0	3.3	3.3	0.0	3.3	13.3	13.3	20.0	13.3	0.0	0.0	3.3	0.0	6.7	13.3	0.0	100.
16	6.7	3.3	0.0	0.0	3.3	6.7	0.0	23.3	26.7	6.7	0.0	0.0	3.3	0.0	6.7	13.3	0.0	100.
17	6.7	0.0	3.3	0.0	0.0	6.7	6.7	16.7	26.7	6.7	0.0	0.0	3.3	0.0	6.7	16.7	0.0	100.
18	6.7	10.0	0.0	3.3	0.0	3.3	10.0	20.0	26.7	3.3	0.0	0.0	3.3	0.0	3.3	10.0	0.0	100.
19	10.0	6.7	3.3	3.3	0.0	3.3	6.7	33.3	16.7	3.3	0.0	3.3	0.0	0.0	3.3	6.7	0.0	100.
20	0.0	13.3	0.0	0.0	3.3	3.3	10.0	26.7	20.0	0.0	3.3	3.3	3.3	3.3	0.0	10.0	0.0	100.
21	0.0	3.3	6.7	0.0	0.0	6.7	6.7	26.7	20.0	0.0	10.0	0.0	0.0	6.7	0.0	13.3	0.0	100.
22	13.3	0.0	3.3	6.7	0.0	3.3	6.7	30.0	23.3	0.0	0.0	3.3	0.0	3.3	6.7	0.0	0.0	100.
23	10.0	3.3	3.3	0.0	6.7	3.3	3.3	26.7	20.0	10.0	3.3	0.0	0.0	6.7	0.0	3.3	0.0	100.
24	10.3	0.0	0.0	3.4	3.4	3.4	6.9	13.8	31.0	10.3	0.0	0.0	0.0	3.4	6.9	6.9	0.0	100.
ALL	8.6	3.5	2.1	1.8	2.1	3.5	7.7	20.9	23.8	6.7	2.8	1.3	1.9	2.2	3.6	7.5	0.0	100.

NUMBER OF OBS = 718

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JUL-SEP 1992

PROGRAM: WINPER  
VERSION: 2P

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	5.4	1.1	3.3	4.3	4.3	4.3	10.9	20.7	16.3	5.4	5.4	1.1	2.2	2.2	2.2	10.9	0.0	100.
2	7.6	2.2	3.3	3.3	5.4	3.3	9.8	18.5	12.0	9.8	5.4	3.3	2.2	3.3	3.3	7.6	0.0	100.
3	10.9	2.2	2.2	1.1	5.4	4.3	6.5	14.1	19.6	8.7	5.4	3.3	3.3	0.0	5.4	7.6	0.0	100.
4	11.0	3.3	1.1	2.2	1.1	9.9	5.5	12.1	17.6	11.0	4.4	4.4	2.2	5.5	4.4	4.4	0.0	100.
5	8.7	5.4	3.3	1.1	1.1	9.8	4.3	14.1	18.5	4.3	8.7	0.0	5.4	4.3	3.3	7.6	0.0	100.
6	7.7	4.4	5.5	1.1	3.3	7.7	8.8	11.0	17.6	5.5	4.4	1.1	5.5	3.3	4.4	8.8	0.0	100.
7	8.8	2.2	2.2	3.3	1.1	7.7	8.8	14.3	15.4	9.9	3.3	1.1	1.1	5.5	4.4	11.0	0.0	100.
8	6.6	3.3	2.2	2.2	2.2	5.5	11.0	14.3	20.9	6.6	1.1	1.1	2.2	2.2	9.9	8.8	0.0	100.
9	11.2	3.4	1.1	1.1	3.4	5.6	10.1	13.5	19.1	10.1	3.4	0.0	1.1	1.1	9.0	6.7	0.0	100.
10	14.3	4.4	1.1	0.0	6.6	3.3	6.6	12.1	22.0	11.0	4.4	0.0	1.1	1.1	5.5	6.6	0.0	100.
11	13.0	6.5	1.1	3.3	0.0	5.4	7.6	13.0	19.6	10.9	3.3	2.2	3.3	1.1	4.3	5.4	0.0	100.
12	10.9	5.4	4.3	1.1	4.3	4.3	9.8	10.9	18.5	8.7	4.3	1.1	2.2	4.3	3.3	6.5	0.0	100.
13	6.5	7.6	3.3	2.2	2.2	5.4	7.6	15.2	16.3	8.7	5.4	3.3	1.1	4.3	3.3	7.6	0.0	100.
14	11.0	5.5	2.2	4.4	4.4	2.2	9.9	13.2	14.3	9.9	4.4	0.0	3.3	6.6	1.1	7.7	0.0	100.
15	12.0	5.4	2.2	1.1	1.1	9.8	8.7	13.0	12.0	8.7	3.3	1.1	3.3	3.3	6.5	8.7	0.0	100.
16	10.9	7.6	1.1	3.3	2.2	9.8	3.3	18.5	15.2	3.3	1.1	0.0	2.2	3.3	8.7	9.8	0.0	100.
17	13.0	6.5	3.3	2.2	1.1	7.6	8.7	16.3	15.2	3.3	2.2	0.0	2.2	1.1	4.3	13.0	0.0	100.
18	12.0	8.7	2.2	3.3	2.2	4.3	13.0	20.7	13.0	3.3	2.2	0.0	1.1	0.0	2.2	12.0	0.0	100.
19	14.1	6.5	3.3	1.1	2.2	7.6	12.0	26.1	8.7	2.2	1.1	1.1	1.1	1.1	2.2	9.8	0.0	100.
20	10.9	9.8	2.2	0.0	3.3	5.4	17.4	22.8	10.9	2.2	1.1	1.1	1.1	2.2	0.0	9.8	0.0	100.
21	3.3	13.0	5.4	1.1	1.1	9.8	12.0	21.7	15.2	1.1	3.3	0.0	0.0	2.2	3.3	7.6	0.0	100.
22	10.9	3.3	8.7	3.3	2.2	6.5	13.0	17.4	19.6	2.2	1.1	1.1	0.0	1.1	4.3	5.4	0.0	100.
23	10.9	4.3	5.4	5.4	3.3	2.2	13.0	18.5	15.2	8.7	3.3	2.2	0.0	2.2	1.1	4.3	0.0	100.
24	8.8	3.3	5.5	2.2	5.5	2.2	12.1	14.3	22.0	6.6	2.2	2.2	1.1	2.2	4.4	5.5	0.0	100.
ALL	10.0	5.2	3.1	2.2	2.9	6.0	9.6	16.1	16.4	6.7	3.5	1.3	2.0	2.6	4.2	8.1	0.0	100.

NUMBER OF OBS = 2198

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	16.1	0.0	3.2	6.5	0.0	3.2	12.9	3.2	9.7	9.7	6.5	9.7	6.5	3.2	6.5	3.2	0.0	100.
2	16.1	6.5	0.0	0.0	3.2	0.0	12.9	6.5	9.7	3.2	12.9	3.2	6.5	9.7	6.5	3.2	0.0	100.
3	16.1	6.5	0.0	0.0	0.0	3.2	16.1	6.5	6.5	6.5	9.7	3.2	6.5	3.2	9.7	6.5	0.0	100.
4	9.7	9.7	0.0	0.0	0.0	3.2	16.1	9.7	0.0	9.7	12.9	0.0	6.5	3.2	3.2	16.1	0.0	100.
5	13.3	3.3	6.7	0.0	0.0	0.0	20.0	6.7	3.3	10.0	13.3	0.0	6.7	3.3	6.7	6.7	0.0	100.
6	16.1	3.2	3.2	3.2	0.0	3.2	9.7	6.5	12.9	6.5	6.5	6.5	6.5	3.2	6.5	6.5	0.0	100.
7	12.9	6.5	3.2	0.0	3.2	3.2	9.7	3.2	16.1	6.5	6.5	6.5	6.5	3.2	6.5	6.5	0.0	100.
8	13.3	0.0	10.0	3.3	0.0	3.3	6.7	16.7	6.7	6.7	6.7	3.3	10.0	3.3	3.3	6.7	0.0	100.
9	6.9	3.4	6.9	6.9	0.0	6.9	6.9	6.9	10.3	3.4	10.3	6.9	6.9	6.9	3.4	6.9	0.0	100.
10	10.3	3.4	10.3	3.4	0.0	3.4	10.3	10.3	6.9	6.9	13.8	3.4	0.0	10.3	3.4	3.4	0.0	100.
11	6.9	10.3	3.4	6.9	0.0	6.9	3.4	10.3	3.4	20.7	10.3	3.4	0.0	3.4	3.4	6.9	0.0	100.
12	13.8	6.9	0.0	10.3	0.0	3.4	10.3	3.4	17.2	13.8	3.4	0.0	3.4	0.0	10.3	3.4	0.0	100.
13	13.8	0.0	3.4	3.4	3.4	6.9	0.0	6.9	24.1	6.9	6.9	0.0	3.4	0.0	6.9	13.8	0.0	100.
14	7.1	3.6	7.1	0.0	7.1	3.6	3.6	7.1	17.9	14.3	3.6	3.6	0.0	0.0	10.7	10.7	0.0	100.
15	9.7	3.2	3.2	0.0	12.9	3.2	0.0	6.5	12.9	12.9	9.7	3.2	3.2	0.0	9.7	9.7	0.0	100.
16	12.9	3.2	3.2	3.2	6.5	3.2	3.2	3.2	16.1	12.9	9.7	0.0	6.5	0.0	9.7	6.5	0.0	100.
17	6.5	3.2	6.5	0.0	3.2	9.7	0.0	6.5	16.1	12.9	12.9	0.0	0.0	9.7	3.2	9.7	0.0	100.
18	9.7	3.2	3.2	6.5	3.2	12.9	0.0	9.7	19.4	9.7	6.5	0.0	0.0	3.2	9.7	3.2	0.0	100.
19	6.5	0.0	0.0	9.7	3.2	6.5	3.2	16.1	9.7	9.7	12.9	3.2	0.0	6.5	3.2	9.7	0.0	100.
20	3.2	3.2	3.2	6.5	3.2	12.9	0.0	12.9	16.1	3.2	12.9	3.2	3.2	3.2	3.2	9.7	0.0	100.
21	6.5	6.5	3.2	3.2	6.5	9.7	0.0	9.7	19.4	6.5	6.5	6.5	0.0	3.2	6.5	6.5	0.0	100.
22	3.2	9.7	0.0	3.2	3.2	6.5	9.7	9.7	12.9	9.7	6.5	6.5	6.5	0.0	6.5	6.5	0.0	100.
23	3.2	9.7	0.0	9.7	3.2	0.0	12.9	3.2	9.7	16.1	6.5	0.0	3.2	6.5	9.7	6.5	0.0	100.
24	9.7	3.2	6.5	3.2	3.2	0.0	12.9	3.2	9.7	9.7	16.1	0.0	3.2	3.2	9.7	6.5	0.0	100.
ALL	10.2	4.5	3.6	3.7	2.7	4.8	7.5	7.7	11.9	9.5	9.3	3.0	4.0	3.7	6.6	7.3	0.0	100.

NUMBER OF OBS = 729

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	10.0	6.7	6.7	6.7	3.3	0.0	6.7	0.0	6.7	13.3	3.3	0.0	6.7	3.3	20.0	6.7	0.0	100.
2	6.7	10.0	3.3	10.0	0.0	0.0	3.3	3.3	3.3	10.0	6.7	3.3	3.3	6.7	20.0	10.0	0.0	100.
3	6.7	13.3	0.0	13.3	0.0	0.0	3.3	0.0	10.0	0.0	6.7	6.7	6.7	10.0	20.0	3.3	0.0	100.
4	6.7	10.0	0.0	10.0	3.3	0.0	3.3	0.0	6.7	3.3	6.7	3.3	6.7	6.7	23.3	10.0	0.0	100.
5	6.7	10.0	0.0	10.0	0.0	0.0	3.3	6.7	3.3	3.3	6.7	6.7	3.3	10.0	13.3	16.7	0.0	100.
6	10.0	10.0	0.0	10.0	0.0	3.3	3.3	3.3	3.3	6.7	3.3	3.3	6.7	3.3	23.3	10.0	0.0	100.
7	6.7	6.7	3.3	10.0	0.0	0.0	3.3	6.7	6.7	3.3	3.3	3.3	3.3	10.0	23.3	10.0	0.0	100.
8	10.0	6.7	0.0	10.0	0.0	0.0	3.3	6.7	6.7	3.3	3.3	3.3	3.3	10.0	13.3	20.0	0.0	100.
9	20.0	3.3	3.3	10.0	0.0	3.3	3.3	3.3	6.7	3.3	3.3	0.0	6.7	10.0	10.0	13.3	0.0	100.
10	16.7	6.7	6.7	6.7	3.3	0.0	3.3	6.7	3.3	3.3	3.3	0.0	0.0	13.3	10.0	16.7	0.0	100.
11	10.0	10.0	6.7	3.3	3.3	0.0	6.7	3.3	6.7	6.7	0.0	0.0	0.0	13.3	16.7	13.3	0.0	100.
12	13.3	0.0	10.0	6.7	3.3	0.0	6.7	0.0	6.7	10.0	0.0	0.0	0.0	16.7	10.0	16.7	0.0	100.
13	16.7	10.0	3.3	3.3	3.3	0.0	6.7	0.0	6.7	6.7	3.3	0.0	0.0	13.3	13.3	13.3	0.0	100.
14	10.3	10.3	3.4	0.0	3.4	0.0	6.9	0.0	10.3	3.4	3.4	0.0	0.0	13.8	10.3	24.1	0.0	100.
15	10.0	10.0	3.3	0.0	3.3	0.0	6.7	3.3	10.0	0.0	3.3	0.0	0.0	13.3	23.3	13.3	0.0	100.
16	20.0	0.0	6.7	0.0	3.3	0.0	6.7	6.7	6.7	0.0	3.3	3.3	0.0	16.7	16.7	10.0	0.0	100.
17	13.3	3.3	6.7	0.0	3.3	3.3	6.7	3.3	6.7	0.0	0.0	3.3	3.3	16.7	16.7	13.3	0.0	100.
18	13.3	6.7	6.7	0.0	6.7	0.0	6.7	3.3	6.7	0.0	0.0	3.3	6.7	20.0	13.3	6.7	0.0	100.
19	3.3	3.3	10.0	0.0	3.3	3.3	6.7	3.3	6.7	0.0	3.3	0.0	13.3	16.7	6.7	20.0	0.0	100.
20	13.3	3.3	10.0	3.3	3.3	0.0	3.3	6.7	6.7	3.3	0.0	3.3	16.7	6.7	10.0	10.0	0.0	100.
21	6.7	10.0	6.7	0.0	6.7	0.0	3.3	3.3	10.0	3.3	0.0	10.0	6.7	6.7	13.3	13.3	0.0	100.
22	10.0	6.7	0.0	3.3	3.3	3.3	6.7	0.0	10.0	3.3	0.0	6.7	13.3	6.7	13.3	13.3	0.0	100.
23	13.8	6.9	3.4	6.9	0.0	3.4	6.9	0.0	0.0	10.3	0.0	6.9	10.3	10.3	13.8	6.9	0.0	100.
24	13.3	3.3	3.3	10.0	0.0	3.3	6.7	0.0	3.3	13.3	3.3	3.3	3.3	6.7	16.7	10.0	0.0	100.
ALL	11.1	7.0	4.3	5.6	2.4	1.0	5.2	2.9	6.4	4.6	2.8	2.9	5.0	10.9	15.5	12.5	0.0	100.

NUMBER OF OBS = 718

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	3.2	0.0	0.0	3.2	0.0	0.0	9.7	12.9	6.5	6.5	9.7	9.7	3.2	9.7	6.5	19.4	0.0	100.
2	0.0	3.2	3.2	0.0	0.0	3.2	9.7	6.5	12.9	6.5	9.7	0.0	12.9	9.7	6.5	16.1	0.0	100.
3	6.5	0.0	0.0	3.2	0.0	0.0	6.5	9.7	12.9	12.9	3.2	6.5	6.5	9.7	9.7	12.9	0.0	100.
4	0.0	0.0	0.0	0.0	0.0	0.0	12.9	6.5	12.9	9.7	3.2	6.5	3.2	12.9	9.7	22.6	0.0	100.
5	0.0	0.0	0.0	0.0	0.0	0.0	12.9	3.2	16.1	9.7	3.2	6.5	6.5	6.5	16.1	19.4	0.0	100.
6	0.0	0.0	0.0	0.0	0.0	0.0	12.9	0.0	19.4	12.9	6.5	3.2	3.2	6.5	19.4	16.1	0.0	100.
7	0.0	0.0	0.0	0.0	0.0	0.0	12.9	3.2	19.4	16.1	0.0	3.2	6.5	6.5	9.7	22.6	0.0	100.
8	0.0	0.0	0.0	0.0	0.0	0.0	13.3	3.3	20.0	6.7	10.0	3.3	3.3	10.0	6.7	23.3	0.0	100.
9	0.0	3.2	0.0	0.0	0.0	3.2	6.5	9.7	22.6	3.2	3.2	6.5	3.2	12.9	6.5	19.4	0.0	100.
10	3.2	3.2	3.2	0.0	0.0	3.2	9.7	6.5	22.6	6.5	0.0	0.0	12.9	0.0	16.1	12.9	0.0	100.
11	3.2	3.2	0.0	0.0	0.0	0.0	12.9	6.5	19.4	6.5	0.0	9.7	3.2	3.2	16.1	16.1	0.0	100.
12	0.0	3.2	0.0	3.2	0.0	0.0	6.5	16.1	6.5	19.4	3.2	0.0	6.5	3.2	16.1	16.1	0.0	100.
13	0.0	3.2	3.2	0.0	0.0	0.0	9.7	6.5	12.9	16.1	6.5	0.0	3.2	3.2	16.1	19.4	0.0	100.
14	3.4	0.0	0.0	3.4	0.0	0.0	6.9	6.9	13.8	13.8	3.4	6.9	0.0	10.3	13.8	17.2	0.0	100.
15	3.3	0.0	0.0	3.3	0.0	0.0	6.7	6.7	13.3	10.0	6.7	3.3	3.3	13.3	10.0	20.0	0.0	100.
16	0.0	3.4	0.0	3.4	0.0	3.4	6.9	6.9	10.3	13.8	3.4	0.0	3.4	17.2	13.8	13.8	0.0	100.
17	0.0	0.0	0.0	3.3	3.3	3.3	6.7	3.3	20.0	6.7	3.3	0.0	10.0	13.3	6.7	20.0	0.0	100.
18	3.3	0.0	0.0	0.0	10.0	0.0	3.3	10.0	16.7	6.7	0.0	6.7	6.7	13.3	10.0	13.3	0.0	100.
19	3.3	0.0	3.3	3.3	0.0	0.0	6.7	10.0	16.7	6.7	0.0	3.3	10.0	13.3	3.3	20.0	0.0	100.
20	0.0	3.3	0.0	0.0	3.3	0.0	6.7	3.3	23.3	3.3	0.0	13.3	0.0	13.3	6.7	23.3	0.0	100.
21	3.2	0.0	0.0	0.0	0.0	6.5	6.5	6.5	16.1	9.7	0.0	9.7	0.0	12.9	6.5	22.6	0.0	100.
22	0.0	0.0	0.0	0.0	0.0	3.3	6.7	10.0	16.7	6.7	6.7	6.7	0.0	6.7	13.3	23.3	0.0	100.
23	0.0	0.0	0.0	0.0	0.0	3.2	6.5	9.7	12.9	6.5	9.7	6.5	0.0	6.5	19.4	19.4	0.0	100.
24	3.3	0.0	0.0	0.0	3.3	0.0	6.7	13.3	10.0	6.7	6.7	10.0	3.3	6.7	13.3	16.7	0.0	100.
ALL	1.5	1.1	0.5	1.1	0.8	1.2	8.6	7.4	15.6	9.3	4.1	5.1	4.6	9.2	11.3	18.6	0.0	100.

NUMBER OF OBS = 732

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION OCT-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	9.8	2.2	3.3	5.4	1.1	1.1	9.8	5.4	7.6	9.8	6.5	6.5	5.4	5.4	10.9	9.8	0.0	100.
2	7.6	6.5	2.2	3.3	1.1	1.1	8.7	5.4	8.7	6.5	9.8	2.2	7.6	8.7	10.9	9.8	0.0	100.
3	9.8	6.5	0.0	5.4	0.0	1.1	8.7	5.4	9.8	6.5	6.5	5.4	6.5	7.6	13.0	7.6	0.0	100.
4	5.4	6.5	0.0	3.3	1.1	1.1	10.9	5.4	6.5	7.6	7.6	3.3	5.4	7.6	12.0	16.3	0.0	100.
5	6.6	4.4	2.2	3.3	0.0	0.0	12.1	5.5	7.7	7.7	7.7	4.4	5.5	6.6	12.1	14.3	0.0	100.
6	8.7	4.3	1.1	4.3	0.0	2.2	8.7	3.3	12.0	8.7	5.4	4.3	5.4	4.3	16.3	10.9	0.0	100.
7	6.5	4.3	2.2	3.3	1.1	1.1	8.7	4.3	14.1	8.7	3.3	4.3	5.4	6.5	13.0	13.0	0.0	100.
8	7.8	2.2	3.3	4.4	0.0	1.1	7.8	8.9	11.1	5.6	6.7	3.3	5.6	7.8	7.8	16.7	0.0	100.
9	8.9	3.3	3.3	5.6	0.0	4.4	5.6	6.7	13.3	3.3	5.6	4.4	5.6	10.0	6.7	13.3	0.0	100.
10	10.0	4.4	6.7	3.3	1.1	2.2	7.8	7.8	11.1	5.6	5.6	1.1	4.4	7.8	10.0	11.1	0.0	100.
11	6.7	7.8	3.3	3.3	1.1	2.2	7.8	6.7	10.0	11.1	3.3	4.4	1.1	6.7	12.2	12.2	0.0	100.
12	8.9	3.3	3.3	6.7	1.1	1.1	7.8	6.7	10.0	14.4	2.2	0.0	3.3	6.7	12.2	12.2	0.0	100.
13	10.0	4.4	3.3	2.2	2.2	2.2	5.6	4.4	14.4	10.0	5.6	0.0	2.2	5.6	12.2	15.6	0.0	100.
14	7.0	4.7	3.5	1.2	3.5	1.2	5.8	4.7	14.0	10.5	3.5	3.5	0.0	8.1	11.6	17.4	0.0	100.
15	7.7	4.4	2.2	1.1	5.5	1.1	4.4	5.5	12.1	7.7	6.6	2.2	2.2	8.8	14.3	14.3	0.0	100.
16	11.1	2.2	3.3	2.2	3.3	2.2	5.6	5.6	11.1	8.9	5.6	1.1	3.3	11.1	13.3	10.0	0.0	100.
17	6.6	2.2	4.4	1.1	3.3	5.5	4.4	4.4	14.3	6.6	5.5	1.1	4.4	13.2	8.8	14.3	0.0	100.
18	8.8	3.3	3.3	2.2	6.6	4.4	3.3	7.7	14.3	5.5	2.2	3.3	4.4	12.1	11.0	7.7	0.0	100.
19	4.4	1.1	4.4	4.4	2.2	3.3	5.5	9.9	11.0	5.5	5.5	2.2	7.7	12.1	4.4	16.5	0.0	100.
20	5.5	3.3	4.4	3.3	3.3	4.4	3.3	7.7	15.4	3.3	4.4	6.6	6.6	7.7	6.6	14.3	0.0	100.
21	5.4	5.4	3.3	1.1	4.3	5.4	3.3	6.5	15.2	6.5	2.2	8.7	2.2	7.6	8.7	14.1	0.0	100.
22	4.4	5.5	0.0	2.2	2.2	4.4	7.7	6.6	13.2	6.6	4.4	6.6	6.6	4.4	11.0	14.3	0.0	100.
23	5.5	5.5	1.1	5.5	1.1	2.2	8.8	4.4	7.7	11.0	5.5	4.4	4.4	7.7	14.3	11.0	0.0	100.
24	8.8	2.2	3.3	4.4	2.2	1.1	8.8	5.5	7.7	9.9	8.8	4.4	3.3	5.5	13.2	11.0	0.0	100.
ALL	7.6	4.2	2.8	3.4	2.0	2.3	7.1	6.0	11.3	7.8	5.4	3.7	4.5	7.9	11.1	12.8	0.0	100.

NUMBER OF OBS = 2179

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JUL-DEC 1992

PROGRAM: WINPER  
VERSION: 2P

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	7.6	1.6	3.3	4.9	2.7	2.7	10.3	13.0	12.0	7.6	6.0	3.8	3.8	3.8	6.5	10.3	0.0	100.
2	7.6	4.3	2.7	3.3	3.3	2.2	9.2	12.0	10.3	8.2	7.6	2.7	4.9	6.0	7.1	8.7	0.0	100.
3	10.3	4.3	1.1	3.3	2.7	2.7	7.6	9.8	14.7	7.6	6.0	4.3	4.9	3.8	9.2	7.6	0.0	100.
4	8.2	4.9	0.5	2.7	1.1	5.5	8.2	8.7	12.0	9.3	6.0	3.8	3.8	6.6	8.2	10.4	0.0	100.
5	7.7	4.9	2.7	2.2	0.5	4.9	8.2	9.8	13.1	6.0	8.2	2.2	5.5	5.5	7.7	10.9	0.0	100.
6	8.2	4.4	3.3	2.7	1.6	4.9	8.7	7.1	14.8	7.1	4.9	2.7	5.5	3.8	10.4	9.8	0.0	100.
7	7.7	3.3	2.2	3.3	1.1	4.4	8.7	9.3	14.8	9.3	3.3	2.7	3.3	6.0	8.7	12.0	0.0	100.
8	7.2	2.8	2.8	3.3	1.1	3.3	9.4	11.6	16.0	6.1	3.9	2.2	3.9	5.0	8.8	12.7	0.0	100.
9	10.1	3.4	2.2	3.4	1.7	5.0	7.8	10.1	16.2	6.7	4.5	2.2	3.4	5.6	7.8	10.1	0.0	100.
10	12.2	4.4	3.9	1.7	3.9	2.8	7.2	9.9	16.6	8.3	5.0	0.6	2.8	4.4	7.7	8.8	0.0	100.
11	9.9	7.1	2.2	3.3	0.5	3.8	7.7	9.9	14.8	11.0	3.3	3.3	2.2	3.8	8.2	8.8	0.0	100.
12	9.9	4.4	3.8	3.8	2.7	2.7	8.8	8.8	14.3	11.5	3.3	0.5	2.7	5.5	7.7	9.3	0.0	100.
13	8.2	6.0	3.3	2.2	2.2	3.8	6.6	9.9	15.4	9.3	5.5	1.6	1.6	4.9	7.7	11.5	0.0	100.
14	9.0	5.1	2.8	2.8	4.0	1.7	7.9	9.0	14.1	10.2	4.0	1.7	1.7	7.3	6.2	12.4	0.0	100.
15	9.8	4.9	2.2	1.1	3.3	5.5	6.6	9.3	12.0	8.2	4.9	1.6	2.7	6.0	10.4	11.5	0.0	100.
16	11.0	4.9	2.2	2.7	2.7	6.0	4.4	12.1	13.2	6.0	3.3	0.5	2.7	7.1	11.0	9.9	0.0	100.
17	9.8	4.4	3.8	1.6	2.2	6.6	6.6	10.4	14.8	4.9	3.8	0.5	3.3	7.1	6.6	13.7	0.0	100.
18	10.4	6.0	2.7	2.7	4.4	4.4	8.2	14.2	13.7	4.4	2.2	1.6	2.7	6.0	6.6	9.8	0.0	100.
19	9.3	3.8	3.8	2.7	2.2	5.5	8.7	18.0	9.8	3.8	3.3	1.6	4.4	6.6	3.3	13.1	0.0	100.
20	8.2	6.6	3.3	1.6	3.3	4.9	10.4	15.3	13.1	2.7	2.7	3.8	3.8	4.9	3.3	12.0	0.0	100.
21	4.3	9.2	4.3	1.1	2.7	7.6	7.6	14.1	15.2	3.8	2.7	4.3	1.1	4.9	6.0	10.9	0.0	100.
22	7.7	4.4	4.4	2.7	2.2	5.5	10.4	12.0	16.4	4.4	2.7	3.8	3.3	2.7	7.7	9.8	0.0	100.
23	8.2	4.9	3.3	5.5	2.2	2.2	10.9	11.5	11.5	9.8	4.4	3.3	2.2	4.9	7.7	7.7	0.0	100.
24	8.7	2.7	4.4	3.3	3.8	1.6	10.4	9.8	14.8	8.7	5.5	3.3	2.2	3.8	8.7	8.2	0.0	100.
ALL	8.8	4.7	3.0	2.8	2.4	4.2	8.4	11.1	13.9	7.3	4.5	2.5	3.3	5.3	7.6	10.4	0.0	100.

NUMBER OF OBS = 4378



NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION JAN-DEC 1992

PROGRAM: WINPER

VERSION: 2P

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	8.3	4.4	3.6	3.9	3.0	3.6	10.2	11.1	10.2	6.4	6.9	3.6	3.0	5.0	6.1	10.5	0.0	100.
2	7.7	5.2	3.6	2.5	3.3	5.0	8.5	9.6	10.7	7.4	6.6	3.0	4.4	6.1	7.7	8.5	0.0	100.
3	9.1	5.5	2.2	2.8	3.9	5.8	6.6	7.7	13.8	7.2	6.1	4.1	3.6	5.5	9.1	7.2	0.0	100.
4	8.8	4.4	2.5	3.0	2.5	6.1	8.0	6.4	13.0	7.7	5.5	4.1	3.0	6.4	8.8	9.7	0.0	100.
5	9.1	4.7	3.0	3.6	2.2	6.6	7.2	8.6	11.0	5.5	7.2	2.8	4.4	5.5	8.6	9.9	0.0	100.
6	9.4	5.0	3.0	3.6	2.2	6.9	7.2	8.0	11.9	6.6	4.4	4.1	3.6	4.4	9.4	10.2	0.0	100.
7	10.2	5.0	3.0	2.5	2.8	5.5	8.6	9.1	11.6	7.2	4.4	3.3	2.8	5.8	7.7	10.5	0.0	100.
8	10.0	3.3	4.2	3.6	1.4	6.1	8.1	10.3	12.2	6.7	4.7	2.2	3.3	4.4	7.8	11.7	0.0	100.
9	11.2	5.0	2.8	3.1	2.8	5.9	8.4	8.9	13.1	6.7	5.0	2.2	3.4	4.7	7.5	9.2	0.0	100.
10	12.3	4.2	3.9	2.8	3.4	4.8	9.0	8.4	13.4	7.6	5.6	2.0	2.2	4.5	6.2	9.8	0.0	100.
11	10.9	6.4	3.1	2.8	2.0	5.6	8.7	9.5	11.8	9.5	3.9	3.6	2.0	4.5	6.4	9.2	0.0	100.
12	10.4	4.5	3.9	3.1	3.4	5.3	9.0	8.1	12.3	10.1	4.2	1.7	3.1	4.8	7.3	9.0	0.0	100.
13	9.5	4.5	3.6	2.0	3.9	5.0	7.0	10.9	12.0	8.1	5.6	2.2	2.0	5.6	7.6	10.4	0.0	100.
14	8.8	4.8	1.7	3.7	3.4	4.0	8.8	10.0	10.0	9.4	4.8	2.3	1.7	8.0	7.1	11.4	0.0	100.
15	9.7	3.6	1.9	1.7	3.3	7.5	6.4	9.7	10.6	7.8	5.0	2.5	2.8	7.0	9.5	10.9	0.0	100.
16	11.1	3.9	1.9	2.5	3.6	7.2	5.0	10.8	11.1	6.4	5.0	1.1	3.3	7.2	9.4	10.3	0.0	100.
17	9.9	3.6	3.0	2.5	2.8	7.2	6.9	10.8	11.6	5.8	3.6	1.4	3.3	6.6	7.5	13.5	0.0	100.
18	10.5	5.0	3.0	2.8	4.1	4.4	9.1	12.7	10.8	6.1	2.8	1.9	3.0	6.4	6.4	11.0	0.0	100.
19	9.1	2.8	4.1	3.6	3.0	3.9	10.5	15.5	9.4	4.7	2.5	3.3	3.9	5.2	3.9	14.6	0.0	100.
20	10.5	4.7	3.9	2.5	3.6	4.4	11.6	13.0	10.5	4.4	3.3	4.1	3.6	4.1	4.4	11.3	0.0	100.
21	7.4	6.6	3.9	3.0	3.6	5.8	9.4	12.1	12.7	4.1	3.9	4.1	2.2	4.4	5.2	11.6	0.0	100.
22	9.4	5.0	3.6	3.3	3.6	5.5	9.7	11.3	13.0	5.5	3.0	3.6	3.3	3.0	6.9	10.2	0.0	100.
23	9.1	5.0	2.8	4.2	3.6	3.3	9.7	12.5	9.7	8.9	5.0	2.5	2.2	4.4	7.8	9.4	0.0	100.
24	8.4	4.5	3.9	3.3	3.9	2.2	10.6	10.6	12.5	7.8	5.8	2.2	3.1	3.9	7.8	9.5	0.0	100.
ALL	9.6	4.7	3.2	3.0	3.1	5.3	8.5	10.2	11.6	7.0	4.8	2.8	3.1	5.3	7.3	10.4	0.0	100.

NUMBER OF OBS = 8644

Precipitation

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

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	12M 12HONT	TOTAL
92	7	1	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	2	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.01
92	7	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.20 0.00	0.21 0.00	0.41
92	7	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	7	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.20 0.00	0.21 0.00	0.41
92	7	8	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.06 0.00	0.06
92	7	9	0.00 0.10	0.00 0.00	0.00 0.00	0.10 0.00	0.00 0.00	0.00 0.10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.30
92	7	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.02 0.00	0.02
92	7	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.16	0.00 0.00	0.16
92	7	13	0.37 0.00	0.37 0.00	0.37 0.00	0.72 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	1.83
92	7	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

RAIN VERSION # 2P

NFPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-SEP 1992

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
92	7	18	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.10	0.10
92	7	19	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.01
92	7	20	0.22 0.00	0.15 0.00	0.15 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.52
92	7	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	22	0.00 0.33	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.33 0.00	0.33 0.00	0.99
92	7	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	24	0.00 0.19	0.00 0.17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.17 0.00	0.17 0.00	0.71
92	7	25	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	26	0.00 0.22	0.00 0.21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.22 0.00	0.22 0.00	0.87
92	7	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	7	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.12 0.00	0.12
92	7	30	0.00 0.20	0.00 0.20	0.00 0.20	0.00 0.20	0.00 0.00	0.00 0.00	0.00 0.00	0.20 0.00	0.20 0.00	0.20 0.00	0.20 0.00	0.39 0.00	1.99
92	7	31	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

MONTH OF JULY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 41  
 TOTAL DAYS WITH PRECIPITATION - 16  
 TOTAL AMOUNT OF PRECIPITATION - 8.53 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.72 INCHES  
 MAXIMUM DAILY PRECIPITATION - 1.99 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 13 HOUR 4 - 0.72 INCHES  
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 12 HOUR 23 - 2.01 INCHES  
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 12 HOUR 23 - 2.01 INCHES  
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 12 HOUR 23 - 2.01 INCHES  
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 12 HOUR 23 - 2.01 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 0  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 0  
 TOTAL DAYS WITH PRECIPITATION - 0  
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

## NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

MONTH OF JULY

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	41	126	219	296	363
0.02	39	114	195	271	339
0.03	38	108	183	253	315
0.04	38	108	183	253	315
0.05	38	108	183	253	315
0.07	37	102	171	237	299
0.10	37	102	171	237	299
0.15	32	74	131	189	249
0.20	25	69	126	182	236
0.25	8	59	107	159	214
0.30	8	59	107	159	214
0.35	5	56	104	152	200
0.40	1	53	101	149	197
0.45	1	39	75	111	148
0.50	1	39	75	111	148
0.60	1	32	62	92	122
0.70	1	26	56	86	117
0.80	0	22	46	70	94
0.90	0	17	35	53	72
1.00	0	12	24	36	48
1.10	0	11	23	35	47
1.20	0	9	21	33	45
1.30	0	8	20	32	44
1.40	0	4	18	30	42
1.50	0	3	17	29	41
1.60	0	3	15	27	39
1.70	0	3	15	27	39
1.80	0	3	13	25	37
1.90	0	1	11	23	35
2.00	0	1	7	13	19

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

B43

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

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
92	8	1	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	2	0.00 0.10	0.00 0.10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.30
92	8	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	7	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.18
92	8	8	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	9	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	13	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

RAIN VERSION # 2P

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR JUL-SEP 1992

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
92	8	18	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	19	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	22	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	24	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	25	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	26	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.01
92	8	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	30	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	8	31	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00



NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

MONTH OF AUGUST

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 6  
 TOTAL DAYS WITH PRECIPITATION - 3  
 TOTAL AMOUNT OF PRECIPITATION - 0.49 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.10 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.30 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	2 HOUR 14 -	0.10 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	2 HOUR 12 -	0.30 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	2 HOUR 12 -	0.30 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	2 HOUR 12 -	0.30 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	2 HOUR 12 -	0.30 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 0  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 0  
 TOTAL DAYS WITH PRECIPITATION - 0  
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

MONTH OF AUGUST

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	1	6	12	18	24
0.01	6	21	39	57	75
0.02	5	15	27	39	51
0.03	5	15	27	39	51
0.04	5	15	27	39	51
0.05	5	15	27	39	51
0.07	5	15	27	39	51
0.10	3	13	25	37	49
0.15	0	11	23	35	47
0.20	0	6	12	18	24
0.25	0	4	10	16	22
0.30	0	4	10	16	22
0.35	0	0	0	0	0
0.40	0	0	0	0	0
0.45	0	0	0	0	0
0.50	0	0	0	0	0
0.60	0	0	0	0	0
0.70	0	0	0	0	0
0.80	0	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

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

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
92	9	1	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.05	0.00 0.25	0.00 0.10	0.00 0.10	0.00 1.15	0.00 0.05	0.00 0.00	0.00 0.00	1.70
92	9	2	0.00 0.00	0.10 0.00	0.10 0.00	0.11 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.31
92	9	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	5	0.00 0.15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 1.00	0.00 1.10	0.00 1.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	3.25
92	9	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	7	0.00 0.31	0.00 0.31	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.31 0.00	0.33 0.00	0.35 0.00	1.61
92	9	8	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	9	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	13	0.00 0.00	0.00 0.00	0.02 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.06	0.06

RAIN VERSION # 2P

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR JUL-SEP 1992

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	12M 12MDNT	TOTAL
92	9	18	0.12 0.00	0.12 0.00	0.12 0.00	0.12 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.10 0.00	0.68
92	9	19	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.10	0.00 0.10	0.00 0.00	0.00 0.00	0.20
92	9	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	22	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	24	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	25	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	26	0.00 0.29	0.00 0.29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.29 0.00	0.29 0.00	1.16
92	9	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	9	30	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-SEP 1992

RAIN VERSION # 2P

MONTH OF SEPTEMBR

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 31  
 TOTAL DAYS WITH PRECIPITATION - 8  
 TOTAL AMOUNT OF PRECIPITATION - 8.97 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 1.15 INCHES  
 MAXIMUM DAILY PRECIPITATION - 3.25 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 21 -	1.15 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	5 HOUR 17 -	3.10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	5 HOUR 13 -	3.25 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	5 HOUR 13 -	3.25 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	5 HOUR 13 -	3.25 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 1  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 0  
 TOTAL DAYS WITH PRECIPITATION - 0  
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

MONTH OF SEPTEMBR

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	31	72	109	144	174
0.02	31	72	109	144	174
0.03	31	72	109	144	174
0.04	31	72	109	144	174
0.05	31	72	109	144	174
0.07	28	70	107	143	173
0.10	28	70	107	143	173
0.15	15	64	103	139	169
0.20	14	59	98	134	164
0.25	14	47	79	109	133
0.30	9	44	77	107	131
0.35	5	36	68	98	123
0.40	4	35	67	97	122
0.45	4	33	64	94	120
0.50	4	32	64	94	120
0.60	4	27	53	83	110
0.70	4	25	49	79	106
0.80	4	25	49	73	94
0.90	4	23	47	71	92
1.00	4	21	45	69	90
1.10	2	20	44	68	89
1.20	0	16	34	52	67
1.30	0	16	34	52	67
1.40	0	12	32	50	65
1.50	0	11	32	50	65
1.60	0	11	31	49	64
1.70	0	7	21	33	43
1.80	0	6	16	28	40
1.90	0	6	15	27	39
2.00	0	6	13	25	37

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

## ANNUAL INDEX

## FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 78  
TOTAL DAYS WITH PRECIPITATION - 27  
TOTAL AMOUNT OF PRECIPITATION - 17.99 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 1.15 INCHES  
MAXIMUM DAILY PRECIPITATION - 3.25 INCHES

1	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9	DAY	1	HOUR	21	-	1.15	INCHES
6	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9	DAY	5	HOUR	17	-	3.10	INCHES
12	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9	DAY	5	HOUR	13	-	3.25	INCHES
18	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9	DAY	5	HOUR	13	-	3.25	INCHES
24	HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9	DAY	5	HOUR	13	-	3.25	INCHES

## FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 1  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 0  
TOTAL DAYS WITH PRECIPITATION - 0  
TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES  
MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

## ANNUAL INDEX

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	78	219	367	498	619
0.02	75	201	331	455	571
0.03	74	195	319	437	547
0.04	74	195	319	437	547
0.05	74	195	319	437	547
0.07	70	187	305	419	529
0.10	68	185	303	417	527
0.15	47	149	257	363	471
0.20	39	134	236	334	430
0.25	22	110	196	284	375
0.30	17	107	194	282	373
0.35	10	92	172	250	328
0.40	5	88	168	246	324
0.45	5	72	139	205	272
0.50	5	71	139	205	272
0.60	5	59	115	175	235
0.70	5	51	105	165	226
0.80	4	47	95	143	191
0.90	4	40	82	124	167
1.00	4	33	69	105	141
1.10	2	31	67	103	139
1.20	0	25	55	85	115
1.30	0	24	54	84	114
1.40	0	16	50	80	110
1.50	0	14	49	79	109
1.60	0	14	46	76	106
1.70	0	10	36	60	84
1.80	0	9	29	53	77
1.90	0	7	26	50	74
2.00	0	7	20	38	56



NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

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
92	10	1	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	2	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	7	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	8	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.98
92	10	9	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	13	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

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
92	10	18	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	19	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	22	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	24	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	25	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	26	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.10
92	10	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.05 0.00	0.05
92	10	30	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	10	31	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

MONTH OF OCTOBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 22  
 TOTAL DAYS WITH PRECIPITATION - 4  
 TOTAL AMOUNT OF PRECIPITATION - 2.13 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.10 INCHES  
 MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 28 HOUR 12 - 0.10 INCHES  
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 8 HOUR 5 - 0.60 INCHES  
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 7 HOUR 23 - 1.20 INCHES  
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 7 HOUR 17 - 1.80 INCHES  
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 7 HOUR 15 - 1.98 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 3  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 0  
 TOTAL DAYS WITH PRECIPITATION - 0  
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

MONTH OF OCTOBER

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	22	37	55	73	91
0.02	22	37	55	73	91
0.03	22	37	55	73	91
0.04	22	37	55	73	91
0.05	22	37	55	73	91
0.07	21	31	43	55	67
0.10	20	30	42	54	66
0.15	0	23	29	35	41
0.20	0	22	28	34	40
0.25	0	21	27	33	39
0.30	0	20	26	32	38
0.35	0	19	25	31	37
0.40	0	18	24	30	36
0.45	0	17	23	29	35
0.50	0	16	22	28	34
0.60	0	14	20	26	32
0.70	0	0	18	24	30
0.80	0	0	16	22	28
0.90	0	0	14	20	26
1.00	0	0	12	18	24
1.10	0	0	10	16	22
1.20	0	0	8	14	20
1.30	0	0	0	12	18
1.40	0	0	0	10	16
1.50	0	0	0	8	14
1.60	0	0	0	6	12
1.70	0	0	0	4	10
1.80	0	0	0	2	8
1.90	0	0	0	0	6
2.00	0	0	0	0	0

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

RAIN VERSION # 2P

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR OCT-DEC 1992

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
92	11	1	0.00 0.40	0.00 0.30	0.00 0.50	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.32 0.00	1.62
92	11	2	0.10 0.00	0.10 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.06 0.00	0.10 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.36
92	11	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.05 0.00	0.05
92	11	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.04 0.00	0.04
92	11	7	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	8	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	9	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.02
92	11	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.04 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.14
92	11	13	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

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
92	11	18	0.00 0.00	0.00 0.00	0.10 0.00	0.06 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.26
92	11	19	0.00 0.10	0.10 0.10	0.40 0.00	0.10 0.00	0.20 0.00	0.00 0.00	0.10 0.00	0.10 0.00	0.10 0.00	0.10 0.04	0.10 0.04	0.10 0.00	1.68
92	11	20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.10 0.00	0.08 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.18
92	11	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	22	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	24	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	25	0.00 0.00	0.00 0.10	0.00 0.00	0.00 0.00	0.10 0.00	0.10 0.00	0.08 0.00	0.00 0.00	0.00 0.10	0.00 0.10	0.00 0.00	0.00 0.00	0.58
92	11	26	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	11	30	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

MONTH OF NOVEMBER

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 - 4.93 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.50 INCHES  
 MAXIMUM DAILY PRECIPITATION - 1.68 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 15 -	0.50 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 11 -	1.62 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 11 -	1.62 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 11 -	1.82 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY	1 HOUR 11 -	1.98 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 229  
 NUMBER OF MISSING HOURS - 0  
 TOTAL HOURS OF PRECIPITATION - 5  
 TOTAL DAYS WITH PRECIPITATION - 3  
 TOTAL AMOUNT OF PRECIPITATION - 0.39 INCHES  
 MAXIMUM 1-HOUR PRECIPITATION - 0.10 INCHES  
 MAXIMUM DAILY PRECIPITATION - 0.30 INCHES

## NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR OCT-DEC 1992

RAIN VERSION # 2P

MONTH OF NOVEMBER

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT (INCHES)	DURATION (HOURS)				
	1	6	12	18	24
0.01	39	112	167	208	244
0.02	39	112	167	208	244
0.03	38	106	155	190	220
0.04	38	106	155	190	220
0.05	34	97	142	171	195
0.07	31	91	130	153	171
0.10	29	84	126	152	170
0.15	6	57	102	126	142
0.20	6	41	83	110	127
0.25	5	30	70	100	118
0.30	5	24	49	72	85
0.35	3	23	45	65	78
0.40	3	23	35	46	58
0.45	1	21	33	46	58
0.50	1	21	33	41	55
0.60	0	17	31	38	47
0.70	0	11	29	36	45
0.80	0	11	27	35	43
0.90	0	7	22	30	41
1.00	0	5	20	29	37
1.10	0	5	18	27	34
1.20	0	4	15	24	30
1.30	0	3	13	23	29
1.40	0	3	12	22	28
1.50	0	3	11	20	27
1.60	0	2	8	18	24
1.70	0	0	0	5	11
1.80	0	0	0	3	10
1.90	0	0	0	0	4
2.00	0	0	0	0	0

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

B61



RAIN VERSION # 2P

NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR OCT-DEC 1992

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
92	12	1	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	2	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	3	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	4	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	6	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.11 0.00	0.00 0.00	0.11
92	12	7	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	8	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	9	0.00 0.00	0.11 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.11
92	12	10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	11	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 9.99	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	12	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	13	0.00 0.00	0.00 0.10	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.15 0.00	0.00 0.00	0.10 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.43
92	12	14	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.12 0.00	0.11 0.00	0.12 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.35
92	12	15	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	16	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	17	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

RAIN VERSION # 2P

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR OCT-DEC 1992

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	12M 12MDNT	TOTAL
92	12	18	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	19	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	21	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	22	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	23	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	24	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	25	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	26	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	27	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
92	12	29	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.03
92	12	30	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.02
92	12	31	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

## MONTH OF DECEMBER

## FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744  
NUMBER OF MISSING HOURS - 1  
TOTAL HOURS OF PRECIPITATION - 11  
TOTAL DAYS WITH PRECIPITATION - 6  
TOTAL AMOUNT OF PRECIPITATION - 1.05 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.15 INCHES  
MAXIMUM DAILY PRECIPITATION - 0.43 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 13 HOUR 7 - 0.15 INCHES  
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 14 HOUR 7 - 0.35 INCHES  
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 14 HOUR 7 - 0.35 INCHES  
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 13 HOUR 21 - 0.43 INCHES  
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS DAY 13 HOUR 14 - 0.53 INCHES

## FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 427  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 3  
TOTAL DAYS WITH PRECIPITATION - 3  
TOTAL AMOUNT OF PRECIPITATION - 0.16 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.11 INCHES  
MAXIMUM DAILY PRECIPITATION - 0.11 INCHES

MONTH OF DECEMBER

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)			
	1	6	12	18
0.01	11	51	86	115
0.02	11	51	86	115
0.03	10	45	74	98
0.04	9	39	62	81
0.05	9	39	62	81
0.07	9	39	62	81
0.10	8	33	57	80
0.15	1	13	32	43
0.20	0	11	25	37
0.25	0	8	21	36
0.30	0	4	16	41
0.35	0	4	15	29
0.40	0	0	0	27
0.45	0	0	0	10
0.50	0	0	0	6
0.60	0	0	0	6
0.70	0	0	0	0
0.80	0	0	0	0
0.90	0	0	0	0
1.00	0	0	0	0
1.10	0	0	0	0
1.20	0	0	0	0
1.30	0	0	0	0
1.40	0	0	0	0
1.50	0	0	0	0
1.60	0	0	0	0
1.70	0	0	0	0
1.80	0	0	0	0
1.90	0	0	0	0
2.00	0	0	0	0

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

## ANNUAL INDEX

## FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208  
NUMBER OF MISSING HOURS - 1  
TOTAL HOURS OF PRECIPITATION - 72  
TOTAL DAYS WITH PRECIPITATION - 20  
TOTAL AMOUNT OF PRECIPITATION - 8.11 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.50 INCHES  
MAXIMUM DAILY PRECIPITATION - 1.68 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH 11 DAY 1 HOUR 15 -	0.50 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH 11 DAY 1 HOUR 11 -	1.62 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH 11 DAY 1 HOUR 11 -	1.62 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH 11 DAY 1 HOUR 11 -	1.82 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH 11 DAY 1 HOUR 11 -	1.98 INCHES

## FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 659  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 8  
TOTAL DAYS WITH PRECIPITATION - 6  
TOTAL AMOUNT OF PRECIPITATION - 0.55 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.11 INCHES  
MAXIMUM DAILY PRECIPITATION - 0.30 INCHES

## ANNUAL INDEX

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	72	200	309	403	487
0.02	72	200	309	403	487
0.03	70	188	285	368	446
0.04	69	182	273	351	429
0.05	65	173	260	332	404
0.07	61	161	236	295	349
0.10	57	147	226	293	347
0.15	7	93	163	210	244
0.20	6	74	136	187	226
0.25	5	59	118	175	215
0.30	5	48	91	139	176
0.35	3	46	85	129	168
0.40	3	41	59	92	130
0.45	1	38	56	80	110
0.50	1	37	55	74	106
0.60	0	31	51	69	90
0.70	0	11	47	65	86
0.80	0	11	43	62	82
0.90	0	7	36	54	77
1.00	0	5	32	51	71
1.10	0	5	28	47	66
1.20	0	4	23	41	59
1.30	0	3	13	38	56
1.40	0	3	12	35	53
1.50	0	3	11	31	50
1.60	0	2	8	27	45
1.70	0	0	0	9	21
1.80	0	0	0	5	18
1.90	0	0	0	0	10
2.00	0	0	0	0	0

B67

## ANNUAL INDEX

## FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4416  
NUMBER OF MISSING HOURS - 1  
TOTAL HOURS OF PRECIPITATION - 150  
TOTAL DAYS WITH PRECIPITATION - 47  
TOTAL AMOUNT OF PRECIPITATION - 26.10 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 1.15 INCHES  
MAXIMUM DAILY PRECIPITATION - 3.25 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	1 HOUR 21 -	1.15 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 17 -	3.10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES

## FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 659  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 8  
TOTAL DAYS WITH PRECIPITATION - 6  
TOTAL AMOUNT OF PRECIPITATION - 0.55 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.11 INCHES  
MAXIMUM DAILY PRECIPITATION - 0.30 INCHES

## NPPD-COOPER NUCLEAR STATION PERCIPITATION DATA FOR JUL-DEC 1992

RAIN VERSION # 2P

## ANNUAL INDEX

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	150	419	676	901	1106
0.02	147	401	640	858	1058
0.03	144	383	604	805	993
0.04	143	377	592	788	976
0.05	139	368	579	769	951
0.07	131	348	541	714	878
0.10	125	332	529	710	874
0.15	54	242	420	573	715
0.20	45	208	372	521	656
0.25	27	169	314	459	590
0.30	22	155	285	421	549
0.35	13	138	257	379	496
0.40	8	129	227	338	459
0.45	6	110	195	285	382
0.50	6	108	194	279	378
0.60	5	90	166	244	325
0.70	5	62	152	230	312
0.80	4	58	138	205	273
0.90	4	47	118	178	244
1.00	4	38	101	156	212
1.10	2	36	95	150	205
1.20	0	29	78	126	174
1.30	0	27	67	122	170
1.40	0	19	62	115	163
1.50	0	17	60	110	159
1.60	0	16	54	103	151
1.70	0	10	36	69	105
1.80	0	9	29	58	95
1.90	0	7	26	50	84
2.00	0	7	20	38	56

B69



## ANNUAL INDEX

## FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 8784  
NUMBER OF MISSING HOURS - 3  
TOTAL HOURS OF PRECIPITATION - 259  
TOTAL DAYS WITH PRECIPITATION - 94  
TOTAL AMOUNT OF PRECIPITATION - 40.91 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 1.15 INCHES  
MAXIMUM DAILY PRECIPITATION - 3.25 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	1 HOUR 21 -	1.15 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 17 -	3.10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PERCIPITATION STARTS MONTH	9 DAY	5 HOUR 13 -	3.25 INCHES

## FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES FARENHEIT

TOTAL NUMBER OF HOURS - 1242  
NUMBER OF MISSING HOURS - 0  
TOTAL HOURS OF PRECIPITATION - 17  
TOTAL DAYS WITH PRECIPITATION - 10  
TOTAL AMOUNT OF PRECIPITATION - 2.18 INCHES  
MAXIMUM 1-HOUR PRECIPITATION - 0.23 INCHES  
MAXIMUM DAILY PRECIPITATION - 1.03 INCHES

## ANNUAL INDEX

PRECIPITATION INTENSITY - DURATION  
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	259	787	1298	1737	2140
0.02	252	745	1214	1628	2008
0.03	244	714	1153	1538	1894
0.04	237	696	1117	1490	1840
0.05	230	669	1074	1429	1761
0.07	208	618	1006	1343	1656
0.10	197	580	954	1279	1574
0.15	91	429	760	1049	1307
0.20	70	366	662	928	1169
0.25	41	284	537	788	1022
0.30	34	258	494	737	968
0.35	17	216	435	660	888
0.40	11	192	373	571	768
0.45	9	162	315	476	645
0.50	8	147	284	429	588
0.60	6	122	237	352	479
0.70	5	85	205	313	434
0.80	4	78	186	284	388
0.90	4	63	159	245	342
1.00	4	48	124	192	260
1.10	2	43	115	184	251
1.20	0	36	98	158	218
1.30	0	33	80	145	205
1.40	0	23	73	133	188
1.50	0	21	71	127	182
1.60	0	20	65	120	174
1.70	0	14	46	86	128
1.80	0	12	38	73	116
1.90	0	10	35	65	105
2.00	0	10	29	53	77

B71

## 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. 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 ( $\Delta T$ ) for the 100-meter JFDs and the 60-meter to 10-meter  $\Delta T$  for the 10-meter JFDs.

JFDs of 10-Meter Wind vs. Delta T

July-September 1992

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1.01- 3.50	17	9	3	8	1	7	12	6	2	3	0	0	0	0	1	5	74
3.51- 7.50	7	1	0	0	2	10	30	50	43	5	3	1	3	3	3	3	164
7.51-12.50	0	0	0	0	0	0	7	8	35	6	2	0	0	0	3	4	65
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	10	3	8	3	17	49	64	80	14	6	1	3	3	7	12	304

# 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	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
1.01- 3.50	23	6	3	5	4	4	9	4	11	5	2	2	1	0	0	4	83
3.51- 7.50	5	2	0	0	1	8	18	8	12	12	0	0	1	5	6	9	82
7.51-12.50	0	0	0	0	0	0	1	3	2	0	0	0	1	1	1	2	11
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	28	8	3	5	5	12	28	15	25	18	2	2	3	6	7	10	177

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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	1	0	1	0	1	0	0	1	2	1	0	0	0	0	1	1	9
3.51- 7.50	13	9	3	5	3	5	8	3	7	6	1	4	1	1	2	9	80
7.51-12.50	3	4	0	0	1	5	15	5	12	9	3	1	1	5	7	6	77
12.51-18.50	0	0	0	0	0	0	0	1	4	0	0	0	0	0	2	7	14
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	17	13	4	5	5	10	23	10	25	16	4	5	2	6	12	23	180

# 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	3	5	1	1	2	1	2	4	2	4	4	2	1	3	5	48
3.51- 7.50	49	19	14	17	9	27	47	33	20	9	8	4	5	10	14	32	317
7.51-12.50	9	2	1	2	3	5	32	44	51	10	4	3	1	4	11	36	218
12.51-18.50	0	0	0	0	0	0	2	6	3	1	0	1	0	0	1	12	26
18.51-24.00	0	0	0	0	0	0	1	0	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	66	24	20	20	13	34	83	85	78	22	16	12	8	15	29	85	616

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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																	0
1.01- 3.50	29	20	6	3	1	5	13	20	21	8	6	6	3	4	11	15	171
3.51- 7.50	46	8	3	6	5	9	42	64	47	14	6	5	3	5	9	37	309
7.51-12.50	10	0	1	0	0	1	3	41	21	9	4	6	1	3	6	12	118
12.51-18.50	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	1	5
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	85	28	10	9	6	15	60	125	90	31	17	17	7	12	26	65	603

# 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																	0
1.01- 3.50	12	4	0	0	0	0	3	17	28	17	11	8	10	4	12	25	151
3.51- 7.50	1	1	0	0	1	0	4	5	9	14	1	0	1	1	1	7	46
7.51-12.50	0	0	0	0	0	0	0	0	1	1	0	1	2	0	0	0	5
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	1	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	5	0	0	1	0	7	22	38	32	12	9	13	5	14	32	203

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

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																	
1.01- 3.50	6	4	1	1	2	3	3	19	21	9	14	6	2	6	9	9	115
3.51- 7.50	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	3
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	6	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	6	4	1	2	2	3	3	20	21	9	15	6	2	6	9	9	121

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																	
1.01- 3.50	56	31	13	5	5	10	20	59	76	38	36	24	17	15	36	55	496
3.51- 7.50	149	52	26	42	23	52	122	116	96	51	19	15	11	17	27	94	912
7.51-12.50	34	9	2	2	7	29	98	148	140	46	14	12	9	20	33	61	664
12.51-18.50	0	0	0	0	0	0	12	18	45	7	3	1	1	1	7	26	121
18.51-24.00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	239	92	41	49	35	91	253	341	357	142	72	52	38	53	104	236	2198



PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

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: 2198

TOTAL NUMBER OF MISSING OBSERVATIONS: 9

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.6 %

MEAN WIND SPEED FOR THIS PERIOD: 6.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
13.83	8.05	8.19	27.75	27.43	9.24	5.51

# DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	24	10	3	8	3	17	49	64	80	14	6	1	3	3	7	12	0
B	28	8	3	5	5	12	28	15	25	18	2	2	3	6	7	10	0
C	17	13	4	5	5	10	23	10	25	16	4	5	2	6	12	23	0
D	66	24	20	20	13	34	83	85	78	22	16	12	8	15	29	85	0
E	85	28	10	9	6	15	60	125	90	31	17	17	7	12	26	65	0
F	13	5	0	0	1	0	7	22	38	32	12	9	3	5	14	32	0
G	6	4	1	2	2	3	3	20	21	9	15	6	2	6	9	9	3
TOTAL	239	92	41	49	35	91	253	341	357	142	72	52	38	53	104	236	3

JFDs of 10-Meter Wind vs. Delta T

October-December 1992

PROGRAM: JFD VERSION: 5P

NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T OCT-DEC 1992

SITE IDENTIFIER: NPPD

DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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 10.0 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
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	1	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	6
7.51-12.50	1	3	0	0	0	0	0	2	5	1	4	0	0	0	0	0	16
12.51-18.50	1	0	0	0	0	0	0	0	6	4	0	0	0	0	0	1	12
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	3	3	0	0	0	0	0	2	11	9	5	0	0	0	0	1	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 10.0 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
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	1	0	1	3	0	1	0	2	4	6	3	1	1	0	0	0	23
7.51-12.50	3	2	0	1	0	0	0	1	8	1	1	0	0	0	2	8	27
12.51-18.50	1	0	0	0	0	0	0	0	3	1	0	0	0	0	0	6	13
18.51-24.00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	2	1	4	0	1	0	3	16	9	4	1	1	0	2	18	67

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

NNN OCT-DEC 1992 NNN

# 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	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
1.01- 3.50	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
3.51- 7.50	3	4	2	1	3	0	1	3	4	5	3	0	2	0	0	2	33
7.51-12.50	3	3	4	0	0	1	2	1	2	8	6	0	0	1	4	7	42
12.51-18.50	0	0	0	0	0	0	0	0	2	2	0	0	0	2	6	4	16
18.51-24.00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	7	6	2	3	1	3	5	8	16	9	0	2	3	11	15	97

# 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 3.50	8	7	12	9	2	5	1	4	6	2	0	5	2	2	3	3	71
3.51- 7.50	56	33	38	34	16	17	41	19	33	20	18	15	8	18	28	47	441
7.51-12.50	51	37	19	2	8	3	49	30	50	14	3	5	13	41	60	98	983
12.51-18.50	3	0	0	0	0	0	9	8	10	0	0	0	2	22	43	43	140
18.51-24.00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	7	12	21
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	118	77	69	45	26	25	100	61	99	38	21	25	25	83	141	203	1156

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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																	0
1.01-3.50	8	2	1	0	1	1	1	18	12	8	5	2	5	8	8	10	90
3.51-7.50	34	5	1	1	0	2	21	17	53	13	7	6	13	10	13	8	204
7.51-12.50	6	0	0	0	0	2	17	5	25	6	8	9	11	15	8	11	123
12.51-18.50	0	0	0	0	0	0	0	0	6	1	0	0	1	11	21	6	46
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	48	7	2	1	1	5	39	40	96	28	20	17	30	44	51	36	465

# 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	%SE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01-3.50	8	1	3	1	2	0		11	25	16	7	4	7	3	11	5	107
3.51-7.50	2	1	0	1	0			5	30	8	8	1	2	4	4	3	70
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	5	2	3	1	0	11
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	10	2	3	2	2	0	0	16	55	24	15	10	11	10	16	8	188

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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																	
1.01- 3.50	16	9	1	1	0	3	11	34	44	10	3	3	1	6	5	11	153
3.51- 7.50	0	0	1	0	0	0	0	3	3	1	2	0	0	0	0	1	11
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	2	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	16	9	2	1	0	3	11	37	47	11	5	5	1	6	5	12	172

# 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																	
1.01- 3.50	40	14	17	12	5	9	16	68	87	36	15	14	15	19	27	29	423
3.51- 7.50	97	43	43	40	19	20	64	49	127	57	42	23	26	32	45	61	788
7.51-12.50	64	45	23	3	8	6	68	39	90	30	22	21	26	60	75	124	704
12.51-18.50	5	0	0	0	0	0	9	8	27	8	0	0	3	35	70	62	227
18.51-24.00	0	0	0	0	0	0	0	0	1	4	0	0	0	0	9	17	31
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	206	102	83	55	32	35	157	164	332	135	79	58	70	146	226	293	2179

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

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: 2179

TOTAL NUMBER OF MISSING OBSERVATIONS: 28

PERCENT DATA RECOVERY FOR THIS PERIOD: 98.7 %

MEAN WIND SPEED FOR THIS PERIOD: 7.4 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.56	3.07	4.45	53.05	21.34	8.63	7.89

# DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	3	3	0	0	0	0	0	2	11	9	5	0	0	0	0	1	0
B	5	2	1	4	0	1	0	3	16	9	4	1	1	0	2	18	0
C	6	7	6	2	3	1	3	5	8	16	9	0	2	3	11	15	0
D	118	77	69	45	26	25	100	61	99	38	21	25	25	83	141	203	0
E	48	7	2	1	1	5	39	40	96	28	20	17	30	44	51	36	0
F	10	2	3	2	2	0	4	16	55	24	15	10	11	10	16	8	0
G	16	4	2	1	0	3	11	37	47	11	5	5	1	6	5	12	6
TOTAL	206	102	83	55	32	35	157	164	332	135	79	58	70	146	226	293	6

JFDs of 10-Meter Wind vs. Delta T

July-December 1992



PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	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	18	9	3	8	1	7	12	6	2	7	1	0	0	0	1	5	80
7.51-12.50	8	4	0	0	2	10	30	52	48	6	7	1	3	3	3	3	180
12.51-18.50	1	0	0	0	0	0	7	8	41	10	2	0	0	0	3	5	77
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	27	13	3	8	3	17	49	66	91	23	11	1	3	3	7	13	338

# 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	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3.51- 7.50	24	6	4	8	4	5	9	6	15	11	5	3	2	0	0	4	106
7.51-12.50	8	4	0	1	1	8	18	9	20	13	1	0	1	5	8	12	109
12.51-18.50	1	0	0	0	0	0	1	3	5	1	0	0	1	1	1	10	24
18.51-24.00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	33	10	4	9	5	13	28	18	41	27	6	3	4	6	9	28	244

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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	1	0	1	1	1	0	0	2	2	1	0	0	0	0	1	1	11
3.51-7.50	16	13	5	6	6	5	9	6	11	11	4	4	3	1	2	11	113
7.51-12.50	6	7	4	0	1	6	17	6	14	17	9	1	1	6	11	13	119
12.51-18.50	0	0	0	0	0	0	0	1	6	2	0	0	0	2	8	11	30
18.51-24.00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	23	20	10	7	8	11	26	15	33	32	13	5	4	9	23	38	277

# 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	16	10	17	10	3	7	2	6	10	4	4	9	4	3	6	8	119
3.51-7.50	105	52	52	51	25	44	88	52	53	29	26	19	13	28	42	79	758
7.51-12.50	60	39	20	4	11	8	81	74	101	24	7	8	14	45	71	134	781
12.51-18.50	3	0	0	0	0	0	11	14	13	1	0	1	2	22	44	55	166
18.51-24.00	0	0	0	0	0	0	1	0	0	2	0	0	0	0	7	12	22
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	184	101	89	65	39	59	183	146	177	60	37	37	33	98	170	208	1766

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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																	0
1.01- 3.50	37	22	7	3	2	6	14	38	33	16	11	8	8	12	19	25	261
3.51- 7.50	80	13	4	7	5	11	63	81	100	27	13	11	16	15	22	45	513
7.51-12.50	16	0	1	0	0	3	20	46	46	15	12	15	12	18	14	23	241
12.51-18.50	0	0	0	0	0	0	2	0	7	1	1	0	1	11	21	7	51
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	133	35	12	10	7	20	99	165	186	59	37	34	37	56	77	101	1068

# 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																	0
1.01- 3.50	20	5	3	1	2	0	6	28	54	33	18	12	17	7	23	30	259
3.51- 7.50	3	2	0	1	1	0	5	10	39	22	9	1	3	5	5	10	116
7.51-12.50	0	0	0	0	0	0	0	0	1	1	0	6	4	3	1	0	16
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	1	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	23	7	3	2	3	0	11	38	94	56	27	19	24	15	30	40	392

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

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																	9
1.01- 3.50	22	8	2	2	2	6	14	53	65	19	17	9	3	12	14	20	268
3.51- 7.50	0	0	1	1	0	0	0	4	3	1	3	0	0	0	0	1	14
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	2	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	22	8	3	3	2	6	14	57	68	20	20	11	3	12	14	21	293

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																	9
1.01- 3.50	96	45	30	17	10	19	36	127	164	74	51	38	32	34	63	84	920
3.51- 7.50	246	95	69	82	42	72	186	165	223	108	61	38	37	49	72	155	1700
7.51-12.50	98	54	25	5	15	35	166	187	230	76	36	33	35	80	108	185	1368
12.51-18.50	5	0	0	0	0	0	21	26	72	15	3	1	4	36	77	88	368
18.51-24.00	0	0	0	0	0	0	1	0	1	4	0	0	0	0	10	17	33
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	445	194	124	104	67	126	410	505	690	277	151	110	108	199	330	529	4378

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

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: 4415

TOTAL NUMBER OF VALID OBSERVATIONS: 4378

TOTAL NUMBER OF MISSING OBSERVATIONS: 37

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.2 %

MEAN WIND SPEED FOR THIS PERIOD: 7.0 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
7.72	5.57	6.33	40.34	24.39	8.95	6.69

# DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	27	13	3	8	3	17	49	66	91	23	11	1	3	3	7	13	0
B	33	10	4	9	5	13	28	18	41	27	6	3	4	6	9	28	0
C	23	20	10	7	8	11	26	15	33	32	13	5	4	9	23	38	0
D	184	101	89	65	39	59	183	146	177	60	37	37	33	98	170	288	0
E	133	35	12	10	7	20	99	165	186	59	37	34	37	56	77	101	0
F	23	7	3	2	3	0	11	38	94	56	27	19	24	15	30	40	0
G	22	8	3	3	2	6	14	57	68	20	20	11	3	12	14	21	0
TOTAL	445	194	124	184	67	126	410	505	690	277	151	110	108	199	330	529	0

JFDs of 10-Meter Wind vs Delta T  
January-December 1992

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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	1	0	1	0	0	0	0	0	2
3.51- 7.50	26	15	7	14	10	11	21	9	4	8	2	0	1	0	1	6	135
7.51-12.50	41	21	5	4	6	13	41	76	58	15	12	2	3	7	10	29	343
12.51-18.50	10	0	2	1	0	0	15	25	60	34	4	1	0	1	11	36	200
18.51-24.00	0	0	0	0	0	0	1	2	4	0	0	1	2	0	3	2	15
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	77	36	14	19	16	24	78	112	128	57	19	4	6	8	25	73	696

# 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	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	4
3.51- 7.50	42	12	10	17	10	14	20	11	19	12	7	6	2	1	1	9	193
7.51-12.50	23	6	5	6	5	17	28	23	25	25	7	1	3	12	12	24	222
12.51-18.50	4	0	0	0	0	0	3	5	19	7	4	5	2	6	5	24	84
18.51-24.00	0	0	0	0	0	0	0	1	1	2	0	1	0	1	1	3	10
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	69	19	15	23	15	31	52	41	64	47	18	13	7	20	19	60	513

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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	1	2	1	2	1	0	1	4	3	1	0	0	0	0	1	1	18
3.51- 7.50	25	19	9	10	19	14	25	15	18	15	5	7	7	4	4	14	210
7.51-12.50	21	12	5	1	5	11	25	26	18	23	19	2	4	12	22	23	227
12.51-18.50	3	0	0	0	1	0	1	4	11	3	3	1	2	4	11	19	63
18.51-24.00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL	50	35	15	13	26	25	52	47	50	43	27	10	13	20	39	60	523

# 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																	2
1.01- 3.50	28	19	27	14	3	11	6	7	21	6	7	10	7	4	7	10	187
3.51- 7.50	159	101	80	83	68	80	160	84	90	73	40	28	20	47	53	107	1273
7.51-12.50	149	68	37	22	48	59	209	128	132	49	32	28	32	98	136	226	1445
12.51-18.50	32	4	0	0	0	3	34	30	32	4	8	10	9	38	98	138	440
18.51-24.00	8	0	0	0	0	0	3	0	7	2	2	3	0	3	20	33	81
>24.00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	2	7
TOTAL	376	192	144	119	119	153	413	249	282	134	89	71	68	190	318	516	3435



PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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																	0
1.01- 3.50	63	50	15	12	8	14	21	51	54	31	18	10	13	21	31	40	452
3.51- 7.50	172	32	14	12	12	28	104	146	143	68	31	20	25	25	48	85	965
7.51-12.50	34	8	1	4	1	7	42	98	99	41	32	32	23	34	49	52	557
12.51-18.50	2	1	0	0	0	0	7	3	25	2	3	5	2	26	28	13	117
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	271	91	30	28	21	49	174	298	321	142	84	67	63	106	158	192	2095

# 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																	0
1.01- 3.50	41	11	10	2	4	2	14	49	85	47	36	23	27	14	42	50	457
3.51- 7.50	22	2	0	1	1	2	15	32	66	50	15	3	8	13	16	19	265
7.51-12.50	1	0	0	0	0	1	0	1	2	5	4	15	3	6	1	0	44
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	6
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	0	0	0	0	0	0	0	0	0
TOTAL	64	13	10	3	5	5	29	82	153	102	55	44	46	33	60	69	773

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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																	9
1.01- 3.50	43	15	9	5	5	10	25	77	86	41	32	15	3	13	29	51	459
3.51- 7.50	3	2	1	1	0	0	0	6	5	8	3	2	2	0	0	2	35
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	3	6	0	0	0	10
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	1	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	46	17	10	6	5	10	25	83	91	50	35	21	11	13	29	53	514

# 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																	11
1.01- 3.50	176	98	62	35	21	37	68	189	250	127	94	58	50	52	110	152	1579
3.51- 7.50	449	183	121	138	120	149	345	303	345	234	103	66	65	90	123	242	3076
7.51-12.50	269	115	53	37	65	108	345	350	334	159	106	75	79	169	230	354	2848
12.51-18.50	51	5	2	1	1	3	60	67	147	50	22	26	18	75	153	230	911
18.51-24.00	8	0	0	0	0	0	4	3	12	5	2	5	2	4	28	42	115
>24.00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4	3	9
TOTAL	953	401	238	211	207	297	823	912	1089	575	327	230	214	390	648	1023	8549

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

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: 8783

TOTAL NUMBER OF VALID OBSERVATIONS: 8549

TOTAL NUMBER OF MISSING OBSERVATIONS: 234

PERCENT DATA RECOVERY FOR THIS PERIOD: 97.3 %

MEAN WIND SPEED FOR THIS PERIOD: 7.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
8.14	6.00	6.12	40.18	24.51	9.04	6.01

# DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	77	36	14	19	16	24	78	112	120	57	19	4	6	8	25	73	0
B	69	19	15	23	15	31	52	41	64	47	18	13	7	20	19	60	0
C	50	33	15	13	26	25	52	47	50	43	27	10	13	20	39	60	0
D	376	192	144	119	119	153	413	249	282	134	89	71	68	190	318	516	2
E	271	91	30	28	21	49	174	298	321	142	84	67	63	106	158	192	0
F	64	13	10	3	5	5	29	82	153	102	55	44	46	33	60	69	0
G	46	17	10	6	5	10	25	83	91	50	35	21	11	13	29	53	4
TOTAL	953	401	238	211	207	297	823	912	1089	575	327	230	214	390	648	1023	11

Stability Class by Hour of Day

10-Meter Wind vs. Delta T

July-December 1992

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92	7	1	E	E	E	E	E	D	D	B	A	A	A	A	A	A	A	A	B	C	D	D	E	D	D	D
92	7	2	D	D	D	D	D	D	D	D	D	D	B	C	C	C	C	C	D	D	D	E	D	D	D	E
92	7	3	E	E	E	E	E	F	D	C	B	A	A	A	A	A	A	B	B	D	D	F	G	G	G	F
92	7	4	F	F	E	E	F	F	E	D	C	B	A	A	A	A	A	A	C	D	E	E	D	D	D	D
92	7	5	E	E	E	E	E	D	D	D	D	D	D	C	D	D	B	C	D	D	E	F	F	E	E	E
92	7	6	D	D	E	E	E	D	C	B	A	A	A	B	D	A	A	A	C	D	D	E	E	E	E	E
92	7	7	D	D	E	F	G	G	D	C	D	B	A	A	A	A	B	B	B	C	D	E	E	E	E	E
92	7	8	E	E	E	F	E	F	E	D	C	D	C	C	C	C	C	D	D	D	D	E	E	F	F	F
92	7	9	F	F	F	E	E	E	E	D	C	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F
92	7	10	F	F	E	E	E	D	D	D	D	B	A	A	A	B	A	B	C	D	D	E	E	E	F	E
92	7	11	E	E	E	E	D	D	D	D	D	D	D	D	D	A	A	A	B	C	C	D	D	D	D	D
92	7	12	D	D	E	E	D	E	D	D	D	D	C	D	C	C	C	D	D	D	D	D	D	D	D	D
92	7	13	D	D	D	E	E	E	D	D	D	D	D	C	D	D	D	D	D	D	D	E	E	E	E	E
92	7	14	E	E	E	E	E	D	D	D	D	A	A	A	A	A	A	D	C	D	F	F	G	F	F	F
92	7	15	F	E	E	E	D	D	D	C	A	A	A	B	B	B	C	D	E	E	F	D	D	D	D	E
92	7	16	E	E	E	E	E	E	D	D	B	B	B	B	C	C	D	D	D	D	E	F	F	F	F	F
92	7	17	E	F	E	E	E	E	D	D	C	A	A	C	C	C	B	C	D	D	E	F	G	G	G	G
92	7	18	G	G	F	G	G	G	F	D	C	C	C	A	B	A	A	A	A	B	D	E	E	E	E	E
92	7	19	E	F	G	F	G	F	E	D	C	A	B	A	B	B	D	D	D	E	D	E	E	E	E	E
92	7	20	E	E	E	E	E	E	D	D	D	D	D	B	C	C	B	D	D	D	D	E	F	F	F	F
92	7	21	F	F	E	F	E	E	D	D	C	B	A	A	B	A	B	B	B	C	D	D	D	D	D	D
92	7	22	D	D	D	D	E	E	E	D	D	C	C	C	B	B	D	D	D	D	D	D	D	D	D	E
92	7	23	D	D	D	D	D	D	D	C	C	C	C	B	C	B	A	B	C	D	D	E	E	E	E	D
92	7	24	D	D	D	D	D	D	C	B	A	A	A	A	A	D	D	E	E	E	E	D	E	E	D	D
92	7	25	E	E	E	E	E	E	D	D	D	D	B	B	A	C	D	E	E	E	E	E	E	D	D	D
92	7	26	D	D	E	D	E	E	D	D	C	C	C	B	C	C	D	D	D	D	E	E	E	E	F	F
92	7	27	F	G	G	G	G	F	F	D	C	B	A	A	A	B	B	C	C	D	F	F	F	F	F	F
92	7	28	E	F	F	F	F	E	E	D	C	C	B	C	C	C	D	D	C	D	D	E	E	E	E	E
92	7	29	F	F	E	F	E	E	D	C	B	A	B	A	C	E	D	D	D	D	D	D	E	D	D	D
92	7	30	E	D	D	E	E	E	D	D	C	C	B	C	C	B	B	D	D	D	D	D	D	E	E	E
92	7	31	E	E	E	E	E	E	D	D	C	B	A	A	A	A	A	D	D	D	D	F	F	F	F	G
92	8	1	F	F	F	F	F	F	E	D	B	A	B	A	A	A	A	A	B	D	E	E	E	E	E	E
92	8	2	E	E	E	E	E	E	E	D	C	B	A	B	B	A	B	D	D	D	E	E	E	E	E	E
92	8	3	E	F	F	F	F	F	F	D	C	B	A	A	A	B	B	B	D	E	E	E	E	E	E	E
92	8	4	E	E	E	E	E	E	E	D	D	B	B	A	A	A	A	B	D	D	D	D	E	E	E	D
92	8	5	D	D	D	D	D	D	C	-	A	A	C	C	B	C	B	C	C	D	D	D	D	D	D	E
92	8	6	E	E	D	-	D	D	D	C	B	B	B	B	B	B	A	A	D	D	E	E	E	E	E	E
92	8	7	D	D	D	D	D	E	D	D	C	C	C	C	C	C	C	D	D	E	G	G	G	G	G	G
92	8	8	G	G	G	G	G	F	E	E	D	D	B	A	A	A	B	A	A	D	D	E	E	E	E	E
92	8	9	D	D	D	D	E	E	D	D	B	C	C	C	B	A	A	B	B	C	D	D	E	E	E	E
92	8	10	E	E	E	E	E	E	E	D	B	A	B	C	B	C	C	C	D	D	E	E	E	E	E	E
92	8	11	E	E	E	E	E	E	E	D	C	C	A	A	A	A	B	C	D	E	F	G	F	F	F	F
92	8	12	F	F	F	F	F	E	E	D	D	C	D	C	B	A	B	C	D	D	E	E	E	F	F	G
92	8	13	G	G	G	G	G	G	F	E	D	C	B	A	A	B	B	B	D	E	E	E	E	E	E	E
92	8	14	E	F	E	E	E	E	D	D	B	C	B	A	A	A	C	D	B	D	D	E	F	F	E	E

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92	8	15	F	F	F	F	F	F	F	E	D	B	B	A	C	C	B	A	C	C	D	E	E	E	E	E
92	8	16	E	F	E	E	E	E	E	D	B	A	A	A	A	A	A	A	C	D	D	E	E	E	E	E
92	8	17	E	E	E	E	E	E	E	D	B	A	A	A	A	A	A	A	A	D	D	E	E	E	F	F
92	8	18	E	E	E	E	E	E	-	-	-	-	A	A	A	A	A	B	D	D	E	F	E	E	E	F
92	8	19	F	E	E	E	F	E	E	D	C	C	A	A	A	A	A	B	B	C	E	F	F	F	F	F
92	8	20	F	F	F	F	F	-	F	E	B	A	A	A	A	-	A	A	A	B	D	E	E	E	F	F
92	8	21	E	E	E	E	E	E	E	D	B	A	A	A	A	A	A	A	B	D	E	E	E	E	E	F
92	8	22	F	E	F	F	F	E	E	D	C	A	A	A	A	A	A	A	A	B	D	E	E	E	E	E
92	8	23	E	E	E	E	E	E	D	D	B	A	A	A	A	A	A	A	B	D	E	E	E	E	E	E
92	8	24	E	E	E	E	E	E	E	D	C	B	A	A	A	A	A	A	B	D	D	E	E	E	E	E
92	8	25	E	E	D	D	E	D	E	D	D	D	D	D	D	C	C	C	C	D	D	D	D	D	D	D
92	8	26	D	D	D	D	D	D	D	D	D	D	D	C	D	C	C	D	D	D	E	E	E	E	E	D
92	8	27	D	D	D	D	E	E	E	D	C	A	A	B	A	A	A	A	C	D	F	G	G	G	G	G
92	8	28	G	G	G	G	G	G	G	E	C	B	A	A	B	B	A	A	B	D	E	F	E	E	E	F
92	8	29	E	E	E	E	E	E	E	D	B	A	A	A	B	B	B	B	D	D	E	E	E	E	E	E
92	8	30	F	G	G	F	F	F	F	E	D	B	B	A	B	B	B	C	C	D	E	F	G	G	G	G
92	8	31	G	G	G	F	F	F	F	E	D	C	A	A	A	A	A	A	A	D	E	E	E	E	E	E
92	9	1	E	D	E	D	D	D	D	D	C	D	D	C	B	B	C	D	E	E	E	D	E	E	D	E
92	9	2	E	D	D	D	E	E	D	D	C	A	B	A	A	A	B	D	D	F	G	G	G	G	G	F
92	9	3	E	E	E	F	G	G	G	E	D	B	A	A	B	B	A	A	A	D	E	F	F	E	E	E
92	9	4	E	E	E	E	E	E	E	D	B	A	A	A	A	A	A	A	D	D	D	D	E	E	E	E
92	9	5	E	E	E	E	D	D	D	E	E	D	D	D	C	B	D	F	F	F	F	F	E	F	E	E
92	9	6	E	E	E	E	E	E	E	D	C	B	B	B	A	A	A	C	C	D	E	E	E	E	D	D
92	9	7	D	D	D	E	D	E	E	D	E	D	D	D	B	B	C	D	D	D	D	D	D	E	E	E
92	9	8	E	E	F	E	E	F	E	D	C	B	A	A	A	A	A	A	C	D	D	D	D	D	D	D
92	9	9	D	D	E	D	E	E	E	E	D	D	D	D	B	C	C	D	D	E	E	E	F	G	G	G
92	9	10	G	F	F	F	F	E	E	E	D	B	A	A	A	A	B	C	D	E	F	G	G	G	G	G
92	9	11	G	G	G	F	F	F	F	E	D	A	A	A	A	A	A	A	B	E	E	E	F	E	E	F
92	9	12	F	E	E	E	E	D	D	D	D	C	A	A	A	A	A	A	C	D	D	E	D	D	D	D
92	9	13	E	D	D	E	E	E	D	D	C	A	A	A	A	A	A	C	C	D	D	E	D	D	D	D
92	9	14	D	D	D	D	D	D	D	D	D	C	A	A	A	A	A	C	C	D	D	E	E	E	E	D
92	9	15	D	D	D	D	D	E	D	D	C	A	A	A	A	A	A	A	C	D	D	D	D	D	E	E
92	9	16	D	D	D	D	E	E	D	D	-	A	A	B	B	D	B	C	D	D	D	D	E	F	F	E
92	9	17	E	E	F	E	E	E	D	D	C	A	A	A	A	A	A	A	C	D	E	D	E	E	E	D
92	9	18	D	E	E	E	D	D	D	D	B	A	A	A	A	A	A	B	D	D	E	F	E	E	F	G
92	9	19	G	G	G	G	G	F	F	D	C	A	A	A	A	A	A	B	B	D	E	D	D	D	D	D
92	9	20	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D
92	9	21	D	D	E	E	E	D	D	D	D	D	D	C	B	C	C	C	D	E	E	F	F	E	E	E
92	9	22	E	E	E	E	E	E	D	C	C	B	B	B	B	B	B	D	D	E	G	G	G	G	G	F
92	9	23	F	F	F	F	F	E	E	E	E	E	C	A	A	A	A	A	B	D	E	E	E	E	E	E
92	9	24	F	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	B	D	E	E	E	E	E	F
92	9	25	F	F	F	E	E	E	E	E	A	A	A	A	A	A	A	A	B	D	E	E	E	E	E	D
92	9	26	E	E	D	D	D	D	D	D	D	D	C	B	B	C	C	D	E	G	G	G	F	F	G	G
92	9	27	G	G	G	G	G	G	F	F	D	B	A	A	A	A	A	B	D	E	F	F	F	E	E	E
92	9	28	E	E	E	E	E	E	E	D	C	B	A	A	A	B	B	C	D	E	G	G	G	G	G	G

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92 9 29	G	G	G	G	G	G	G	F	E	D	C	A	A	B	A	A	C	E	F	F	F	G	G	F
92 9 30	G	G	G	F	F	F	F	E	D	C	B	A	A	A	A	B	D	E	F	G	G	G	F	F
92 10 1	F	F	F	F	F	F	F	F	D	C	C	B	B	A	A	B	D	F	G	G	G	G	F	F
92 10 2	F	F	G	G	G	G	F	E	D	C	B	B	B	A	A	B	D	F	G	G	G	G	F	F
92 10 3	E	E	E	F	G	G	G	F	D	D	B	B	B	A	A	B	D	G	G	G	G	G	G	G
92 10 4	G	G	G	G	G	G	G	G	D	D	C	C	C	B	C	D	D	G	G	G	G	F	F	E
92 10 5	E	E	E	E	E	E	E	E	D	D	D	B	A	-	A	B	C	E	G	G	G	G	F	F
92 10 6	G	G	G	F	F	F	E	D	D	D	B	A	A	A	A	B	D	E	E	E	E	E	E	F
92 10 7	F	G	F	E	D	E	E	D	D	D	D	D	C	B	C	D	D	D	D	D	D	D	D	D
92 10 8	D	D	D	D	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 10 9	D	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	G	G	G	F	F	E
92 10 10	E	E	E	E	E	E	E	D	D	D	C	C	C	C	D	D	E	F	F	F	F	F	F	F
92 10 11	F	F	F	G	G	G	G	E	D	D	C	D	B	B	C	D	E	F	F	F	F	F	F	F
92 10 12	E	F	E	E	E	E	E	E	D	C	B	B	B	B	C	D	D	F	G	G	G	G	G	G
92 10 13	F	E	E	E	E	E	E	E	D	C	B	A	C	A	B	D	E	F	F	E	G	G	G	G
92 10 14	G	F	E	E	E	E	E	D	C	B	A	A	B	D	D	D	D	D	D	D	D	D	D	D
92 10 15	D	D	D	D	D	D	D	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	E
92 10 16	E	E	E	E	E	E	E	-	-	-	-	-	-	-	D	D	D	D	F	F	G	F	G	F
92 10 17	G	G	F	F	F	F	F	E	D	C	B	C	D	C	D	D	D	E	E	E	E	E	D	E
92 10 18	E	E	E	E	D	E	D	D	D	C	B	B	C	C	C	D	D	E	F	F	F	E	D	D
92 10 19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F
92 10 20	G	G	G	G	G	G	G	F	E	D	C	B	C	C	B	D	E	G	G	G	G	G	G	G
92 10 21	G	G	G	G	G	G	G	F	D	D	B	A	A	A	A	B	D	E	E	E	E	E	E	E
92 10 22	E	E	E	E	E	E	E	E	D	C	B	A	A	A	A	C	D	E	E	E	E	E	E	E
92 10 23	E	E	E	E	E	E	E	E	D	D	C	B	B	B	C	D	E	E	F	F	F	E	E	F
92 10 24	F	G	G	G	E	E	E	F	D	D	C	C	B	C	C	D	D	E	G	G	G	G	G	G
92 10 25	G	G	G	G	G	G	G	E	D	C	C	A	A	B	C	D	F	F	F	F	F	F	F	E
92 10 26	E	E	E	D	D	D	E	D	D	B	B	A	A	A	B	C	D	E	F	G	G	G	G	G
92 10 27	G	G	G	G	G	G	G	E	D	D	C	B	A	A	B	C	D	E	F	F	G	G	G	G
92 10 28	G	F	E	F	E	E	E	E	D	D	C	B	B	B	C	D	E	E	E	E	E	D	E	E
92 10 29	E	E	E	E	D	D	D	D	D	D	C	B	C	C	D	D	D	D	D	D	D	D	D	D
92 10 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
92 10 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
92 11 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
92 11 2	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	E	E	E	E
92 11 3	E	E	E	E	E	E	E	E	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D
92 11 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
92 11 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
92 11 6	D	D	D	E	E	F	E	D	D	C	D	D	C	C	D	D	D	D	D	D	D	D	D	D
92 11 7	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D
92 11 8	D	D	D	D	D	D	D	D	D	D	D	B	A	B	B	D	D	E	D	D	D	D	-	D
92 11 9	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 11 10	D	E	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	E	E
92 11 11	E	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 11 12	D	D	D	D	D	E	E	D	D	D	D	C	C	C	D	D	E	E	F	G	F	F	E	E

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

STABILITY BASED ON: DELTA T      BETWEEN 60.0 AND 10.0 METERS

YR MN DY	HOURLY STABILITIES																							
	HOURS																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
92 11 13	E	E	E	E	E	E	E	E	D	D	D	C	C	D	D	D	D	E	F	F	F	F	E	E
92 11 14	E	E	E	E	E	E	E	E	D	C	B	B	A	C	D	D	D	F	F	G	G	F	F	E
92 11 15	E	E	E	E	E	E	E	E	D	C	C	C	C	C	D	D	E	F	F	E	F	E	F	
92 11 16	F	F	F	G	F	G	G	G	F	E	C	C	C	C	C	D	E	E	G	G	G	G	G	F
92 11 17	F	E	E	E	E	E	D	D	D	D	D	C	C	D	D	D	D	E	D	D	D	D	D	
92 11 18	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 20	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 21	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 22	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 23	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 24	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 25	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 11 26	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	E	E	
92 11 27	E	E	E	E	F	E	E	F	F	E	D	D	D	D	D	D	D	F	G	G	G	G	G	G
92 11 28	G	G	G	G	G	G	F	F	E	E	D	D	D	D	D	D	E	E	E	E	E	E	E	
92 11 29	E	E	F	F	E	E	E	E	E	D	D	D	D	D	D	D	D	E	D	D	D	D	D	
92 11 30	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	E	E	
92 12 1	E	F	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	
92 12 2	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	E	E	
92 12 3	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	
92 12 4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	
92 12 5	F	E	E	E	F	E	F	F	E	D	C	B	D	D	D	D	D	D	D	D	D	D	D	
92 12 6	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	
92 12 7	F	G	F	E	G	G	G	G	F	D	D	D	D	D	D	D	D	E	E	E	F	F	F	
92 12 8	F	F	F	F	F	F	F	F	E	D	C	C	D	D	D	D	E	E	E	E	E	E	E	
92 12 9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	
92 12 10	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	F	F	F	F	E	
92 12 11	G	F	F	G	G	F	F	F	F	E	D	C	-	-	-	-	-	-	-	E	E	E	E	
92 12 12	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	D	D	
92 12 13	D	D	D	D	D	D	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 12 14	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
92 12 15	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	
92 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	
92 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	
92 12 18	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	D	
92 12 19	D	E	E	D	D	D	D	D	D	D	B	C	D	D	D	D	D	D	E	E	E	E	F	
92 12 20	G	F	F	G	F	F	F	F	E	D	C	C	D	D	D	D	E	E	E	E	E	E	E	
92 12 21	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	G	G	G	G	G	F	
92 12 22	F	G	F	G	G	F	G	F	F	E	D	D	D	D	D	D	E	E	F	E	E	E	E	
92 12 23	G	G	F	E	E	F	F	E	E	D	D	B	B	B	C	D	D	D	D	D	D	D	D	
92 12 24	E	E	E	E	D	D	D	D	C	E	B	C	D	D	D	D	E	E	E	E	E	E	F	
92 12 25	F	E	E	E	D	D	E	D	C	C	C	D	D	D	D	D	E	F	G	G	G	G	F	
92 12 26	F	F	F	E	E	E	E	E	E	D	C	B	D	D	D	D	E	E	E	E	E	E	E	
92 12 27	E	E	E	E	E	E	E	E	E	D	C	C	D	D	D	D	E	F	F	F	F	F	E	



PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 10M WIND VS 60-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92 12 28	E	E	D	D	D	D	E	E	E	D	D	D	D	D	D	D	E	F	E	F	E	D	D	D
92 12 29	D	D	E	E	D	D	D	C	D	D	D	C	C	D	D	D	D	D	D	D	D	D	D	D
92 12 30	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	B	B	B	B
92 12 31	D	D	D	D	D	D	D	D	D	C	B	A	B	B	B	D	D	D	D	E	E	D	D	D

JFDs of 100-Meter Wind vs. Delta T

July-September 1992

PROGRAM: JFD    VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7.51-12.50	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	7
12.51-18.50	0	0	0	0	0	0	2	14	8	2	0	0	0	0	0	0	26
18.51-24.00	0	0	0	0	0	0	1	1	13	0	0	0	0	0	0	0	15
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	6	19	22	2	0	0	0	0	0	0	50

# 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	1	0	1	0	0	2	2	0	1	0	0	0	0	0	0	1	8
7.51-12.50	4	0	0	0	0	3	8	11	12	2	1	0	0	0	0	1	42
12.51-18.50	0	0	0	0	0	0	3	13	8	6	3	0	0	0	0	1	34
18.51-24.00	0	0	0	0	0	0	0	1	8	1	0	0	0	0	0	1	11
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	5	0	1	0	0	5	13	25	30	9	4	0	0	0	0	4	96

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	8	7	4	4	3	2	3	4	1	2	1	0	0	1	1	0	41
7.51-12.50	11	1	0	0	1	7	11	9	15	10	2	1	4	6	3	6	87
12.51-18.50	1	1	0	0	0	4	3	7	12	5	1	0	0	1	5	5	45
18.51-24.00	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	2	6
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL	20	9	4	4	4	13	17	20	33	18	4	1	4	8	9	13	181

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	1	1	1	2	1	1	2	0	4	0	1	0	1	1	1	0
1.01- 3.50	0	1	1	1	2	1	1	2	0	4	0	1	0	1	1	1	17
3.51- 7.50	24	18	9	11	9	14	9	10	11	9	10	3	6	4	7	15	169
7.51-12.50	38	15	2	3	7	23	25	30	30	23	10	3	7	11	15	22	264
12.51-18.50	18	10	1	0	1	9	17	45	36	10	1	0	1	0	12	26	187
18.51-24.00	3	0	0	0	0	0	2	9	21	2	0	0	0	0	2	15	54
>24.00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	5
TOTAL	83	44	13	15	19	47	54	97	100	48	21	7	14	16	37	81	696

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

# 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 AT 100.00 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	1	2	1	1	0	0	0	0	1	0	0	0	1	0	1	11
3.51- 7.50	7	12	11	4	5	15	4	6	2	3	5	1	6	3	5	10	99
7.51-12.50	41	27	12	11	18	16	20	33	25	24	11	4	7	12	9	35	305
12.51-18.50	36	5	2	3	2	18	49	86	65	14	5	2	5	1	9	15	317
18.51-24.00	8	0	0	0	0	0	2	25	32	3	2	3	0	0	3	7	85
>24.00	2	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	5
TOTAL	97	45	27	19	26	49	77	151	124	45	23	10	18	17	26	68	822

# 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 AT 100.00 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	1	0	0	0	3	0	0	1	0	0	0	0	1	6
3.51- 7.50	3	16	9	5	3	5	1	5	2	11	7	1	1	1	1	1	72
7.51-12.50	2	4	7	2	2	11	11	16	19	12	9	3	2	2	5	4	111
12.51-18.50	3	2	0	0	1	0	13	11	18	6	4	2	3	3	3	6	75
18.51-24.00	0	0	0	0	0	0	2	1	0	1	1	1	2	1	0	0	9
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	8	22	16	8	6	16	27	36	39	30	22	7	8	7	10	12	274

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4
3.51- 7.50	2	1	6	4	5	4	5	5	3	3	1	2	0	2	2	1	46
7.51-12.50	0	0	0	0	1	1	3	5	2	3	1	3	0	4	1	0	24
12.51-18.50	0	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0	5
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	2	1	6	4	6	5	9	10	6	6	2	5	0	9	4	4	79

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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01- 3.50	3	2	3	3	3	1	1	5	0	5	1	1	0	2	2	6	38
3.51- 7.50	46	54	40	28	25	42	24	36	20	28	24	7	13	11	16	28	436
7.51-12.50	96	47	21	16	29	61	81	108	103	74	39	14	20	35	33	68	840
12.51-18.50	58	18	3	3	4	31	88	176	148	43	14	4	9	8	29	53	689
18.51-24.00	11	0	0	0	0	0	7	37	77	8	3	4	2	1	5	25	180
>24.00	2	0	0	0	0	0	2	2	6	0	0	0	0	0	1	2	15
TOTAL	216	121	67	50	61	135	203	358	354	158	76	30	44	57	86	182	2198

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-SEP 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 9/30/92

\*\*\* JUL-SEP 1992 \*\*\*

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: 2198

TOTAL NUMBER OF MISSING OBSERVATIONS: 9

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.6 %

MEAN WIND SPEED FOR THIS PERIOD: 11.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
2.27	4.37	8.23	31.67	37.40	12.47	3.59

# 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	0	6	19	22	2	0	0	0	0	0	0	0
B	5	0	1	0	0	5	13	25	30	9	4	0	0	0	0	4	0
C	20	9	4	4	4	13	17	20	33	18	4	1	4	8	9	13	0
D	83	44	13	15	19	47	54	97	100	48	21	7	14	16	37	81	0
E	97	45	27	19	26	49	77	151	124	45	23	10	18	17	26	68	0
F	8	22	16	8	6	16	27	36	39	30	22	7	8	7	10	12	0
G	2	1	6	4	6	5	9	10	6	6	2	5	0	9	4	4	0
TOTAL	216	121	67	50	61	135	203	358	354	158	76	30	44	57	86	182	0

JFDs of 100-Meter Wind vs. Delta T

October-December 1992



PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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 AT 100.00 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 AT 100.00 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	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	1
18.51-24.00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	2	1	0	0	0	0	0	1	4	1	0	0	0	0	0	0	9

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.6 METERS

WIND MEASURED AT: 100.0 METERS

WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 100.00 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	2	0	0	1	0	0	0	0	3	6	2	0	1	0	0	0	15
7.51-12.50	4	0	0	1	0	0	0	0	1	3	3	0	0	0	0	4	16
12.51-18.50	1	2	0	0	0	0	0	1	10	2	0	0	0	0	0	3	19
18.51-24.00	1	0	0	0	0	0	0	0	4	2	0	0	0	0	1	0	8
>24.00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	1	4
TOTAL	8	2	0	2	0	0	0	1	20	14	5	0	1	0	1	8	62

# 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 AT 100.00 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	4	2	3	0	2	1	2	2	0	1	2	0	1	2	0	24
3.51- 7.50	11	7	8	2	4	11	9	7	6	19	20	8	5	7	4	15	143
7.51-12.50	21	17	24	12	5	8	21	15	28	26	8	1	0	19	45	45	295
12.51-18.50	38	34	16	3	0	1	30	28	32	3	3	1	15	37	41	45	327
18.51-24.00	5	2	0	0	0	0	15	10	15	1	0	0	0	9	25	23	105
>24.00	0	0	0	0	0	0	0	0	3	0	0	0	0	3	8	15	29
TOTAL	77	64	50	20	9	22	76	92	86	49	32	12	20	76	125	143	923

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER, NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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 AT 100.00 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	0	2	1	0	0	0	1	1	0	1	0	1	4	14
3.51- 7.50	5	1	2	7	3	2	5	6	2	11	7	6	7	7	3	25	99
7.51-12.50	11	8	2	14	2	9	11	9	17	21	11	11	7	9	13	25	180
12.51-18.50	20	12	2	4	6	5	14	16	54	9	8	16	20	16	27	33	262
18.51-24.00	7	0	0	0	0	0	12	11	7	0	4	1	4	21	21	9	97
>24.00	3	0	0	0	0	0	1	0	6	0	0	0	1	9	10	4	34
TOTAL	47	22	7	25	13	17	43	42	86	42	31	34	40	62	75	100	686

# 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 AT 100.00 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	1	0	0	0	2	1	0	0	2	1	0	1	0	0	8
3.51- 7.50	0	0	1	4	3	5	2	4	5	14	6	3	1	4	3	1	56
7.51-12.50	5	4	1	16	12	3	8	11	14	33	10	9	8	14	13	16	177
12.51-18.50	9	1	0	3	2	3	16	3	17	2	9	6	5	5	8	10	99
18.51-24.00	9	0	0	0	0	0	2	0	0	0	2	6	3	4	1	6	33
>24.00	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5	8
TOTAL	24	5	3	23	17	11	30	19	36	49	29	25	17	30	25	38	381

PROGRAM: JFD VERSION: 5P  
 MPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: MPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01- 3.50	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	4
3.51- 7.50	0	1	1	4	1	0	0	1	3	5	7	2	1	4	0	0	31
7.51-12.50	2	1	0	0	1	2	1	5	4	6	11	8	9	6	3	1	60
12.51-18.50	1	0	0	0	1	0	0	4	7	2	1	2	2	1	1	0	22
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	0	0	0	0	0	0	0	0	0
TOTAL	3	2	1	4	3	3	1	11	14	14	20	12	13	11	5	1	118

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01- 3.50	3	5	4	3	2	3	3	4	2	2	5	3	2	2	3	4	50
3.51- 7.50	18	9	12	18	11	19	16	18	19	55	42	19	15	22	10	41	344
7.51-12.50	43	30	27	43	20	22	41	40	64	90	43	29	24	48	74	91	729
12.51-18.50	70	49	18	10	9	9	60	53	124	18	21	25	42	59	77	91	735
18.51-24.00	23	3	0	0	0	0	29	21	26	3	6	7	7	34	49	38	246
>24.00	4	0	0	0	0	0	1	0	11	1	0	0	1	14	18	25	75
TOTAL	161	96	61	74	42	53	150	136	246	169	117	83	91	179	231	290	2179

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T OCT-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 10/ 1/92 - 12/31/92

\*\*\* OCT-DEC 1992 \*\*\*

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: 2179

TOTAL NUMBER OF MISSING OBSERVATIONS: 28

PERCENT DATA RECOVERY FOR THIS PERIOD: 98.7 %

MEAN WIND SPEED FOR THIS PERIOD: 12.7 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
0.00	0.41	2.85	42.36	31.48	17.49	5.42

# 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	2	1	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0
C	8	2	0	2	0	0	0	1	20	14	5	0	1	0	1	8	0
D	77	64	50	20	9	22	76	62	86	49	32	12	20	76	125	143	0
E	47	22	7	25	13	17	43	42	86	42	31	34	40	62	75	100	0
F	24	5	3	23	17	11	30	19	36	49	29	25	17	30	25	38	0
G	3	2	1	4	3	3	1	11	14	14	20	12	13	11	5	1	0
TOTAL	161	96	61	74	42	53	150	136	246	169	117	83	91	179	231	290	0

JFDs of 100-Meter Wind vs. Delta T

July-December 1992

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7.51-12.50	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	7
12.51-18.50	0	0	0	0	0	0	2	14	8	2	0	0	0	0	0	0	26
18.51-24.00	0	0	0	0	0	0	1	1	13	0	0	0	0	0	0	0	15
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	6	19	22	2	0	0	0	0	0	0	50

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
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	1	0	1	0	0	2	2	0	1	0	0	0	0	0	0	1	8
7.51-12.50	4	0	0	0	0	3	6	11	12	3	1	0	0	0	0	1	43
12.51-18.50	1	0	0	0	0	0	3	14	12	6	3	0	0	0	0	1	40
18.51-24.00	1	1	0	0	0	0	0	1	8	1	0	0	0	0	0	1	13
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	7	1	1	0	0	5	13	26	34	10	4	0	0	0	0	4	105

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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	10	7	4	5	3	2	3	4	4	8	3	0	1	1	1	0	56
7.51-12.50	15	1	0	1	1	7	11	9	16	13	5	1	4	6	3	10	103
12.51-18.50	2	3	0	0	0	4	3	8	22	7	1	0	0	1	5	8	64
18.51-24.00	1	0	0	0	0	0	0	0	7	3	0	0	0	0	1	2	14
>24.00	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	1	6
TOTAL	28	11	4	6	4	13	17	21	53	32	9	1	5	8	10	21	243

# 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	5	3	4	2	3	2	4	2	4	1	3	0	2	3	1	41
3.51- 7.50	35	25	17	13	13	25	18	17	17	28	30	11	11	11	11	30	312
7.51-12.50	59	32	26	15	12	31	46	45	58	49	18	4	7	30	60	67	559
12.51-18.50	56	44	17	3	1	10	47	73	68	13	4	1	16	37	53	71	514
18.51-24.00	8	2	0	0	0	0	17	19	36	3	0	0	0	9	27	38	159
>24.00	0	0	0	0	0	0	0	1	5	0	0	0	0	3	8	17	34
TOTAL	160	108	63	35	28	69	130	159	186	97	53	19	34	92	162	224	1619



PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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	2	3	1	3	1	0	0	0	2	1	0	1	1	1	5	25
3.51- 7.50	12	13	13	11	8	17	9	12	4	14	12	7	13	10	8	35	198
7.51-12.50	52	35	14	25	20	25	31	42	42	45	22	15	14	21	22	60	485
12.51-18.50	56	17	4	7	8	23	63	102	119	23	13	18	25	17	36	48	579
18.51-24.00	15	0	0	0	0	0	14	36	39	3	6	4	4	21	24	16	182
>24.00	5	0	0	0	0	0	3	1	6	0	0	0	1	9	10	4	39
TOTAL	144	67	34	44	39	66	120	193	210	87	54	44	58	79	101	168	1508

# 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	0	1	1	0	0	2	4	0	0	3	1	0	1	0	1	14
3.51- 7.50	3	16	10	9	6	10	3	0	7	25	13	4	2	5	4	2	128
7.51-12.50	7	8	8	18	14	14	19	27	33	46	19	12	10	16	18	20	289
12.51-18.50	12	3	0	3	3	3	29	14	35	8	13	8	8	8	11	16	174
18.51-24.00	9	0	0	0	0	0	4	1	0	1	3	7	5	5	1	6	42
>24.00	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	5	9
TOTAL	32	27	19	31	23	27	57	55	75	80	51	32	25	37	35	50	656

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

# 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	1	0	1	1	0	1	0	1	3	8
3.51- 7.50	2	2	7	8	6	5	5	6	6	8	8	4	1	6	2	1	77
7.51-12.50	2	1	0	0	2	3	4	10	6	9	12	11	9	10	4	1	84
12.51-18.50	1	0	0	0	1	0	1	4	8	2	1	2	2	4	1	0	27
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	0	0	0	0	0	0	0	0	0
TOTAL	5	3	7	8	9	8	10	21	20	20	22	17	13	20	9	5	197

# 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	6	7	7	6	5	4	4	9	2	7	6	4	2	4	5	10	88
3.51- 7.50	64	63	52	46	36	61	40	48	39	83	66	26	28	33	26	69	780
7.51-12.50	139	77	98	59	49	83	122	148	167	165	77	43	44	83	107	159	1570
12.51-18.50	128	67	21	13	13	40	148	229	272	61	35	29	51	67	106	144	1424
18.51-24.00	34	3	0	0	0	0	36	58	103	11	9	11	9	35	54	63	426
>24.00	6	0	0	0	0	0	3	2	17	1	0	0	1	14	19	27	90
TOTAL	377	217	128	124	103	188	353	494	600	328	193	113	135	236	317	472	4378

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

\*\*\* JUL-DEC 1992 \*\*\*

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: 4415

TOTAL NUMBER OF VALID OBSERVATIONS: 4378

TOTAL NUMBER OF MISSING OBSERVATIONS: 37

PERCENT DATA RECOVERY FOR THIS PERIOD: 99.2 %

MEAN WIND SPEED FOR THIS PERIOD: 12.2 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.14	2.40	5.55	36.98	34.44	14.98	4.50

# 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	0	6	19	22	2	0	0	0	0	0	0	0
B	7	1	1	0	0	5	13	26	34	10	4	0	0	0	0	4	0
C	28	11	4	6	4	13	17	21	53	32	9	1	5	8	10	21	0
D	160	108	63	35	28	69	130	159	186	97	53	19	34	92	162	224	0
E	144	67	34	44	39	66	120	193	210	87	54	44	58	79	101	168	0
F	32	27	19	31	23	27	57	55	75	80	51	32	25	37	35	50	0
G	5	3	7	8	9	8	10	21	20	20	22	17	13	20	9	5	0
TOTAL	377	217	128	124	103	188	353	494	600	328	193	113	135	236	317	472	0

JFDs of 100-Meter Wind vs. Delta T  
January-December 1992

PROGRAM: JHD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7.51-12.50	2	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	11
12.51-18.50	3	2	0	0	0	0	2	23	11	7	0	0	0	0	0	2	50
18.51-24.00	2	0	0	0	0	0	3	2	14	0	0	0	0	0	0	9	30
>24.00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
TOTAL	8	2	0	0	0	0	9	30	28	7	0	0	0	0	0	11	95

# 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 AT 100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1.01- 3.50	3	1	2	0	1	2	3	0	1	0	0	0	0	0	0	1	14
3.51- 7.50	11	5	2	0	1	5	9	18	14	7	6	0	0	0	3	4	85
7.51-12.50	18	4	4	4	0	0	6	19	20	20	5	1	0	1	0	18	120
12.51-18.50	2	1	1	0	0	0	1	4	13	3	0	0	0	0	4	8	37
18.51-24.00	0	0	0	0	0	0	1	2	1	2	0	0	0	0	0	0	6
>24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	34	11	9	4	2	7	20	43	50	32	11	1	0	1	7	31	263

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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 AT 100.00 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	1	0	0	0	0	0	0	1	0	0	2
3.51- 7.50	17	7	7	10	13	8	10	9	6	9	4	0	2	1	1	0	104
7.51-12.50	30	9	5	8	8	11	18	18	27	22	8	1	5	11	10	15	206
12.51-18.50	18	7	5	3	6	12	7	23	29	20	9	4	1	8	15	30	197
18.51-24.00	7	0	0	0	0	0	1	1	13	3	1	2	0	2	1	11	42
>24.00	0	0	0	0	0	0	0	0	6	1	0	0	2	2	1	2	14
TOTAL	72	24	17	21	27	31	37	51	81	55	22	7	10	24	28	58	565

# 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 AT 100.00 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	9	4	4	5	5	2	5	4	9	2	3	1	2	3	1	66
3.51- 7.50	49	42	32	31	23	63	37	35	41	49	39	21	18	21	16	39	556
7.51-12.50	88	50	52	32	36	83	94	76	84	79	46	12	19	64	85	92	992
12.51-18.50	139	74	25	24	14	32	103	120	100	37	21	16	28	76	110	143	1062
18.51-24.00	51	14	1	0	0	2	28	42	59	7	3	11	4	25	56	90	393
>24.00	20	3	0	0	0	0	4	2	21	2	2	1	0	3	23	38	119
TOTAL	354	192	114	91	78	185	268	280	309	183	113	64	70	191	293	403	3188

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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 AT 100.00 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	5	4	1	5	1	0	0	2	4	4	1	4	1	1	6	44
3.51- 7.50	27	21	20	23	17	32	12	22	15	35	27	12	18	18	17	51	367
7.51-12.50	94	76	38	50	49	57	62	85	73	87	36	29	24	33	39	98	930
12.51-18.50	104	41	23	12	25	69	141	174	197	57	40	34	33	37	81	122	1190
18.51-24.00	26	7	4	2	1	3	41	68	79	5	13	18	18	43	43	30	401
>24.00	9	0	0	0	0	2	12	1	8	0	2	2	3	14	14	10	77
TOTAL	265	150	89	88	97	164	268	350	374	188	122	96	100	146	195	317	3009

# 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 AT 100.00 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	0	3	1	0	1	2	5	0	4	4	1	0	2	0	3	28
3.51- 7.50	12	19	13	16	11	17	9	16	12	40	22	8	6	6	7	11	225
7.51-12.50	15	13	13	25	19	26	33	41	47	60	30	18	13	21	30	30	434
12.51-18.50	18	4	0	3	4	8	41	25	45	13	34	20	14	24	31	24	308
18.51-24.00	10	0	0	0	0	5	7	1	0	2	8	14	12	6	3	6	74
>24.00	1	0	0	0	0	0	0	0	0	0	1	3	3	4	1	5	18
TOTAL	58	36	29	45	34	57	92	88	104	119	99	64	48	63	72	79	1087

PROGRAM: JFD VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

# 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 AT 100.00 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	2	0	0	1	1	2	3	0	2	0	1	3	16
3.51- 7.50	8	4	8	11	9	10	10	13	8	10	14	4	3	7	4	6	129
7.51-12.50	11	4	3	2	-	5	6	19	10	11	13	14	10	15	8	4	137
12.51-18.50	2	0	0	0	1	0	2	4	8	2	4	5	5	11	3	4	51
18.51-24.00	0	0	0	0	0	0	0	0	0	0	2	0	1	4	1	0	8
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL	21	9	11	13	14	15	18	37	27	25	36	23	22	37	17	17	342

# 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 AT 100.00 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	14	16	11	6	12	7	5	11	8	19	13	5	7	5	5	13	157
3.51- 7.50	117	94	82	91	74	132	81	95	83	143	106	45	47	53	45	108	1396
7.51-12.50	251	157	113	117	115	187	226	262	255	266	139	74	71	144	175	243	2795
12.51-18.50	302	132	57	46	50	121	302	388	410	156	113	80	81	157	240	343	2978
18.51-24.00	98	22	6	2	1	10	81	118	178	20	27	45	35	80	108	154	985
>24.00	30	3	0	0	0	2	17	5	39	5	5	6	9	23	39	55	238
TOTAL	812	424	269	262	252	459	712	879	973	609	403	255	250	462	612	916	8549



PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JAN-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 1/ 1/92 - 12/31/92

\*\*\* JAN-DEC 1992 \*\*\*

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: 8783

TOTAL NUMBER OF VALID OBSERVATIONS: 8549

TOTAL NUMBER OF MISSING OBSERVATIONS: 234

PERCENT DATA RECOVERY FOR THIS PERIOD: 97.3 %

MEAN WIND SPEED FOR THIS PERIOD: 12.7 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

# PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.11	3.08	6.61	37.29	35.28	12.71	4.00

# DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	CALM
A	8	2	0	0	0	0	9	30	28	7	0	0	0	0	0	11	0
B	34	11	9	4	2	7	20	43	50	32	11	1	0	1	7	31	0
C	72	24	17	21	27	31	37	51	81	55	22	7	10	24	28	58	0
D	354	192	114	91	78	185	268	280	309	183	113	64	70	191	293	403	0
E	265	150	89	88	97	164	268	350	374	188	122	96	100	146	195	317	0
F	58	36	29	45	34	57	92	88	104	119	99	64	48	63	72	79	0
G	21	9	11	13	14	15	18	37	27	25	36	23	22	37	17	17	0
TOTAL	812	424	269	262	252	459	712	879	973	609	403	255	250	462	612	916	0

Stability Classes by Hour of Day

100-Meter Wind vs. Delta T

July-December 1992

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92	7	1	E	E	E	E	E	E	D	D	C	B	A	A	A	A	A	A	D	D	D	D	E	E	D	D
92	7	2	D	D	D	D	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
92	7	3	E	E	E	E	F	F	E	D	D	C	C	C	C	C	C	C	D	D	D	E	F	F	F	F
92	7	4	F	E	F	F	F	F	E	D	D	C	C	B	B	A	B	B	C	D	D	E	E	E	E	E
92	7	5	E	E	E	E	E	E	E	D	E	F	F	E	E	D	D	D	D	D	D	E	F	F	E	E
92	7	6	E	E	E	E	E	E	D	D	D	C	B	B	D	D	C	C	C	D	D	D	E	E	E	E
92	7	7	E	E	E	F	F	F	E	D	D	C	C	B	D	D	D	D	D	D	D	E	E	E	E	E
92	7	8	E	E	E	F	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F
92	7	9	F	F	E	E	F	F	E	D	D	D	E	E	E	E	E	E	E	E	E	E	E	E	F	F
92	7	10	F	F	F	F	F	E	E	E	D	D	D	C	C	D	C	D	D	D	D	E	E	F	F	E
92	7	11	E	E	E	E	E	E	E	D	D	D	D	D	C	C	D	D	D	D	D	D	D	E	E	E
92	7	12	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F	F	F
92	7	13	F	F	F	F	F	F	E	E	E	E	D	E	D	D	D	D	D	D	D	E	E	E	E	E
92	7	14	E	E	E	E	E	E	E	D	C	C	C	C	C	C	D	C	D	D	D	E	F	F	F	F
92	7	15	F	F	F	E	E	E	E	D	D	C	C	C	C	D	D	D	E	E	F	E	D	E	E	E
92	7	16	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F
92	7	17	F	F	E	E	E	E	E	D	D	C	C	D	D	D	D	D	D	D	E	F	F	F	G	G
92	7	18	G	F	F	G	G	G	F	D	D	D	D	C	D	C	C	C	C	D	D	E	E	E	E	E
92	7	19	E	E	F	F	F	F	E	D	D	C	D	B	C	D	D	D	D	E	D	E	E	E	E	E
92	7	20	F	F	F	F	E	E	E	E	D	E	D	E	D	D	D	D	D	D	D	D	E	E	F	F
92	7	21	F	F	E	F	E	E	D	D	D	D	D	C	D	C	C	D	D	D	D	E	E	D	D	D
92	7	22	D	E	F	F	F	E	E	E	D	D	D	D	C	D	D	D	D	D	D	D	D	E	E	E
92	7	23	E	E	D	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E
92	7	24	E	E	E	E	E	E	E	D	D	C	B	B	B	D	E	F	F	F	F	F	F	F	F	F
92	7	25	F	F	F	F	F	F	F	E	E	E	D	D	C	D	D	F	F	F	F	F	E	E	E	E
92	7	26	F	F	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E
92	7	27	F	F	G	G	F	F	F	E	D	D	C	C	C	C	D	D	D	D	E	E	F	F	F	F
92	7	28	E	F	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	F
92	7	29	F	E	E	E	E	E	E	D	D	D	D	B	D	E	E	E	E	D	E	E	E	E	E	E
92	7	30	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E
92	7	31	E	E	E	E	E	E	E	D	D	D	C	C	C	C	B	D	D	D	D	F	F	F	F	F
92	8	1	F	F	F	F	F	F	E	D	D	C	D	B	B	B	B	B	C	D	D	E	E	E	E	E
92	8	2	E	E	E	E	E	E	E	E	D	D	C	D	D	D	D	D	D	D	E	E	E	E	E	E
92	8	3	E	F	F	F	F	F	F	E	D	D	C	C	C	C	D	D	D	D	E	E	E	E	E	E
92	8	4	E	E	E	E	E	E	E	D	D	D	D	C	B	B	C	C	D	D	E	E	E	E	E	E
92	8	5	D	D	D	D	E	D	D	D	-	C	C	D	D	D	D	D	D	D	D	D	D	E	E	E
92	8	6	E	E	E	-	E	E	D	D	D	D	D	D	D	D	D	C	C	D	D	E	E	E	E	E
92	8	7	D	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	F	G	G	G
92	8	8	G	G	G	G	G	G	F	F	E	D	D	B	B	C	D	D	D	D	E	E	E	E	E	E
92	8	9	E	E	E	E	E	E	D	D	D	D	D	D	C	C	D	D	D	D	E	E	E	E	E	E
92	8	10	E	E	E	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
92	8	11	E	E	E	E	E	E	E	D	D	D	D	C	C	C	C	D	D	D	E	F	F	F	F	F
92	8	12	F	F	F	F	F	F	E	D	D	D	D	D	C	D	D	D	D	D	E	E	E	F	F	F
92	8	13	F	F	F	F	F	F	F	E	D	D	D	C	C	D	D	D	D	E	E	E	E	E	E	E
92	8	14	E	E	F	E	E	E	E	D	D	D	D	C	B	C	D	D	D	D	E	E	F	E	E	E

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

STABILITY BASED ON: DELTA T      BETWEEN 100.0 AND 10.0 METERS

HOURLY STABILITIES  
 HOURS

YR	HN	DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
92	8	15	E	F	F	F	E	F	F	E	D	D	D	B	D	D	D	C	D	D	D	E	F	E	E	E
92	8	16	E	E	E	E	E	E	E	D	C	C	B	A	A	A	B	C	D	D	D	E	E	E	E	E
92	8	17	E	E	E	E	E	E	E	D	D	C	C	B	C	D	D	C	D	D	E	E	E	F	F	F
92	8	18	E	E	E	E	E	E	-	-	-	-	C	A	C	B	C	D	D	D	E	E	E	E	E	E
92	8	19	E	E	E	E	E	E	E	D	D	C	B	B	C	C	D	D	D	E	F	F	F	F	F	F
92	8	20	F	F	F	F	F	-	F	E	D	B	B	A	A	-	A	B	C	D	D	E	E	E	E	E
92	8	21	E	E	E	E	E	E	E	D	D	C	C	B	B	A	A	A	C	D	E	E	E	E	E	F
92	8	22	F	F	F	F	E	E	E	E	D	C	B	A	A	A	A	A	C	D	D	E	E	E	E	E
92	8	23	E	E	E	E	E	E	E	D	D	C	B	A	A	A	B	C	D	D	E	E	E	E	E	E
92	8	24	E	E	E	E	E	E	E	D	D	C	C	B	B	B	B	C	D	D	E	E	E	E	E	E
92	8	25	E	E	E	E	E	E	E	E	D	D	D	D	E	D	D	D	D	D	D	E	E	E	E	E
92	8	26	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D
92	8	27	D	D	D	E	E	E	E	D	D	C	C	C	C	B	B	C	D	D	E	F	F	G	G	G
92	8	28	G	G	G	G	G	G	F	D	D	C	C	B	C	D	C	C	D	D	E	F	E	E	E	F
92	8	29	E	E	E	E	E	E	E	D	D	C	C	B	C	D	D	D	D	D	E	E	E	E	E	E
92	8	30	F	F	G	F	G	F	F	E	D	D	C	C	C	C	C	C	D	D	E	F	F	G	G	G
92	8	31	G	G	G	F	F	F	F	E	D	D	C	A	C	B	B	B	C	D	E	E	E	E	E	E
92	9	1	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
92	9	2	E	E	E	E	E	E	E	E	D	D	C	C	C	C	C	D	D	D	E	G	G	G	G	E
92	9	3	E	E	E	F	F	F	G	F	D	D	D	B	D	C	B	C	D	D	E	F	F	E	E	E
92	9	4	E	E	E	E	E	E	E	D	D	C	B	A	B	B	B	D	D	D	E	E	E	E	E	E
92	9	5	E	E	E	E	E	E	D	E	E	E	E	E	D	D	D	E	E	F	F	F	E	F	E	E
92	9	6	E	E	E	E	E	E	E	E	D	D	D	C	D	C	C	D	D	D	E	E	E	E	E	E
92	9	7	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E
92	9	8	E	E	E	E	E	E	E	D	D	C	C	C	B	B	C	D	D	D	D	D	D	D	E	E
92	9	9	E	E	E	D	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	F	F	G
92	9	10	G	F	F	F	F	E	E	E	D	D	C	C	C	C	C	C	D	D	E	E	F	G	G	G
92	9	11	G	G	G	G	F	F	E	E	D	D	C	B	A	A	A	B	D	E	E	E	E	E	E	F
92	9	12	E	E	E	E	E	D	D	D	D	B	A	A	A	B	C	D	D	D	E	D	D	E	E	E
92	9	13	D	D	D	E	E	E	D	D	D	C	B	B	B	B	C	D	D	D	E	E	E	E	D	D
92	9	14	D	D	D	D	E	D	D	D	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D
92	9	15	D	D	D	D	E	D	D	D	C	B	A	A	A	A	C	D	D	D	D	D	D	E	E	E
92	9	16	D	D	D	E	E	D	D	-	C	B	D	C	D	D	D	D	E	D	D	E	E	F	E	E
92	9	17	E	E	F	E	E	E	D	D	D	C	B	A	A	B	A	C	D	D	E	E	E	E	E	E
92	9	18	E	E	E	E	D	D	D	D	C	C	B	B	C	C	C	D	D	E	E	E	F	F	F	F
92	9	19	F	F	G	G	F	F	F	E	D	C	B	B	B	B	A	C	D	D	E	D	D	D	D	D
92	9	20	D	D	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	E	D	D
92	9	21	E	E	E	E	E	D	D	D	D	D	D	C	D	D	D	D	D	E	E	F	F	E	E	E
92	9	22	E	E	E	E	E	E	E	D	D	D	D	C	C	C	C	C	D	D	E	F	G	G	G	F
92	9	23	F	F	F	F	F	E	E	E	E	E	D	B	A	B	A	B	D	D	E	E	E	E	E	E
92	9	24	E	E	E	E	E	E	E	D	D	C	B	A	A	B	B	B	D	D	E	E	E	E	E	F
92	9	25	F	F	F	E	E	E	E	E	C	B	A	A	A	A	B	D	D	E	E	E	E	E	E	E
92	9	26	E	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	E	F	G	G	G	G	G	G
92	9	27	G	G	G	G	G	G	F	F	E	D	B	B	B	B	B	C	D	E	F	F	F	E	E	E
92	9	28	E	E	E	D	D	E	D	D	D	C	B	B	B	C	C	D	D	E	F	F	G	G	G	G

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92	9	29	G	G	G	G	G	G	G	F	E	D	D	B	C	C	B	C	D	E	F	F	F	G	G	F
92	9	30	F	F	F	F	F	F	F	E	D	D	C	B	C	C	C	D	D	E	F	F	F	F	F	F
92	10	1	F	F	F	F	F	F	F	F	D	D	D	C	C	C	C	B	D	D	E	G	G	G	F	F
92	10	2	F	F	F	F	F	F	F	F	E	D	D	C	C	C	C	C	D	D	E	G	G	G	F	F
92	10	3	E	F	E	F	F	F	F	F	D	D	D	C	C	C	C	D	D	F	G	G	G	G	G	F
92	10	4	G	G	G	G	G	G	G	G	F	D	D	D	D	D	D	D	D	F	G	G	F	F	F	F
92	10	5	F	E	E	E	F	F	F	E	E	D	D	C	-	B	C	D	E	F	G	G	F	F	F	F
92	10	6	F	F	F	F	F	F	F	F	E	D	D	C	B	B	C	D	D	E	E	E	E	E	E	F
92	10	7	F	F	F	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
92	10	8	E	F	F	F	-	F	E	E	E	E	E	E	D	D	E	E	E	E	E	D	D	D	D	D
92	10	9	D	D	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F
92	10	10	E	E	E	E	E	E	E	E	D	D	D	D	D	D	C	D	D	E	F	F	F	F	F	F
92	10	11	G	F	G	G	G	G	G	G	F	D	D	D	D	D	C	D	D	E	E	F	F	F	F	F
92	10	12	F	F	E	E	E	E	E	E	D	C	C	C	C	C	C	D	D	E	F	G	F	F	F	F
92	10	13	F	F	F	F	E	E	E	E	D	D	C	B	C	C	C	D	E	E	F	E	F	G	G	G
92	10	14	G	F	E	E	E	E	E	D	D	D	C	B	B	C	D	D	D	D	D	D	D	D	D	D
92	10	15	D	D	D	D	D	D	D	D	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	D
92	10	16	D	D	D	D	D	D	D	-	-	-	-	-	-	-	D	D	D	D	E	E	F	F	F	F
92	10	17	F	F	F	F	F	F	F	F	E	D	D	D	C	D	D	D	D	D	E	E	E	E	E	D
92	10	18	E	E	E	E	D	E	D	D	D	D	D	C	D	D	D	D	D	E	F	F	F	E	E	D
92	10	19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	E
92	10	20	F	G	G	G	G	G	F	F	E	D	D	C	D	D	D	D	D	F	G	G	G	G	G	G
92	10	21	G	G	G	G	G	G	G	F	E	D	D	C	B	C	C	D	D	E	E	E	E	E	E	E
92	10	22	E	E	E	E	E	E	E	E	D	D	C	C	C	C	C	D	D	E	E	E	E	E	E	E
92	10	23	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	F	F	F	E	E	F
92	10	24	F	F	F	F	F	F	F	F	E	D	D	D	C	D	D	D	D	E	G	G	G	G	G	G
92	10	25	G	G	G	G	G	G	G	F	E	D	D	D	C	C	C	D	D	E	F	F	F	F	F	F
92	10	26	E	D	D	D	D	D	D	D	D	D	D	C	B	C	C	D	D	E	E	F	G	G	G	G
92	10	27	G	G	G	G	G	G	G	G	E	D	D	C	C	C	D	D	D	E	F	F	F	G	G	G
92	10	28	G	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
92	10	29	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92	10	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
92	10	31	D	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
92	11	1	E	E	E	E	F	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E
92	11	2	E	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E
92	11	3	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92	11	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
92	11	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
92	11	6	D	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92	11	7	D	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92	11	8	D	D	D	D	D	D	E	D	D	D	C	C	C	D	D	D	D	D	D	D	D	D	D	D
92	11	9	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
92	11	10	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	E	E
92	11	11	E	D	E	E	E	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92	11	12	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F	E	E

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 106M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

STABILITY BASED ON: DELTA T      BETWEEN 100.0 AND 10.0 METERS

YR MN DY	HOURLY STABILITIES																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
92 11 13	E	E	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
92 11 14	E	E	E	E	E	E	E	D	D	D	C	C	C	D	D	D	D	E	F	F	F	F	F	F
92 11 15	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F
92 11 16	F	F	F	F	F	G	G	G	F	D	D	D	D	D	D	D	D	E	F	G	G	G	G	F
92 11 17	F	E	E	E	E	E	D	E	E	D	D	D	D	D	D	D	D	E	D	D	D	D	D	E
92 11 18	E	E	E	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
92 11 19	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
92 11 20	F	F	F	F	F	F	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
92 11 21	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 11 22	D	D	D	D	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 11 23	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 11 24	E	E	E	E	E	E	E	E	D	D	D	D	D	-	D	D	D	D	D	D	E	E	E	E
92 11 25	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	E
92 11 26	E	E	E	E	E	D	E	D	D	D	D	D	D	D	D	D	D	E	F	F	F	E	E	E
92 11 27	F	F	F	F	F	F	E	F	E	D	D	D	D	D	D	D	D	E	F	F	F	G	G	G
92 11 28	G	G	G	G	G	F	F	F	F	E	D	D	D	D	D	D	E	E	E	E	E	E	E	F
92 11 29	F	F	F	F	E	F	E	E	E	E	D	D	D	D	D	D	E	E	E	E	E	D	D	D
92 11 30	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	F	F	E	E	E	E
92 12 1	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
92 12 2	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	E	E	E
92 12 3	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	D
92 12 4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	-	E	E
92 12 5	F	E	E	E	E	E	F	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
92 12 6	D	D	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
92 12 7	E	F	F	F	G	G	G	G	G	E	E	D	D	D	-	E	E	E	F	F	F	F	F	F
92 12 8	F	F	F	F	F	F	F	F	F	E	D	D	D	D	D	D	E	E	E	E	E	E	D	D
92 12 9	E	E	F	F	F	F	F	F	F	E	E	E	E	E	E	E	E	F	F	F	E	E	E	E
92 12 10	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	G	E
92 12 11	F	F	F	G	G	F	G	G	G	F	E	D	D	-	-	-	-	-	-	-	E	E	E	E
92 12 12	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	D	D
92 12 13	D	D	D	D	D	E	-	E	E	E	E	E	E	E	E	E	E	E	E	F	F	F	F	F
92 12 14	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	E	F	F	F	F	F	F	F	F
92 12 15	F	F	E	E	E	E	E	E	E	E	E	E	-	D	D	E	E	E	E	E	E	E	E	E
92 12 16	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	D	D	D	D	D	D
92 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
92 12 18	D	D	D	D	D	D	E	E	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
92 12 19	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	F
92 12 20	F	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
92 12 21	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	F	G	F	F	F	F
92 12 22	F	G	F	F	F	F	G	F	F	F	D	D	D	D	D	D	E	E	E	F	F	F	E	E
92 12 23	F	F	F	F	E	F	F	E	E	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D
92 12 24	E	E	E	E	D	D	D	D	D	D	C	C	C	D	D	D	E	E	E	E	E	E	E	F
92 12 25	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	G	G	G
92 12 26	F	F	F	E	E	E	E	E	E	D	D	D	C	D	D	D	E	E	E	E	E	E	E	E
92 12 27	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	F	F	F	F	F	F	F

PROGRAM: JFD      VERSION: 5P  
 NPPD-COOPER NUCLEAR STATION JFD: 100M WIND VS 100-10M DELTA-T JUL-DEC 1992  
 SITE IDENTIFIER: NPPD  
 DATA PERIOD EXAMINED: 7/ 1/92 - 12/31/92

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
92 12 28	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F	G	F	G	F	F	F	F
92 12 29	F	F	F	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
92 12 30	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D
92 12 31	D	D	D	D	D	D	D	D	D	D	D	C	C	C	D	D	D	D	D	D	D	D	D	D

## ATMOSPHERIC DIFFUSION ESTIMATES

The tables of atmospheric diffusion estimates in this section were generated using the computer code XOQDOQ. Data are given for 22 distances and 16 compass points (directions from site) centered on the Cooper Nuclear Station. Tables are presented for the ground-level (vent) and elevated (stack) release options separately, and for the following time periods: July-September, October-December, July-December, and January-December 1992.



Atmospheric Diffusion Estimates

Ground Level Releases

July-September 1992

VENTS GROUND LEVEL RELEASES - JUL-SEP 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES									
	0-250	0-500	0-750	1-000	1-250	2-500	3-000	3-500	4-000	4-500	1-000	2-000	2-500	3-000	3-500	4-000	4-500	5-000	5-500	6-000
S	5.92E-05	2.01E-05	1.08E-05	5.45E-06	2.19E-06	7.33E-07	5.09E-07	3.78E-07	2.94E-07	2.37E-07	2.16E-06	1.16E-06	7.33E-07	5.09E-07	3.78E-07	2.94E-07	2.37E-07	1.94E-07	1.51E-07	1.18E-07
SSW	2.60E-05	9.07E-06	4.87E-06	2.43E-06	1.23E-06	4.23E-07	2.93E-07	2.15E-07	1.68E-07	1.37E-07	1.23E-06	6.48E-07	4.23E-07	2.93E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08	6.25E-08
SW	1.03E-05	3.68E-06	1.94E-06	9.58E-07	4.73E-07	1.59E-07	1.04E-07	7.82E-08	6.04E-08	4.82E-08	4.42E-07	2.41E-07	1.59E-07	1.04E-07	7.82E-08	6.04E-08	4.82E-08	3.78E-08	2.94E-08	2.37E-08
WSW	7.04E-06	2.50E-06	1.28E-06	6.31E-07	3.15E-07	1.04E-07	6.94E-08	5.11E-08	3.93E-08	3.11E-08	2.82E-07	1.51E-07	9.74E-08	6.48E-08	4.82E-08	3.68E-08	2.82E-08	2.15E-08	1.68E-08	1.37E-08
W	7.42E-06	2.58E-06	1.32E-06	6.45E-07	3.20E-07	1.06E-07	7.04E-08	5.21E-08	3.98E-08	3.15E-08	2.85E-07	1.54E-07	1.00E-07	6.94E-08	5.11E-08	3.93E-08	3.11E-08	2.41E-08	1.89E-08	1.48E-08
WNW	1.56E-05	5.37E-06	2.79E-06	1.37E-06	6.85E-07	2.28E-07	1.54E-07	1.12E-07	8.64E-08	6.78E-08	6.25E-07	3.42E-07	2.28E-07	1.54E-07	1.12E-07	8.64E-08	6.78E-08	5.21E-08	4.04E-08	3.15E-08
NW	3.87E-05	1.32E-05	6.95E-06	3.52E-06	1.78E-06	5.85E-07	3.93E-07	2.85E-07	2.15E-07	1.68E-07	1.54E-06	8.05E-07	5.21E-07	3.68E-07	2.82E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08
NNW	8.02E-05	2.64E-05	1.40E-05	7.05E-06	3.52E-06	1.16E-06	7.74E-07	5.64E-07	4.23E-07	3.25E-07	2.94E-06	1.54E-06	1.00E-06	6.94E-07	5.11E-07	3.93E-07	3.11E-07	2.41E-07	1.89E-07	1.48E-07
N	8.94E-05	2.84E-05	1.51E-05	7.60E-06	3.87E-06	1.23E-06	8.24E-07	5.94E-07	4.42E-07	3.35E-07	3.04E-06	1.59E-06	1.04E-06	7.82E-07	5.94E-07	4.42E-07	3.35E-07	2.60E-07	2.01E-07	1.51E-07
NNE	4.38E-05	1.36E-05	7.30E-06	3.69E-06	1.87E-06	6.16E-07	4.04E-07	2.93E-07	2.15E-07	1.68E-07	1.54E-06	8.05E-07	5.21E-07	3.68E-07	2.82E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08
NE	3.40E-05	1.10E-05	5.74E-06	2.87E-06	1.44E-06	4.73E-07	3.04E-07	2.28E-07	1.78E-07	1.37E-07	1.23E-06	6.48E-07	4.23E-07	2.93E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08	6.25E-08
ENE	2.23E-05	7.09E-06	3.73E-06	1.88E-06	9.58E-07	3.15E-07	2.04E-07	1.51E-07	1.12E-07	8.64E-08	7.82E-07	4.23E-07	2.93E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08	6.25E-08	4.82E-08
E	1.56E-05	4.88E-06	2.66E-06	1.36E-06	6.85E-07	2.28E-07	1.54E-07	1.12E-07	8.64E-08	6.78E-08	6.25E-07	3.42E-07	2.28E-07	1.54E-07	1.12E-07	8.64E-08	6.78E-08	5.21E-08	4.04E-08	3.15E-08
ESE	1.72E-05	5.57E-06	2.98E-06	1.44E-06	7.24E-07	2.41E-07	1.59E-07	1.12E-07	8.64E-08	6.78E-08	6.25E-07	3.42E-07	2.28E-07	1.54E-07	1.12E-07	8.64E-08	6.78E-08	5.21E-08	4.04E-08	3.15E-08
SE	3.52E-05	1.13E-05	6.01E-06	3.02E-06	1.44E-06	4.73E-07	3.04E-07	2.28E-07	1.78E-07	1.37E-07	1.23E-06	6.48E-07	4.23E-07	2.93E-07	2.15E-07	1.68E-07	1.37E-07	1.04E-07	8.05E-08	6.25E-08
SSE	6.44E-05	2.09E-05	1.13E-05	5.73E-06	2.87E-06	1.23E-06	8.24E-07	5.94E-07	4.42E-07	3.35E-07	3.04E-06	1.59E-06	1.04E-06	7.82E-07	5.94E-07	4.42E-07	3.35E-07	2.60E-07	2.01E-07	1.51E-07

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES									
	5-000	7-500	10-000	15-000	20-000	30-000	35-000	40-000	45-000	50-000	20-000	25-000	30-000	35-000	40-000	45-000	50-000	55-000	60-000	65-000
S	1.62E-07	1.01E-07	6.56E-08	3.78E-08	2.56E-08	1.90E-08	1.49E-08	1.22E-08	1.02E-08	8.72E-09	1.02E-08	8.72E-09	7.33E-09	6.04E-09	4.82E-09	3.78E-09	2.94E-09	2.37E-09	1.94E-09	1.51E-09
SSW	8.93E-08	4.62E-08	3.01E-08	1.74E-08	1.18E-08	8.84E-09	6.95E-09	5.68E-09	4.78E-09	4.10E-09	4.78E-09	4.10E-09	3.42E-09	2.85E-09	2.37E-09	1.94E-09	1.51E-09	1.18E-09	9.05E-10	7.04E-10
SW	3.18E-08	1.60E-08	1.02E-08	5.78E-09	3.87E-09	2.85E-09	2.21E-09	1.80E-09	1.50E-09	1.28E-09	1.50E-09	1.28E-09	1.04E-09	8.64E-10	7.04E-10	5.64E-10	4.42E-10	3.42E-10	2.60E-10	2.01E-10
WSW	2.79E-08	1.39E-08	8.95E-09	5.14E-09	3.48E-09	2.58E-09	2.03E-09	1.65E-09	1.36E-09	1.19E-09	1.36E-09	1.19E-09	9.74E-10	8.05E-10	6.48E-10	5.11E-10	3.93E-10	3.11E-10	2.41E-10	1.89E-10
W	2.28E-08	1.18E-08	7.75E-09	4.51E-09	3.10E-09	2.32E-09	1.83E-09	1.51E-09	1.27E-09	1.09E-09	1.27E-09	1.09E-09	9.10E-10	7.51E-10	6.04E-10	4.82E-10	3.78E-10	2.94E-10	2.37E-10	1.94E-10
NNW	4.80E-08	2.45E-08	1.59E-08	9.18E-09	6.24E-09	4.64E-09	3.64E-09	2.98E-09	2.50E-09	2.14E-09	2.50E-09	2.14E-09	1.78E-09	1.48E-09	1.18E-09	9.42E-10	7.42E-10	5.85E-10	4.51E-10	3.42E-10
N	1.21E-07	6.21E-08	4.01E-08	2.59E-08	1.54E-08	1.14E-08	8.96E-09	7.29E-09	6.10E-09	5.22E-09	6.10E-09	5.22E-09	4.34E-09	3.56E-09	2.85E-09	2.37E-09	1.94E-09	1.51E-09	1.18E-09	9.05E-10
NNN	2.70E-07	1.45E-07	9.45E-08	6.55E-08	4.38E-08	3.24E-08	2.57E-08	2.14E-08	1.78E-08	1.53E-08	1.78E-08	1.53E-08	1.27E-08	1.04E-08	8.35E-09	6.78E-09	5.35E-09	4.10E-09	3.15E-09	2.41E-09
NNE	3.91E-07	2.10E-07	1.36E-07	8.95E-08	5.95E-08	4.31E-08	3.43E-08	2.81E-08	2.37E-08	2.01E-08	2.37E-08	2.01E-08	1.68E-08	1.37E-08	1.09E-08	8.64E-09	6.78E-09	5.21E-09	4.04E-09	3.15E-09
NNE	1.48E-07	7.92E-08	5.24E-08	3.09E-08	2.13E-08	1.61E-08	1.27E-08	1.05E-08	8.85E-09	7.74E-09	8.85E-09	7.74E-09	6.48E-09	5.35E-09	4.34E-09	3.42E-09	2.60E-09	2.01E-09	1.51E-09	1.18E-09
ENE	1.20E-07	6.70E-08	4.47E-08	2.67E-08	1.86E-08	1.40E-08	1.12E-08	9.26E-09	7.85E-09	6.78E-09	7.85E-09	6.78E-09	5.64E-09	4.51E-09	3.56E-09	2.85E-09	2.28E-09	1.78E-09	1.37E-09	1.04E-09
ENE	7.46E-08	4.03E-08	2.67E-08	1.58E-08	1.09E-08	8.20E-09	6.50E-09	5.35E-09	4.52E-09	3.90E-09	4.52E-09	3.90E-09	3.24E-09	2.67E-09	2.15E-09	1.78E-09	1.48E-09	1.18E-09	9.05E-10	7.04E-10
E	5.52E-08	2.93E-08	1.91E-08	1.24E-08	8.10E-09	5.79E-09	4.58E-09	3.76E-09	3.17E-09	2.70E-09	3.17E-09	2.70E-09	2.28E-09	1.89E-09	1.51E-09	1.21E-09	9.42E-10	7.42E-10	5.85E-10	4.51E-10
ESE	5.97E-08	3.16E-08	2.09E-08	1.24E-08	8.10E-09	5.79E-09	4.58E-09	3.76E-09	3.17E-09	2.70E-09	3.17E-09	2.70E-09	2.28E-09	1.89E-09	1.51E-09	1.21E-09	9.42E-10	7.42E-10	5.85E-10	4.51E-10
SSE	1.25E-07	6.40E-08	4.22E-08	2.48E-08	1.71E-08	1.28E-08	1.02E-08	8.40E-09	7.09E-09	6.10E-09	7.09E-09	6.10E-09	5.09E-09	4.10E-09	3.24E-09	2.60E-09	2.01E-09	1.51E-09	1.18E-09	9.05E-10
SSE	2.19E-07	1.14E-07	7.50E-08	4.36E-08	2.98E-08	2.23E-08	1.75E-08	1.44E-08	1.21E-08	1.04E-08	1.21E-08	1.04E-08	8.64E-09	7.04E-09	5.64E-09	4.42E-09	3.42E-09	2.60E-09	2.01E-09	1.51E-09

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

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES										SEGMENT BOUNDARIES IN MILES										
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	1.04E-05	2.44E-06	7.58E-07	3.83E-07	2.38E-07	1.06E-07	3.86E-08	1.91E-08	1.22E-08	7.68E-09	1.05E-05	2.44E-06	7.58E-07	3.83E-07	2.38E-07	1.06E-07	3.86E-08	1.91E-08	1.22E-08	7.68E-09	1.05E-05
SSW	4.72E-06	1.09E-06	3.42E-07	1.74E-07	1.08E-07	4.86E-08	1.77E-08	8.97E-09	5.70E-09	4.10E-09	4.72E-06	1.09E-06	3.42E-07	1.74E-07	1.08E-07	4.86E-08	1.77E-08	8.97E-09	5.70E-09	4.10E-09	4.72E-06
SW	1.83E-06	4.25E-07	1.27E-07	6.34E-08	3.89E-08	1.69E-08	5.93E-09	2.85E-09	1.60E-09	1.28E-09	1.83E-06	4.25E-07	1.27E-07	6.34E-08	3.89E-08	1.69E-08	5.93E-09	2.85E-09	1.60E-09	1.28E-09	1.83E-06
WSW	1.84E-06	3.54E-07	1.07E-07	5.32E-08	3.53E-08	1.47E-08	4.60E-09	2.36E-09	1.66E-09	1.62E-09	1.84E-06	3.54E-07	1.07E-07	5.32E-08	3.53E-08	1.47E-08	4.60E-09	2.36E-09	1.66E-09	1.62E-09	1.84E-06
W	1.26E-06	2.83E-07	8.78E-08	4.45E-08	2.78E-08	1.24E-08	3.89E-09	1.97E-09	1.51E-09	1.09E-09	1.26E-06	2.83E-07	8.78E-08	4.45E-08	2.78E-08	1.24E-08	3.89E-09	1.97E-09	1.51E-09	1.09E-09	1.26E-06
NNW	6.80E-06	1.57E-06	1.87E-07	9.44E-07	5.85E-07	2.59E-07	9.38E-08	4.71E-08	2.72E-08	2.35E-08	6.80E-06	1.57E-06	1.87E-07	9.44E-07	5.85E-07	2.59E-07	9.38E-08	4.71E-08	2.72E-08	2.35E-08	6.80E-06
N	1.37E-05	3.22E-06	1.03E-06	5.39E-07	3.37E-07	1.53E-07	5.75E-08	3.20E-08	1.89E-08	1.57E-08	1.37E-05	3.22E-06	1.03E-06	5.39E-07	3.37E-07	1.53E-07	5.75E-08	3.20E-08	1.89E-08	1.57E-08	1.37E-05
NNN	1.47E-05	3.48E-06	1.12E-06	5.82E-07	3.68E-07	1.68E-07	6.36E-08	3.60E-08	2.19E-08	1.89E-08	1.47E-05	3.48E-06	1.12E-06	5.82E-07	3.68E-07	1.68E-07	6.36E-08	3.60E-08	2.19E-08	1.89E-08	1.47E-05
NNE	1.17E-05	1.13E-06	1.13E-06	3.37E-07	1.40E-07	8.30E-08	3.01E-08	1.94E-08	1.19E-08	1.49E-08	1.17E-05	1.13E-06	1.13E-06	3.37E-07	1.40E-07	8.30E-08	3.01E-08	1.94E-08	1.19E-08	1.49E-08	1.17E-05
ENE	2.20E-06	6.26E-07	2.81E-07	1.46E-07	1.53E-08	4.24E-08	4.24E-08	4.24E-08	5.39E-09	5.39E-09	2.20E-06	6.26E-07	2.81E-07	1.46E-07	1.53E-08	4.24E-08	4.24E-08	4.24E-08	5.39E-09	5.39E-09	2.20E-06
ESE	2.20E-06	6.26E-07	2.81E-07	1.46E-07	1.53E-08	4.24E-08	4.24E-08	4.24E-08	5.39E-09	5.39E-09	2.20E-06	6.26E-07	2.81E-07	1.46E-07	1.53E-08	4.24E-08	4.24E-08	4.24E-08	5.39E-09	5.39E-09	2.20E-06
SSE	1.50E-05	1.86E-06	4.97E-07	2.32E-07	1.46E-07	6.71E-08	2.53E-08	1.23E-08	8.44E-09	8.44E-09	1.50E-05	1.86E-06	4.97E-07	2.32E-07	1.46E-07	6.71E-08	2.53E-08	1.23E-08	8.44E-09	8.44E-09	1.50E-05

VENTS GROUND LEVEL RELEASES - JUL-SEP 1992  
2,260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	CHI/Q	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000
S	5.92E-05	2.01E-05	1.08E-05	5.42E-06	2.15E-06	1.15E-06	7.25E-07	5.02E-07	3.72E-07	2.89E-07	2.32E-07
SSW	2.68E-05	9.07E-06	4.85E-06	2.42E-06	9.64E-07	5.18E-07	3.27E-07	2.73E-07	2.35E-07	2.05E-07	1.85E-07
SSW	1.03E-05	3.64E-06	1.93E-06	9.54E-07	5.70E-07	3.70E-07	2.10E-07	1.21E-07	8.36E-08	5.78E-08	4.14E-08
WSW	9.08E-06	3.09E-06	1.61E-06	7.94E-07	4.10E-07	2.69E-07	1.64E-07	1.10E-07	7.44E-08	5.24E-08	3.75E-08
W	7.62E-06	2.50E-06	1.28E-06	6.29E-07	3.29E-07	1.93E-07	1.36E-07	8.41E-08	5.64E-08	3.93E-08	2.79E-08
WNW	1.58E-05	5.36E-06	2.78E-06	1.36E-06	6.97E-07	3.77E-07	2.06E-07	1.24E-07	8.18E-08	5.71E-08	4.04E-08
NW	3.85E-05	1.32E-05	7.07E-06	3.51E-06	1.78E-06	9.35E-07	4.89E-07	2.59E-07	1.61E-07	1.05E-07	7.04E-07
NNW	8.08E-05	2.64E-05	1.40E-05	7.03E-06	3.58E-06	1.85E-06	9.26E-07	4.89E-07	2.59E-07	1.61E-07	1.05E-07
N	8.93E-05	2.84E-05	1.50E-05	7.57E-06	3.88E-06	2.05E-06	1.07E-06	5.70E-07	3.02E-07	1.70E-07	1.05E-07
NNE	4.38E-05	1.36E-05	7.27E-06	3.68E-06	1.80E-06	9.24E-07	4.73E-07	2.52E-07	1.36E-07	7.42E-07	4.58E-07
NE	3.60E-05	1.10E-05	5.71E-06	2.86E-06	1.43E-06	7.25E-07	3.73E-07	2.02E-07	1.10E-07	6.14E-07	3.75E-07
ENE	2.22E-05	7.03E-06	3.72E-06	1.87E-06	9.24E-07	4.73E-07	2.52E-07	1.36E-07	7.42E-07	4.58E-07	2.77E-07
E	1.56E-05	4.86E-06	2.65E-06	1.35E-06	6.75E-07	3.43E-07	1.94E-07	1.05E-07	5.89E-08	3.27E-07	1.85E-07
ESE	3.58E-05	1.13E-05	5.99E-06	3.00E-06	1.51E-06	7.71E-07	4.02E-07	2.18E-07	1.18E-07	6.47E-07	3.92E-07
SE	6.43E-05	2.09E-05	1.13E-05	5.71E-06	2.93E-06	1.51E-06	7.71E-07	4.02E-07	2.18E-07	1.18E-07	6.47E-07
SSE	1.98E-07	9.77E-08	6.27E-08	3.52E-08	2.34E-08	1.69E-08	1.10E-08	7.53E-09	5.15E-09	3.57E-09	2.50E-09
BEARING	1.98E-07	9.77E-08	6.27E-08	3.52E-08	2.34E-08	1.69E-08	1.10E-08	7.53E-09	5.15E-09	3.57E-09	2.50E-09
S	8.71E-08	4.45E-08	2.86E-08	1.61E-08	1.07E-08	6.78E-09	4.37E-09	2.81E-09	1.81E-09	1.16E-09	7.42E-10
SSW	3.10E-08	1.54E-08	7.79E-09	3.95E-09	2.03E-09	1.07E-09	5.74E-10	3.00E-10	1.59E-10	8.58E-11	4.58E-11
SSW	2.67E-08	1.35E-08	6.66E-09	3.46E-09	1.83E-09	9.55E-10	5.00E-10	2.65E-10	1.40E-10	7.44E-11	4.04E-11
WSW	2.22E-08	1.15E-08	5.74E-09	2.95E-09	1.51E-09	7.81E-10	4.18E-10	2.22E-10	1.18E-10	6.22E-11	3.33E-11
W	4.78E-08	2.39E-08	1.23E-08	6.30E-09	3.26E-09	1.68E-09	8.81E-10	4.61E-10	2.41E-10	1.25E-10	6.58E-11
WNW	1.96E-07	6.05E-08	3.06E-08	1.53E-08	7.74E-09	3.95E-09	2.03E-09	1.07E-09	5.74E-10	3.00E-10	1.59E-10
NNW	2.79E-07	9.17E-08	4.22E-08	2.04E-08	1.03E-08	5.25E-09	2.71E-09	1.40E-09	7.35E-10	3.89E-10	2.06E-10
N	2.79E-07	9.17E-08	4.22E-08	2.04E-08	1.03E-08	5.25E-09	2.71E-09	1.40E-09	7.35E-10	3.89E-10	2.06E-10
NNE	1.46E-07	4.90E-08	2.53E-08	1.27E-08	6.49E-09	3.35E-09	1.74E-09	9.14E-10	4.81E-10	2.52E-10	1.33E-10
NE	1.21E-07	3.94E-08	2.03E-08	1.03E-08	5.25E-09	2.71E-09	1.40E-09	7.35E-10	3.89E-10	2.06E-10	1.11E-10
ENE	7.46E-08	2.33E-08	1.19E-08	6.05E-09	3.06E-09	1.53E-09	7.74E-10	4.04E-10	2.11E-10	1.11E-10	5.73E-11
E	5.36E-08	1.67E-08	8.67E-09	4.37E-09	2.24E-09	1.16E-09	6.05E-10	3.11E-10	1.61E-10	8.42E-11	4.44E-11
ESE	5.81E-08	1.81E-08	9.31E-09	4.75E-09	2.45E-09	1.26E-09	6.58E-10	3.41E-10	1.78E-10	9.24E-11	4.84E-11
SE	1.84E-07	6.16E-08	3.12E-08	1.56E-08	7.95E-09	4.04E-09	2.11E-09	1.11E-09	5.73E-10	3.02E-10	1.61E-10
SSE	2.14E-07	7.15E-08	3.62E-08	1.84E-08	9.31E-09	4.75E-09	2.45E-09	1.26E-09	6.58E-10	3.41E-10	1.78E-10
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	CHI/Q	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000
S	1.05E-05	2.43E-06	7.50E-07	3.79E-07	2.34E-07	1.69E-08	1.10E-08	7.53E-09	5.15E-09	3.57E-09	2.50E-09
SSW	4.71E-06	1.09E-06	3.38E-07	1.70E-07	1.06E-07	6.78E-08	4.37E-08	2.81E-08	1.81E-08	1.16E-08	7.42E-09
SSW	1.87E-06	4.22E-07	1.26E-07	6.25E-08	3.81E-08	2.34E-08	1.43E-08	8.64E-09	5.24E-09	3.27E-09	2.05E-09
WSW	1.58E-06	3.53E-07	1.06E-07	5.35E-08	3.27E-08	2.03E-08	1.21E-08	7.44E-09	4.58E-09	2.77E-09	1.61E-09
W	1.26E-06	2.82E-07	8.70E-08	4.39E-08	2.75E-08	1.71E-08	1.05E-08	6.33E-09	3.93E-09	2.44E-09	1.50E-09
WNW	2.73E-06	6.11E-07	1.66E-07	9.39E-08	5.75E-08	3.58E-08	2.22E-08	1.36E-08	8.18E-09	5.04E-09	3.14E-09
NW	6.86E-06	1.56E-06	7.75E-07	3.51E-07	1.93E-07	1.03E-07	5.41E-08	2.81E-08	1.49E-08	7.81E-09	4.14E-09
NNW	1.36E-05	3.20E-06	1.02E-06	5.27E-07	2.71E-07	1.40E-07	7.35E-08	3.89E-08	2.06E-08	1.11E-08	5.73E-09
N	1.47E-05	3.46E-06	1.11E-06	5.73E-07	3.02E-07	1.56E-07	8.14E-08	4.22E-08	2.22E-08	1.18E-08	6.22E-09
NNE	7.09E-06	1.68E-06	5.43E-07	2.80E-07	1.46E-07	7.71E-08	4.02E-08	2.18E-08	1.18E-08	6.47E-09	3.92E-09
NE	5.63E-06	1.32E-06	4.40E-07	2.36E-07	1.24E-07	6.49E-08	3.35E-08	1.74E-08	9.14E-09	4.81E-09	2.52E-09
ENE	3.63E-06	8.58E-07	2.77E-07	1.49E-07	7.95E-08	4.04E-08	2.11E-08	1.11E-08	5.73E-09	3.02E-09	1.61E-09
E	2.57E-06	6.22E-07	2.00E-07	1.03E-07	5.25E-08	2.71E-08	1.40E-08	7.35E-09	3.89E-09	2.06E-09	1.11E-09
ESE	2.84E-06	6.22E-07	2.00E-07	1.03E-07	5.25E-08	2.71E-08	1.40E-08	7.35E-09	3.89E-09	2.06E-09	1.11E-09
SE	5.89E-06	1.37E-06	4.42E-07	2.36E-07	1.24E-07	6.49E-08	3.35E-08	1.74E-08	9.14E-09	4.81E-09	2.52E-09
SSE	1.09E-05	2.59E-06	8.18E-07	4.22E-07	2.22E-07	1.18E-07	6.22E-08	3.27E-08	1.70E-08	8.81E-09	4.58E-09

VENTS GROUND LEVEL RELEASES - JUL-SEP 1992  
8,000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	5.610E-05	1.842E-05	9.689E-06	4.765E-06	1.834E-06	9.605E-07	5.920E-07	4.033E-07	2.938E-07	2.47E-07	1.782E-07	
SSW	2.504E-05	8.301E-06	4.340E-06	2.130E-06	8.235E-07	4.324E-07	2.673E-07	1.825E-07	1.332E-07	1.020E-07	8.100E-08	
SW	9.701E-06	3.309E-06	1.727E-06	8.36E-07	3.162E-07	1.632E-07	9.945E-08	6.712E-08	4.852E-08	3.685E-08	2.964E-08	
WSW	8.605E-06	2.831E-06	1.443E-06	6.968E-07	2.649E-07	1.372E-07	8.400E-08	5.692E-08	4.129E-08	3.147E-08	2.487E-08	
W	7.221E-06	2.688E-06	1.408E-06	5.525E-07	2.124E-07	1.113E-07	6.864E-08	4.601E-08	3.415E-08	2.614E-08	2.075E-08	
WNW	1.501E-05	4.902E-06	2.490E-06	1.202E-06	4.585E-07	2.387E-07	1.465E-07	9.952E-08	7.234E-08	5.521E-08	4.370E-08	
NW	3.450E-05	1.211E-05	6.318E-06	3.086E-06	1.175E-06	6.104E-07	3.741E-07	2.536E-07	1.891E-07	1.404E-07	1.110E-07	
NNW	7.566E-05	2.64E-05	1.352E-05	6.172E-06	2.435E-06	1.298E-06	8.103E-07	5.570E-07	4.099E-07	3.158E-07	2.420E-07	
N	8.459E-05	2.598E-05	1.346E-05	6.658E-06	2.635E-06	1.408E-06	8.805E-07	6.070E-07	4.467E-07	3.495E-07	2.722E-07	
NNE	4.150E-05	1.247E-05	6.502E-06	3.232E-06	1.285E-06	6.874E-07	4.306E-07	2.972E-07	2.189E-07	1.689E-07	1.325E-07	
NE	3.410E-05	1.011E-05	5.110E-06	2.514E-06	1.019E-06	5.526E-07	3.495E-07	2.430E-07	1.801E-07	1.397E-07	1.122E-07	
ENE	2.103E-05	6.433E-06	3.327E-06	1.645E-06	6.550E-07	3.509E-07	2.199E-07	1.518E-07	1.119E-07	8.637E-08	6.994E-08	
E	1.481E-05	4.453E-06	2.372E-06	1.193E-06	4.794E-07	2.539E-07	1.590E-07	1.096E-07	8.067E-08	6.221E-08	4.948E-08	
ESE	1.647E-05	5.084E-06	2.582E-06	1.265E-06	5.051E-07	2.710E-07	1.701E-07	1.174E-07	8.674E-08	6.703E-08	5.35E-08	
SE	1.361E-05	1.034E-05	5.352E-06	2.643E-06	1.048E-06	5.602E-07	3.505E-07	2.416E-07	1.778E-07	1.371E-07	1.05E-07	
SSE	6.098E-05	1.915E-05	1.010E-05	5.014E-06	1.965E-06	1.041E-06	6.473E-07	4.439E-07	3.253E-07	2.499E-07	1.990E-07	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	1.453E-07	7.059E-08	4.352E-08	2.305E-08	1.461E-08	1.021E-08	7.587E-09	5.885E-09	4.710E-09	3.860E-09	3.24E-09	
SSW	6.614E-08	3.294E-08	1.994E-08	1.060E-08	6.735E-09	4.719E-09	3.144E-09	2.730E-09	2.188E-09	1.795E-09	1.500E-09	
SW	2.255E-08	1.119E-08	6.801E-09	3.524E-09	2.204E-09	1.527E-09	1.124E-09	8.677E-10	6.905E-10	5.631E-10	4.683E-10	
WSW	2.023E-08	9.794E-09	5.980E-09	3.149E-09	1.994E-09	1.394E-09	1.037E-09	8.049E-10	6.448E-10	5.292E-10	4.425E-10	
W	1.896E-08	8.264E-09	5.150E-09	2.758E-09	1.769E-09	1.248E-09	9.353E-10	7.307E-10	5.885E-10	4.851E-10	4.02E-10	
NNW	3.560E-08	1.733E-08	1.061E-08	5.610E-09	3.561E-09	2.493E-09	1.857E-09	1.443E-09	1.157E-09	9.500E-10	7.948E-10	
NW	9.030E-08	4.348E-08	2.667E-08	1.402E-08	8.856E-09	6.175E-09	4.583E-09	3.552E-09	2.841E-09	2.327E-09	1.943E-09	
NNW	2.067E-07	1.035E-07	6.398E-08	3.449E-08	2.135E-08	1.561E-08	1.169E-08	9.126E-09	7.343E-09	6.047E-09	5.072E-09	
N	2.259E-07	1.123E-07	7.041E-08	3.810E-08	2.452E-08	1.733E-08	1.300E-08	1.016E-08	8.186E-09	6.746E-09	5.64E-09	
NNE	1.109E-07	5.508E-08	3.472E-08	1.865E-08	1.215E-08	8.600E-09	6.459E-09	5.053E-09	4.073E-09	3.560E-09	2.81E-09	
NE	9.246E-08	4.669E-08	2.958E-08	1.623E-08	1.053E-08	7.493E-09	5.648E-09	4.433E-09	3.583E-09	2.962E-09	2.42E-09	
ENE	5.671E-08	2.824E-08	1.773E-08	9.604E-09	6.182E-09	4.371E-09	3.279E-09	2.563E-09	2.064E-09	1.701E-09	1.42E-09	
E	4.078E-08	2.023E-08	1.264E-08	6.827E-09	4.377E-09	3.084E-09	2.307E-09	1.799E-09	1.444E-09	1.189E-09	9.96E-10	
ESE	4.009E-08	2.204E-08	1.388E-08	7.550E-09	4.722E-09	3.457E-09	2.600E-09	2.036E-09	1.643E-09	1.356E-09	1.139E-09	
SE	8.92E-08	4.466E-08	2.798E-08	1.513E-08	9.72E-09	6.872E-09	5.152E-09	4.025E-09	3.240E-09	2.69E-09	2.23E-09	
SSE	1.628E-07	7.998E-08	4.972E-08	2.654E-08	1.697E-08	1.192E-08	8.098E-09	6.026E-09	5.58E-09	4.567E-09	3.82E-09	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	9.441E-06	2.097E-07	6.148E-07	2.988E-07	1.798E-07	7.518E-08	2.385E-08	1.835E-08	5.924E-09	3.876E-09	
SSW	4.238E-06	9.400E-07	2.775E-07	1.354E-07	8.172E-08	3.431E-08	1.096E-08	9.775E-09	2.748E-09	1.802E-09	
SW	1.688E-06	3.642E-07	1.035E-07	4.90E-08	2.932E-08	1.199E-08	3.326E-09	1.546E-09	8.739E-10	5.657E-10	
WSW	1.420E-06	3.040E-07	8.736E-08	4.21E-08	2.511E-08	1.040E-08	2.855E-09	1.11E-09	8.101E-10	5.514E-10	
W	1.137E-06	2.930E-07	7.127E-08	3.42E-08	2.094E-08	8.822E-09	2.859E-09	1.62E-09	7.349E-10	4.869E-10	
WNW	2.454E-06	5.260E-07	1.523E-07	7.358E-08	4.411E-08	1.837E-08	5.809E-09	2.535E-09	1.452E-09	9.538E-10	
NW	6.168E-06	1.349E-06	3.889E-07	1.873E-07	9.120E-08	4.642E-08	1.454E-08	6.253E-09	3.575E-09	2.337E-09	
NNW	1.328E-05	3.393E-06	8.393E-07	4.13E-07	2.541E-07	1.085E-07	3.555E-08	1.574E-08	9.179E-09	6.070E-09	
N	1.322E-05	3.116E-07	9.116E-07	4.56E-07	2.775E-07	1.189E-07	3.92E-08	1.52E-08	1.022E-08	6.772E-09	
NNE	6.374E-06	4.457E-06	4.457E-06	2.22E-07	1.561E-07	5.852E-08	1.949E-08	8.90E-09	5.882E-09	3.372E-09	
NE	5.067E-06	3.610E-07	3.610E-07	1.87E-07	1.130E-07	4.926E-08	1.666E-08	7.455E-09	4.556E-09	2.972E-09	
ENE	3.270E-06	2.274E-07	2.274E-07	1.14E-07	6.91E-08	2.990E-08	9.88E-09	4.17E-09	2.577E-09	1.707E-09	
E	2.310E-06	1.645E-07	1.645E-07	8.11E-08	5.407E-08	2.331E-08	7.736E-09	3.118E-09	1.810E-09	1.194E-09	
ESE	2.554E-06	1.702E-07	1.702E-07	8.04E-08	5.407E-08	2.331E-08	7.736E-09	3.118E-09	1.810E-09	1.194E-09	
SE	5.554E-06	1.866E-07	1.866E-07	1.06E-07	7.105E-07	4.731E-08	1.55E-08	6.45E-09	4.048E-09	2.69E-09	
SSE	9.850E-06	2.322E-06	6.710E-07	3.305E-07	2.007E-07	8.494E-08	2.745E-08	1.206E-08	6.968E-09	4.585E-09	

VENTS GROUND LEVEL RELEASES - JUL-SEP 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	DISTANCES IN MILES									
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
S	2.617E-07	8.849E-08	4.543E-08	2.160E-08	7.759E-09	3.848E-09	2.266E-09	1.484E-09	1.044E-09	7.736E-10
SSW	1.007E-07	3.406E-08	1.749E-08	8.314E-09	2.987E-09	1.481E-09	8.721E-10	5.710E-10	4.018E-10	2.978E-10
SW	4.488E-08	1.518E-08	7.792E-09	3.704E-09	1.331E-09	6.599E-10	3.885E-10	2.544E-10	1.790E-10	1.327E-10
WSW	5.363E-08	1.814E-08	9.312E-09	4.427E-09	1.590E-09	7.886E-10	4.643E-10	3.041E-10	2.139E-10	1.586E-10
W	3.831E-08	1.295E-08	6.651E-09	3.162E-09	1.136E-09	5.633E-10	3.317E-10	2.172E-10	1.528E-10	1.133E-10
WNW	9.960E-08	3.368E-08	1.729E-08	8.222E-09	2.953E-09	1.465E-09	8.624E-10	5.647E-10	3.973E-10	2.945E-10
NW	2.769E-07	9.365E-08	4.808E-08	2.286E-08	8.211E-09	4.072E-09	2.398E-09	1.570E-09	1.105E-09	8.187E-10
NNW	3.734E-07	1.263E-07	6.482E-08	3.082E-08	1.107E-08	5.490E-09	3.233E-09	2.117E-09	1.489E-09	1.104E-09
N	3.910E-07	1.322E-07	6.788E-08	3.227E-08	1.159E-08	5.749E-09	3.385E-09	2.216E-09	1.560E-09	1.156E-09
NNE	1.555E-07	5.260E-08	2.701E-08	1.284E-08	4.612E-09	2.287E-09	1.347E-09	8.818E-10	6.205E-10	4.598E-10
NE	7.889E-08	2.668E-08	1.370E-08	6.512E-09	2.339E-09	1.160E-09	6.830E-10	4.472E-10	3.147E-10	2.332E-10
ENE	5.697E-08	1.927E-08	9.892E-09	4.703E-09	1.689E-09	8.377E-10	4.933E-10	3.230E-10	2.273E-10	1.684E-10
E	4.166E-08	1.409E-08	7.234E-09	3.439E-09	1.235E-09	6.126E-10	3.607E-10	2.362E-10	1.662E-10	1.232E-10
ESE	5.804E-08	1.963E-08	1.008E-08	4.791E-09	1.721E-09	8.534E-10	5.025E-10	3.290E-10	2.315E-10	1.716E-10
SE	1.139E-07	3.852E-08	1.978E-08	9.403E-09	3.378E-09	1.675E-09	9.863E-10	6.458E-10	4.544E-10	3.368E-10
SSE	2.585E-07	8.741E-08	4.488E-08	2.134E-08	7.664E-09	3.801E-09	2.238E-09	1.465E-09	1.031E-09	7.642E-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	50.00
S	4.736E-10	2.104E-10	1.274E-10	6.442E-11	3.899E-11	2.614E-11	1.873E-11	1.407E-11	1.094E-11	8.736E-12
SSW	1.823E-10	8.099E-11	4.906E-11	2.480E-11	1.501E-11	1.006E-11	7.210E-12	5.414E-12	4.210E-12	3.363E-12
SW	8.122E-11	3.608E-11	2.186E-11	1.105E-11	6.686E-12	4.483E-12	3.212E-12	2.412E-12	1.875E-12	1.498E-12
WSW	9.707E-11	4.312E-11	2.612E-11	1.320E-11	7.991E-12	5.358E-12	3.839E-12	2.883E-12	2.241E-12	1.790E-12
W	6.933E-11	3.080E-11	1.866E-11	9.431E-12	5.708E-12	3.827E-12	2.742E-12	2.059E-12	1.601E-12	1.279E-12
WNW	1.803E-10	8.008E-11	4.851E-11	2.452E-11	1.484E-11	9.950E-12	7.130E-12	5.354E-12	4.163E-12	3.325E-12
NW	5.012E-10	2.227E-10	1.349E-10	6.817E-11	4.126E-11	2.767E-11	1.982E-11	1.489E-11	1.157E-11	9.245E-12
NNW	6.757E-10	3.002E-10	1.818E-10	9.191E-11	5.563E-11	3.730E-11	2.673E-11	2.007E-11	1.560E-11	1.246E-11
N	7.976E-10	3.143E-10	1.904E-10	9.624E-11	5.825E-11	3.906E-11	2.799E-11	2.101E-11	1.634E-11	1.305E-11
NNE	2.815E-10	1.251E-10	7.576E-11	3.829E-11	2.318E-11	1.554E-11	1.113E-11	8.361E-12	6.501E-12	5.193E-12
NE	1.428E-10	6.343E-11	3.842E-11	1.942E-11	1.175E-11	7.881E-12	5.647E-12	4.240E-12	3.297E-12	2.634E-12
ENE	1.031E-10	4.581E-11	2.775E-11	1.403E-11	8.489E-12	5.692E-12	4.078E-12	3.062E-12	2.381E-12	1.902E-12
E	7.541E-11	3.350E-11	2.029E-11	1.026E-11	6.208E-12	4.162E-12	2.982E-12	2.240E-12	1.741E-12	1.391E-12
ESE	1.050E-10	4.666E-11	2.827E-11	1.429E-11	8.648E-12	5.793E-12	4.155E-12	3.120E-12	2.426E-12	1.938E-12
SE	2.062E-10	9.159E-11	5.548E-11	2.804E-11	1.697E-11	1.138E-11	8.155E-12	6.123E-12	4.761E-12	3.803E-12
SSE	4.678E-10	2.078E-10	1.259E-10	6.363E-11	3.851E-11	2.582E-11	1.850E-11	1.389E-11	1.080E-11	8.630E-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	4.441E-08	9.096E-09	2.375E-09	1.067E-09	6.034E-10	2.320E-10	6.712E-11	2.660E-11	1.421E-11	8.793E-12
SSW	1.709E-08	3.501E-09	9.141E-10	4.105E-10	2.322E-10	8.931E-11	2.584E-11	1.024E-11	5.468E-12	3.385E-12
SW	7.616E-09	1.560E-09	4.072E-10	1.829E-10	1.035E-10	3.979E-11	1.151E-11	4.562E-12	2.436E-12	1.508E-12
WSW	9.102E-09	1.864E-09	4.867E-10	2.186E-10	1.237E-10	4.755E-11	1.376E-11	5.452E-12	2.912E-12	1.802E-12
W	6.501E-09	1.332E-09	3.476E-10	1.561E-10	8.833E-11	3.397E-11	9.826E-12	3.895E-12	2.080E-12	1.287E-12
WNW	1.690E-08	3.462E-09	9.039E-10	4.060E-10	2.297E-10	8.831E-11	2.555E-11	1.013E-11	5.407E-12	3.347E-12
NW	4.700E-08	9.627E-09	2.513E-09	1.129E-09	6.385E-10	2.456E-10	7.104E-11	2.815E-11	1.503E-11	9.306E-12
NNW	6.336E-08	1.298E-08	3.388E-09	1.522E-09	8.608E-10	3.310E-10	9.577E-11	3.796E-11	2.027E-11	1.255E-11
N	6.635E-08	1.359E-08	3.548E-09	1.593E-09	9.014E-10	3.466E-10	1.003E-10	3.975E-11	2.122E-11	1.314E-11
NNE	2.640E-08	5.407E-09	1.412E-09	6.340E-10	3.586E-10	1.379E-10	3.990E-11	1.581E-11	8.445E-12	5.227E-12
NE	1.339E-08	2.742E-09	7.159E-10	3.215E-10	1.819E-10	6.995E-11	2.023E-11	8.020E-12	4.283E-12	2.651E-12
ENE	9.669E-09	1.981E-09	5.170E-10	2.322E-10	1.314E-10	5.052E-11	1.461E-11	5.792E-12	3.093E-12	1.914E-12
E	7.071E-09	1.448E-09	3.781E-10	1.698E-10	9.607E-11	3.694E-11	1.069E-11	4.236E-12	2.262E-12	1.400E-12
ESE	9.850E-09	2.018E-09	5.267E-10	2.366E-10	1.338E-10	5.146E-11	1.489E-11	5.901E-12	3.151E-12	1.950E-12
SE	1.933E-08	3.960E-09	1.034E-09	4.643E-10	2.627E-10	1.010E-10	2.922E-11	1.158E-11	6.185E-12	3.828E-12
SSE	4.387E-08	8.986E-09	2.346E-09	1.054E-09	5.960E-10	2.292E-10	6.631E-11	2.628E-11	1.403E-11	8.686E-12



VENTS GROUND LEVEL RELEASES - JUL-SEP 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q		X/Q		X/Q		D/Q
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(PER SQ.METER)	
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY				
					UNDEPLETED	UNDEPLETED	DEPLETED				
A	SITE BOUNDARY	S	0.80	1287.	9.354E-06	9.321E-06	8.296E-06			3.864E-08	
A	SITE BOUNDARY	SSW	0.82	1327.	3.882E-06	3.867E-06	3.436E-06			1.372E-08	
A	SITE BOUNDARY	SW	0.98	1569.	1.018E-06	1.014E-06	8.919E-07			3.953E-09	
A	SITE BOUNDARY	WSW	0.93	1489.	9.621E-07	9.590E-07	8.457E-07			5.410E-09	
A	SITE BOUNDARY	W	0.91	1468.	7.900E-07	7.873E-07	6.950E-07			4.009E-09	
A	SITE BOUNDARY	WNW	0.94	1509.	1.605E-06	1.600E-06	1.410E-06			9.705E-09	
A	SITE BOUNDARY	NW	0.81	1307.	5.859E-06	5.843E-06	5.193E-06			3.927E-08	
A	SITE BOUNDARY	NNW	0.69	1106.	1.609E-05	1.604E-05	1.440E-05			7.507E-08	
A	SITE BOUNDARY	N	0.67	1086.	1.777E-05	1.771E-05	1.591E-05			8.106E-08	
A	SITE BOUNDARY	NNE	0.60	965.	1.026E-05	1.023E-05	9.255E-06			3.908E-08	
A	SITE BOUNDARY	NE	0.62	1005.	7.662E-06	7.636E-06	6.889E-06			1.863E-08	
A	SITE BOUNDARY	ENE	0.59	945.	5.461E-06	5.444E-06	4.932E-06			1.482E-08	
A	SITE BOUNDARY	E	0.53	845.	4.494E-06	4.482E-06	4.088E-06			1.301E-08	
A	SITE BOUNDARY	ESE	0.54	865.	4.939E-06	4.926E-06	4.486E-06			1.745E-08	
A	SITE BOUNDARY	SE	0.65	1046.	7.485E-06	7.461E-06	6.717E-06			2.516E-08	
A	SITE BOUNDARY	SSE	0.81	1307.	9.409E-06	9.375E-06	8.337E-06			3.665E-08	
A	NEAR. RESIDENCE	SW	1.40	2253.	4.362E-07	4.334E-07	3.718E-07			1.578E-09	
A	NEAR. RESIDENCE	WSW	1.30	2092.	4.314E-07	4.294E-07	3.700E-07			2.271E-09	
A	NEAR. RESIDENCE	W	1.00	1609.	6.316E-07	6.293E-07	5.523E-07			3.162E-09	
A	NEAR. RESIDENCE	WNW	1.60	2575.	4.688E-07	4.660E-07	3.953E-07			2.520E-09	
A	NEAR. RESIDENCE	NW	0.90	1448.	4.550E-06	4.537E-06	4.007E-06			3.004E-08	
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.746E-06	1.732E-06	1.450E-06			6.212E-09	
A	NEAR. RESIDENCE	N	3.00	4828.	7.673E-07	7.564E-07	6.070E-07			2.216E-09	
A	NEAR. RESIDENCE	NNE	2.70	4345.	4.594E-07	4.535E-07	3.678E-07			1.125E-09	
A	NEAR. RESIDENCE	ENE	1.70	2736.	5.939E-07	5.887E-07	4.978E-07			1.242E-09	
A	NEAR. RESIDENCE	E	1.80	2897.	3.819E-07	3.782E-07	3.184E-07			7.903E-10	
A	NEAR. RESIDENCE	ESE	2.40	3863.	2.282E-07	2.255E-07	1.850E-07			5.530E-10	
A	NEAR. RESIDENCE	SE	2.20	3541.	5.594E-07	5.532E-07	4.576E-07			1.334E-09	
A	NEAREST COW	S	10.50	16899.	6.141E-08	5.852E-08	4.034E-08			1.176E-10	
A	NEAREST GARDEN	SW	1.40	2253.	4.362E-07	4.334E-07	3.718E-07			1.578E-09	
A	NEAREST GARDEN	WSW	1.30	2092.	4.314E-07	4.294E-07	3.700E-07			2.271E-09	
A	NEAREST GARDEN	WNW	2.40	3863.	1.972E-07	1.954E-07	1.600E-07			9.490E-10	
A	NEAREST GARDEN	NW	2.70	4345.	3.957E-07	3.920E-07	3.171E-07			2.004E-09	
A	NEAREST GARDEN	NNW	1.90	3058.	1.746E-06	1.732E-06	1.450E-06			6.212E-09	
A	NEAREST GARDEN	N	3.00	4828.	7.673E-07	7.564E-07	6.070E-07			2.216E-09	
A	NEAREST GARDEN	NNE	2.70	4345.	4.594E-07	4.535E-07	3.678E-07			1.125E-09	
A	NEAREST GARDEN	ENE	1.70	2736.	5.939E-07	5.887E-07	4.978E-07			1.242E-09	
A	NEAREST GARDEN	E	1.80	2897.	3.819E-07	3.782E-07	3.184E-07			7.903E-10	
A	NEAREST GARDEN	ESE	2.40	3863.	2.282E-07	2.255E-07	1.850E-07			5.530E-10	
A	NEAREST GARDEN	SE	2.20	3541.	5.594E-07	5.532E-07	4.576E-07			1.334E-09	

Atmospheric Diffusion Estimates

Ground Level Releases

October-December 1992

VENTS GROUND LEVEL RELEASES - OCT-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE BEARING	CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES									
		0.250	0.500	0.750	1.000	1.500	2.000	3.000	3.500	4.000	4.500
S	5.530E-05	1.823E-05	9.557E-06	4.756E-06	1.56E-06	1.26E-06	1.09E-06	6.88E-07	3.49E-07	2.73E-07	2.31E-07
SSW	1.999E-05	6.822E-06	3.566E-06	1.760E-06	1.06E-06	6.96E-07	3.75E-07	1.99E-07	1.19E-07	8.22E-08	6.41E-08
SW	1.763E-05	6.138E-06	3.257E-06	1.615E-06	9.33E-07	6.28E-07	3.75E-07	1.99E-07	1.19E-07	8.22E-08	6.41E-08
WSW	1.225E-05	4.279E-06	2.255E-06	1.112E-06	6.49E-07	4.29E-07	2.20E-07	1.19E-07	7.03E-08	4.93E-08	3.34E-08
W	6.371E-06	2.209E-06	1.190E-06	5.94E-07	3.37E-07	2.37E-07	1.28E-07	6.51E-08	3.81E-08	2.35E-08	1.57E-08
WNW	9.875E-06	3.527E-06	1.719E-06	8.58E-07	3.39E-07	2.37E-07	1.28E-07	6.51E-08	3.81E-08	2.35E-08	1.57E-08
NW	3.471E-05	1.149E-05	5.886E-06	2.99E-06	1.22E-06	6.96E-07	3.75E-07	1.99E-07	1.19E-07	8.22E-08	6.41E-08
NNW	7.494E-05	2.330E-05	1.192E-05	5.95E-06	3.39E-06	2.37E-06	1.28E-06	6.51E-07	3.81E-07	2.35E-07	1.57E-07
N	1.181E-04	3.679E-05	1.915E-05	9.595E-06	3.99E-06	1.40E-06	5.06E-07	2.69E-07	1.38E-07	7.03E-08	4.93E-08
NNE	4.193E-05	1.318E-05	6.995E-06	3.528E-06	1.747E-06	1.28E-06	6.51E-07	3.81E-07	2.35E-07	1.57E-07	1.08E-07
ENE	2.141E-05	6.852E-06	3.600E-06	1.840E-06	7.561E-07	4.12E-07	2.01E-07	1.04E-07	5.73E-08	3.29E-08	2.12E-08
E	1.646E-05	5.404E-06	2.883E-06	1.49E-06	5.86E-07	3.52E-07	2.25E-07	1.19E-07	7.03E-08	4.93E-08	3.34E-08
ESE	1.736E-05	5.829E-06	3.210E-06	1.632E-06	5.52E-07	3.52E-07	2.25E-07	1.19E-07	7.03E-08	4.93E-08	3.34E-08
SE	3.900E-05	1.312E-05	7.067E-06	3.553E-06	1.420E-06	5.52E-07	2.25E-07	1.19E-07	7.03E-08	4.93E-08	3.34E-08
SSE	4.874E-05	1.637E-05	8.589E-06	4.255E-06	1.70E-06	9.16E-07	5.71E-07	3.49E-07	2.73E-07	2.31E-07	1.99E-07

ANNUAL AVERAGE BEARING	CHI/Q (SEC/METER CUBED)	DISTANCE IN MILES									
		0.250	0.500	0.750	1.000	1.500	2.000	3.000	3.500	4.000	4.500
S	1.829E-07	9.603E-08	6.297E-08	3.973E-08	2.517E-08	1.862E-08	1.46E-08	35.000	40.000	45.000	50.000
SSW	6.112E-08	3.109E-08	1.668E-08	9.293E-09	5.47E-09	3.40E-09	2.12E-09	1.02E-09	6.32E-10	4.38E-10	2.71E-10
SW	5.267E-08	2.629E-08	1.388E-08	7.49E-09	4.88E-09	2.92E-09	1.86E-09	1.02E-09	6.32E-10	4.38E-10	2.71E-10
WSW	3.538E-08	1.758E-08	9.064E-09	5.06E-09	3.23E-09	1.97E-09	1.25E-09	6.59E-10	4.10E-10	2.64E-10	1.69E-10
W	1.924E-08	9.576E-09	5.042E-09	2.83E-09	1.57E-09	9.43E-10	5.86E-10	3.59E-10	2.26E-10	1.44E-10	9.05E-11
WNW	1.147E-07	5.985E-08	3.23E-08	1.80E-08	1.04E-08	6.25E-09	3.86E-09	2.41E-09	1.54E-09	9.96E-10	6.40E-10
NW	2.585E-07	1.287E-07	6.95E-08	3.86E-08	2.12E-08	1.25E-08	7.58E-09	4.73E-09	2.96E-09	1.91E-09	1.24E-09
NNW	4.101E-07	2.190E-07	1.158E-07	6.41E-08	3.64E-08	2.12E-08	1.25E-08	7.58E-09	4.73E-09	2.96E-09	1.91E-09
N	1.432E-07	7.566E-08	4.001E-08	2.250E-08	1.28E-08	7.58E-09	4.73E-09	2.96E-09	1.91E-09	1.24E-09	8.05E-10
NNE	1.432E-07	7.566E-08	4.001E-08	2.250E-08	1.28E-08	7.58E-09	4.73E-09	2.96E-09	1.91E-09	1.24E-09	8.05E-10
ENE	5.573E-08	3.823E-08	2.513E-08	1.471E-08	8.15E-09	5.06E-09	3.13E-09	1.99E-09	1.24E-09	8.05E-10	5.18E-10
E	5.573E-08	3.823E-08	2.513E-08	1.471E-08	8.15E-09	5.06E-09	3.13E-09	1.99E-09	1.24E-09	8.05E-10	5.18E-10
ESE	9.068E-08	5.134E-08	3.308E-08	1.74E-08	9.71E-09	6.06E-09	3.78E-09	2.31E-09	1.46E-09	9.31E-10	6.06E-10
SE	1.570E-07	8.463E-08	4.536E-08	2.42E-08	1.25E-08	7.45E-09	4.65E-09	2.96E-09	1.91E-09	1.24E-09	8.05E-10
SSE	1.558E-07	8.037E-08	4.225E-08	2.249E-08	1.25E-08	7.45E-09	4.65E-09	2.96E-09	1.91E-09	1.24E-09	8.05E-10

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

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES										
	0.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	9.35E-06	2.16E-06	6.95E-07	3.54E-07	2.28E-07	1.09E-07	5.74E-08	3.02E-08	1.62E-08	8.93E-09	
SSW	3.48E-06	7.86E-07	2.95E-07	1.20E-07	7.49E-08	3.28E-08	1.66E-08	7.71E-09	3.71E-09	2.50E-09	
SW	3.16E-06	7.15E-07	2.63E-07	1.05E-07	6.44E-08	2.78E-08	1.54E-08	7.59E-09	3.81E-09	2.01E-09	
WSW	2.19E-06	4.90E-07	1.84E-07	7.14E-08	4.30E-08	1.86E-08	9.54E-09	4.93E-09	2.63E-09	1.30E-09	
W	1.15E-06	2.63E-07	9.83E-08	3.87E-08	2.34E-08	1.01E-08	4.63E-09	2.16E-09	1.13E-09	5.10E-10	
WNW	1.68E-06	3.81E-07	1.41E-07	5.52E-08	3.75E-08	1.68E-08	7.40E-09	3.69E-09	1.92E-09	1.13E-09	
NW	5.86E-06	1.35E-06	4.93E-07	2.21E-07	1.30E-07	6.28E-08	3.31E-08	1.75E-08	8.65E-09	4.50E-09	
NNW	1.17E-05	2.75E-06	9.97E-07	4.51E-07	3.17E-07	1.49E-07	6.24E-08	3.17E-08	1.59E-08	7.89E-09	
N	1.88E-05	4.44E-06	1.62E-06	7.29E-07	4.79E-07	2.89E-07	8.15E-08	4.29E-08	2.09E-08	1.04E-08	
NNE	6.82E-06	1.62E-06	5.25E-07	2.38E-07	1.79E-07	9.26E-08	3.00E-08	1.54E-08	7.62E-09	3.88E-09	
ENE	3.57E-06	8.40E-07	3.07E-07	1.40E-07	8.89E-08	4.01E-08	1.49E-08	7.47E-09	3.57E-09	1.70E-09	
E	3.80E-06	7.38E-07	2.68E-07	1.18E-07	7.46E-08	3.51E-08	1.26E-08	5.66E-09	2.81E-09	1.48E-09	
ESE	9.95E-06	2.38E-07	8.68E-07	3.68E-07	2.37E-07	2.09E-08	1.09E-08	5.25E-09	2.78E-09	1.40E-09	
SE	6.85E-06	1.60E-06	1.50E-06	5.02E-07	1.12E-07	5.20E-08	2.91E-08	1.45E-08	7.12E-09	3.70E-09	
SSE	8.39E-06	1.92E-06	1.92E-06	5.98E-07	1.85E-07	7.94E-08	3.56E-08	1.76E-08	8.86E-09	4.54E-09	



VENTS GROUND LEVEL RELEASES - OCT-DEC 1992  
2.260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	5.524E-05	1.819E-05	9.527E-06	4.737E-06	1.914E-06	1.040E-06	6.605E-07	4.617E-07	3.441E-07	2.685E-07	2.168E-07	
SSW	1.997E-05	6.809E-06	3.556E-06	1.753E-06	6.897E-07	3.677E-07	2.302E-07	1.590E-07	1.173E-07	9.075E-08	7.273E-08	
SW	1.761E-05	6.126E-06	3.248E-06	1.609E-06	6.241E-07	3.292E-07	2.043E-07	1.401E-07	1.027E-07	7.898E-08	6.297E-08	
WSW	1.223E-05	4.271E-06	2.248E-06	1.108E-06	4.270E-07	2.242E-07	1.386E-07	9.479E-08	6.933E-08	5.322E-08	4.235E-08	
W	6.365E-06	2.205E-06	1.187E-06	5.924E-07	2.294E-07	1.209E-07	7.492E-08	5.132E-08	3.740E-08	2.890E-08	2.303E-08	
WNW	9.864E-06	3.320E-06	1.713E-06	8.422E-07	3.357E-07	1.807E-07	1.139E-07	7.916E-08	5.870E-08	4.561E-08	3.669E-08	
NW	3.467E-05	1.146E-05	5.969E-06	2.958E-06	1.195E-06	6.496E-07	4.126E-07	2.884E-07	2.150E-07	1.678E-07	1.355E-07	
NNW	7.484E-05	2.324E-05	1.188E-05	5.894E-06	2.460E-06	1.366E-06	8.818E-07	6.244E-07	4.703E-07	3.703E-07	3.014E-07	
N	1.180E-04	3.670E-05	1.909E-05	9.551E-06	3.966E-06	2.195E-06	1.413E-06	9.985E-07	7.509E-07	5.904E-07	4.799E-07	
NNE	4.188E-05	1.315E-05	6.971E-06	3.511E-06	1.437E-06	7.876E-07	5.035E-07	3.538E-07	2.648E-07	2.074E-07	1.680E-07	
NE	2.139E-05	6.838E-06	3.669E-06	1.852E-06	7.515E-07	4.094E-07	2.686E-07	1.824E-07	1.362E-07	1.064E-07	8.600E-08	
ENE	1.644E-05	5.393E-06	2.874E-06	1.443E-06	5.830E-07	3.166E-07	2.009E-07	1.404E-07	1.046E-07	8.154E-08	6.581E-08	
E	1.735E-05	5.817E-06	3.200E-06	1.625E-06	6.589E-07	3.513E-07	2.220E-07	1.545E-07	1.147E-07	8.925E-08	7.186E-08	
ESE	2.831E-05	9.534E-06	5.078E-06	2.538E-06	1.019E-06	5.511E-07	3.488E-07	2.431E-07	1.807E-07	1.407E-07	1.134E-07	
SE	3.897E-05	1.309E-05	7.048E-06	3.541E-06	1.412E-06	7.601E-07	4.793E-07	3.330E-07	2.469E-07	1.918E-07	1.543E-07	
SSE	4.870E-05	1.634E-05	8.566E-06	4.244E-06	1.691E-06	9.098E-07	5.736E-07	3.985E-07	2.956E-07	2.297E-07	1.848E-07	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	1.798E-07	9.277E-08	6.011E-08	3.423E-08	2.289E-08	1.670E-08	1.287E-08	1.030E-08	8.468E-09	7.109E-09	6.066E-09	
SSW	5.991E-08	3.015E-08	1.920E-08	1.069E-08	7.047E-09	5.089E-09	3.892E-09	3.094E-09	2.532E-09	2.117E-09	1.800E-09	
SW	5.162E-08	2.550E-08	1.601E-08	8.733E-09	5.675E-09	4.051E-09	3.069E-09	2.421E-09	1.967E-09	1.635E-09	1.384E-09	
WSW	3.468E-08	1.705E-08	1.068E-08	5.801E-09	3.760E-09	2.679E-09	2.027E-09	1.597E-09	1.296E-09	1.077E-09	9.102E-10	
W	1.887E-08	9.297E-09	5.827E-09	3.170E-09	2.058E-09	1.468E-09	1.110E-09	8.751E-10	7.103E-10	5.897E-10	4.984E-10	
WNW	3.033E-08	1.546E-08	9.934E-09	5.592E-09	3.711E-09	2.691E-09	2.064E-09	1.645E-09	1.348E-09	1.128E-09	9.598E-10	
NW	1.124E-07	5.801E-08	3.761E-08	2.144E-08	1.436E-08	1.049E-08	8.097E-09	6.488E-09	5.342E-09	4.491E-09	3.838E-09	
NNW	2.516E-07	1.332E-07	8.776E-08	5.107E-08	3.464E-08	2.553E-08	1.982E-08	1.595E-08	1.317E-08	1.110E-08	9.496E-09	
N	4.002E-07	2.111E-07	1.388E-07	8.058E-08	5.459E-08	4.021E-08	3.122E-08	2.513E-08	2.076E-08	1.751E-08	1.500E-08	
NNE	1.397E-07	7.291E-08	4.759E-08	2.737E-08	1.844E-08	1.352E-08	1.046E-08	8.394E-09	6.919E-09	5.820E-09	4.975E-09	
NE	7.139E-08	3.702E-08	2.407E-08	1.378E-08	9.264E-09	6.789E-09	5.252E-09	4.217E-09	3.479E-09	2.930E-09	2.508E-09	
ENE	5.455E-08	2.811E-08	1.820E-08	1.035E-08	6.919E-09	5.049E-09	3.893E-09	3.117E-09	2.565E-09	2.156E-09	1.843E-09	
E	5.944E-08	3.038E-08	1.954E-08	1.102E-08	7.323E-09	5.317E-09	4.083E-09	3.257E-09	2.672E-09	2.240E-09	1.909E-09	
ESE	9.389E-08	4.815E-08	3.107E-08	1.760E-08	1.173E-08	8.543E-09	6.576E-09	5.258E-09	4.323E-09	3.630E-09	3.099E-09	
SE	1.275E-07	6.493E-08	4.168E-08	2.344E-08	1.556E-08	1.129E-08	8.660E-09	6.907E-09	5.665E-09	4.747E-09	4.046E-09	
SSE	1.527E-07	7.796E-08	5.014E-08	2.829E-08	1.882E-08	1.368E-08	1.052E-08	8.400E-09	6.899E-09	5.787E-09	4.937E-09	

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

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	9.324E-06	2.153E-06	6.821E-07	3.489E-07	2.184E-07	9.759E-08	3.494E-08	1.682E-08	1.034E-08	7.125E-09
SSW	3.478E-06	7.829E-07	2.384E-07	1.191E-07	7.332E-08	3.189E-08	1.096E-08	5.132E-09	3.108E-09	2.122E-09
SW	3.159E-06	7.119E-07	2.119E-07	1.043E-07	6.351E-08	2.769E-08	8.991E-09	4.091E-09	2.433E-09	1.640E-09
WSW	2.191E-06	4.882E-07	1.439E-07	7.046E-08	4.273E-08	1.814E-08	5.977E-09	2.706E-09	1.685E-09	1.080E-09
W	1.149E-06	2.618E-07	7.773E-08	3.821E-08	2.323E-08	9.882E-09	3.266E-09	1.482E-09	8.796E-10	5.916E-10
WNW	1.683E-06	3.793E-07	1.178E-07	5.956E-08	3.698E-08	1.631E-08	5.721E-09	2.712E-09	1.651E-09	1.131E-09
NW	5.852E-06	1.345E-06	4.261E-07	2.180E-07	1.365E-07	6.102E-08	2.189E-08	1.057E-08	6.511E-09	4.502E-09
NNW	1.174E-05	2.737E-06	9.079E-07	4.762E-07	3.034E-07	1.393E-07	5.192E-08	2.567E-08	1.599E-08	1.112E-08
N	1.876E-05	4.420E-06	1.456E-06	7.605E-07	4.831E-07	2.210E-07	8.196E-08	4.045E-08	2.520E-08	1.754E-08
NNE	6.806E-06	1.609E-06	5.194E-07	2.683E-07	1.692E-07	7.650E-08	2.789E-08	1.361E-08	7.422E-09	5.833E-09
NE	3.566E-06	8.441E-07	2.690E-07	1.380E-07	8.663E-08	3.890E-08	1.406E-08	6.234E-09	4.231E-09	2.936E-09
ENE	2.798E-06	6.558E-07	2.075E-07	1.060E-07	6.630E-08	2.958E-08	1.057E-08	5.085E-09	3.128E-09	2.161E-09
E	3.082E-06	7.343E-07	2.295E-07	1.164E-07	7.241E-08	3.292E-08	1.127E-08	5.358E-09	3.270E-09	2.245E-09
ESE	4.940E-06	1.149E-06	3.604E-07	1.833E-07	1.143E-07	5.072E-08	1.798E-08	8.606E-09	5.278E-09	3.638E-09
SE	6.833E-06	1.595E-06	4.957E-07	2.505E-07	1.555E-07	6.850E-08	2.399E-08	1.137E-08	6.935E-09	4.759E-09
SSE	8.373E-06	1.911E-06	5.932E-07	2.999E-07	1.862E-07	8.221E-08	2.893E-08	1.378E-08	8.433E-09	5.802E-09

VENTS GROUND LEVEL RELEASES - OCT-DEC 1992  
8.000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.232E-05	1.664E-05	8.509E-06	4.159E-06	1.633E-06	8.665E-07	5.393E-07	3.702E-07	2.715E-07	2.088E-07	1.663E-07
SSW	1.891E-05	6.226E-06	3.175E-06	1.539E-06	5.881E-07	3.062E-07	1.877E-07	1.273E-07	9.245E-08	7.046E-08	5.570E-08
SW	1.668E-05	5.602E-06	2.900E-06	1.412E-06	5.323E-07	2.741E-07	1.667E-07	1.122E-07	8.093E-08	6.133E-08	4.823E-08
WSW	1.159E-05	3.906E-06	2.008E-06	9.726E-07	3.642E-07	1.867E-07	1.131E-07	7.593E-08	5.464E-08	4.132E-08	3.244E-08
W	6.028E-06	2.017E-06	1.060E-06	5.199E-07	1.956E-07	1.006E-07	6.110E-08	4.110E-08	2.962E-08	2.243E-08	1.763E-08
WNW	9.343E-06	3.036E-06	1.530E-06	7.395E-07	2.865E-07	1.506E-07	9.304E-08	6.350E-08	4.634E-08	3.548E-08	2.816E-08
NW	3.284E-05	1.048E-05	5.330E-06	2.596E-06	1.019E-06	5.408E-07	3.366E-07	2.310E-07	1.694E-07	1.303E-07	1.038E-07
NNW	7.090E-05	2.126E-05	1.061E-05	5.178E-06	2.101E-06	1.140E-06	7.211E-07	5.017E-07	3.719E-07	2.887E-07	2.318E-07
N	1.118E-04	3.358E-05	1.705E-05	8.388E-06	3.385E-06	1.830E-06	1.154E-06	8.013E-07	5.930E-07	4.595E-07	3.685E-07
NNE	3.967E-05	1.203E-05	6.228E-06	3.084E-06	1.227E-06	6.566E-07	4.114E-07	2.839E-07	2.092E-07	1.614E-07	1.290E-07
NE	2.025E-05	6.254E-06	3.277E-06	1.626E-06	6.410E-07	3.410E-07	2.127E-07	1.462E-07	1.074E-07	8.266E-08	6.592E-08
ENE	1.557E-05	4.932E-06	2.567E-06	1.267E-06	4.973E-07	2.637E-07	1.640E-07	1.125E-07	8.246E-08	6.336E-08	5.045E-08
E	1.643E-05	5.320E-06	2.858E-06	1.427E-06	5.552E-07	2.926E-07	1.812E-07	1.238E-07	9.046E-08	6.932E-08	5.506E-08
ESE	2.681E-05	8.718E-06	4.534E-06	2.228E-06	8.688E-07	4.588E-07	2.845E-07	1.947E-07	1.424E-07	1.092E-07	8.685E-08
SE	3.690E-05	1.197E-05	6.293E-06	3.107E-06	1.204E-06	6.328E-07	3.909E-07	2.667E-07	1.945E-07	1.489E-07	1.181E-07
SSE	4.612E-05	1.494E-05	7.648E-06	3.725E-06	1.442E-06	7.574E-07	4.678E-07	3.192E-07	2.329E-07	1.783E-07	1.415E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.362E-07	6.704E-08	4.175E-08	2.239E-08	1.431E-08	1.006E-08	7.522E-09	5.861E-09	4.709E-09	3.872E-09	3.244E-09
SSW	4.530E-08	2.173E-08	1.329E-08	6.954E-09	4.376E-09	3.042E-09	2.252E-09	1.742E-09	1.390E-09	1.137E-09	9.482E-10
SW	3.904E-08	1.837E-08	1.108E-08	5.678E-09	3.518E-09	2.416E-09	1.771E-09	1.357E-09	1.076E-09	8.739E-10	7.243E-10
WSW	2.622E-08	1.229E-08	7.386E-09	3.770E-09	2.330E-09	1.597E-09	1.169E-09	8.948E-10	7.082E-10	5.749E-10	4.761E-10
W	1.426E-08	6.695E-09	4.028E-09	2.059E-09	1.274E-09	8.742E-10	6.400E-10	4.902E-10	3.880E-10	3.149E-10	2.607E-10
WNW	2.299E-08	1.118E-08	6.907E-09	3.663E-09	2.324E-09	1.626E-09	1.210E-09	9.394E-10	7.525E-10	6.173E-10	5.160E-10
NW	8.498E-08	4.182E-08	2.604E-08	1.396E-08	8.927E-09	6.281E-09	4.695E-09	3.660E-09	2.942E-09	2.420E-09	2.028E-09
NNW	1.912E-07	9.666E-08	6.129E-08	3.367E-08	2.187E-08	1.557E-08	1.175E-08	9.225E-09	7.460E-09	6.169E-09	5.192E-09
N	1.036E-07	1.528E-07	9.660E-08	5.285E-08	3.423E-08	2.432E-08	1.832E-08	1.437E-08	1.161E-08	9.591E-09	8.067E-09
NNE	1.060E-07	5.278E-08	3.313E-08	1.796E-08	1.157E-08	8.181E-09	6.141E-09	4.802E-09	3.869E-09	3.190E-09	2.678E-09
NE	5.403E-08	2.671E-08	1.668E-08	8.979E-09	5.759E-09	4.061E-09	3.041E-09	2.374E-09	1.910E-09	1.573E-09	1.320E-09
ENE	4.129E-08	2.028E-08	1.261E-08	6.743E-09	4.300E-09	3.020E-09	2.254E-09	1.754E-09	1.408E-09	1.157E-09	9.690E-10
E	4.497E-08	2.190E-08	1.353E-08	7.171E-09	4.544E-09	3.175E-09	2.359E-09	1.829E-09	1.463E-09	1.199E-09	1.001E-09
ESE	7.098E-08	3.469E-08	2.149E-08	1.144E-08	7.271E-09	5.093E-09	3.794E-09	2.949E-09	2.364E-09	1.940E-09	1.623E-09
SE	9.637E-08	4.676E-08	2.882E-08	1.523E-08	9.637E-09	6.726E-09	4.995E-09	3.872E-09	3.097E-09	2.537E-09	2.118E-09
SSE	1.155E-07	5.617E-08	3.469E-08	1.840E-08	1.168E-08	8.172E-09	6.063E-09	4.724E-09	3.786E-09	3.106E-09	2.597E-09

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

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.382E-06	1.854E-06	5.589E-07	2.758E-07	1.677E-07	7.116E-08	2.310E-08	1.018E-08	5.896E-09	3.887E-09
SSW	3.126E-06	6.741E-07	1.952E-07	9.405E-08	5.623E-08	2.322E-08	7.215E-09	3.082E-09	1.754E-09	1.142E-09
SW	2.839E-06	6.131E-07	1.735E-07	8.240E-08	4.871E-08	1.972E-08	5.918E-09	2.451E-09	1.368E-09	8.783E-10
WSW	1.949E-06	4.205E-07	1.179E-07	5.565E-08	3.277E-08	1.321E-08	3.933E-09	1.621E-09	9.019E-10	5.778E-10
W	1.032E-06	2.255E-07	6.364E-08	3.016E-08	1.781E-08	7.192E-09	2.148E-09	8.872E-10	4.941E-10	3.165E-10
WNW	1.513E-06	3.267E-07	9.656E-08	4.711E-08	2.841E-08	1.191E-08	3.789E-09	1.646E-09	9.454E-10	6.198E-10
NW	5.260E-06	1.157E-06	3.488E-07	1.721E-07	1.047E-07	4.440E-08	1.441E-08	6.352E-09	3.682E-09	2.429E-09
NNW	1.057E-05	2.357E-06	7.449E-07	3.773E-07	2.336E-07	1.020E-07	3.457E-08	1.572E-08	9.273E-09	6.190E-09
N	1.687E-05	3.805E-06	1.193E-06	6.017E-07	3.714E-07	1.613E-07	5.430E-08	2.456E-08	1.445E-08	9.624E-09
NNE	6.119E-06	1.386E-06	4.258E-07	2.123E-07	1.301E-07	5.587E-08	1.849E-08	8.267E-09	4.829E-09	3.202E-09
NE	3.205E-06	7.266E-07	2.203E-07	1.091E-07	6.648E-08	2.832E-08	9.258E-09	4.106E-09	2.388E-09	1.579E-09
ENE	2.515E-06	5.646E-07	1.700E-07	8.377E-08	5.088E-08	2.154E-08	6.961E-09	3.055E-09	1.765E-09	1.162E-09
E	2.769E-06	6.321E-07	1.879E-07	9.194E-08	5.555E-08	2.331E-08	7.417E-09	3.214E-09	1.841E-09	1.204E-09
ESE	4.439E-06	9.886E-07	2.950E-07	1.447E-07	8.760E-08	3.689E-08	1.182E-08	5.154E-09	2.967E-09	1.948E-09
SE	6.139E-06	1.373E-06	4.057E-07	1.978E-07	1.392E-07	4.981E-08	1.577E-08	6.810E-09	3.897E-09	2.547E-09
SSE	7.525E-06	1.645E-06	4.856E-07	2.367E-07	1.428E-07	5.980E-08	1.903E-08	8.271E-09	4.755E-09	3.119E-09

VENTS GROUND LEVEL RELEASES - OCT-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE										
DISTANCES IN MILES										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
S	2.175E-07	7.354E-08	3.776E-08	1.795E-08	6.448E-09	3.198E-09	1.883E-09	1.233E-09	8.675E-10	6.429E-10
SSW	1.077E-07	3.640E-08	1.869E-08	8.886E-09	3.192E-09	1.583E-09	9.321E-10	6.103E-10	4.294E-10	3.183E-10
SW	8.758E-08	2.962E-08	1.521E-08	7.230E-09	2.597E-09	1.288E-09	7.583E-10	4.965E-10	3.494E-10	2.589E-10
WSW	5.804E-08	1.963E-08	1.008E-08	4.791E-09	1.721E-09	8.534E-10	5.025E-10	3.290E-10	2.315E-10	1.716E-10
W	3.376E-08	1.142E-08	5.862E-09	2.787E-09	1.001E-09	4.965E-10	2.923E-10	1.914E-10	1.347E-10	9.982E-11
WNW	3.695E-08	1.250E-08	6.416E-09	3.050E-09	1.096E-09	5.433E-10	3.199E-10	2.095E-10	1.474E-10	1.092E-10
NW	1.857E-07	5.604E-08	2.878E-08	1.368E-08	4.514E-09	2.437E-09	1.435E-09	9.396E-10	6.611E-10	4.900E-10
NNW	1.733E-07	5.860E-08	3.009E-08	1.430E-08	5.138E-09	2.548E-09	1.500E-09	9.823E-10	6.912E-10	5.123E-10
N	3.506E-07	1.186E-07	6.087E-08	2.894E-08	1.040E-08	5.155E-09	3.036E-09	1.988E-09	1.399E-09	1.037E-09
NNE	1.425E-07	4.819E-08	2.474E-08	1.176E-08	4.226E-09	2.096E-09	1.234E-09	8.079E-10	5.685E-10	4.213E-10
NE	8.338E-08	2.819E-08	1.448E-08	6.882E-09	2.472E-09	1.226E-09	7.219E-10	4.727E-10	3.326E-10	2.465E-10
ENE	6.122E-08	2.070E-08	1.063E-08	5.053E-09	1.815E-09	9.002E-10	5.300E-10	3.471E-10	2.442E-10	1.810E-10
E	7.387E-08	2.498E-08	1.283E-08	6.097E-09	2.190E-09	1.086E-09	6.395E-10	4.188E-10	2.947E-10	2.184E-10
ESE	1.541E-07	5.211E-08	2.675E-08	1.272E-08	4.569E-09	2.266E-09	1.334E-09	8.736E-10	6.147E-10	4.555E-10
SE	2.385E-07	8.065E-08	4.141E-08	1.969E-08	7.071E-09	3.507E-09	2.065E-09	1.352E-09	9.514E-10	7.051E-10
SSE	3.103E-07	1.049E-07	5.387E-08	2.561E-08	9.200E-09	4.562E-09	2.686E-09	1.759E-09	1.238E-09	9.173E-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	50.00
S	3.936E-10	1.748E-10	1.059E-10	5.353E-11	3.240E-11	2.172E-11	1.557E-11	1.169E-11	9.089E-12	7.260E-12
SSW	1.948E-10	8.655E-11	5.243E-11	2.650E-11	1.604E-11	1.075E-11	7.706E-12	5.786E-12	4.499E-12	3.594E-12
SW	1.585E-10	7.042E-11	4.266E-11	2.156E-11	1.305E-11	8.749E-12	6.269E-12	4.708E-12	3.660E-12	2.924E-12
WSW	1.050E-10	4.666E-11	2.827E-11	1.429E-11	8.648E-12	5.798E-12	4.155E-12	3.120E-12	2.426E-12	1.938E-12
W	6.111E-11	2.715E-11	1.644E-11	8.312E-12	5.031E-12	3.373E-12	2.417E-12	1.815E-12	1.411E-12	1.127E-12
WNW	6.688E-11	2.971E-11	1.800E-11	9.096E-12	5.505E-12	3.691E-12	2.645E-12	1.986E-12	1.544E-12	1.234E-12
NW	3.000E-10	1.333E-10	8.072E-11	4.080E-11	2.469E-11	1.656E-11	1.186E-11	8.908E-12	6.926E-12	5.533E-12
NNW	3.136E-10	1.393E-10	8.439E-11	4.266E-11	2.582E-11	1.731E-11	1.240E-11	9.314E-12	7.242E-12	5.785E-12
N	6.346E-10	2.819E-10	1.708E-10	8.631E-11	5.224E-11	3.503E-11	2.510E-11	1.885E-11	1.465E-11	1.170E-11
NNE	2.579E-10	1.146E-10	6.941E-11	3.508E-11	2.123E-11	1.424E-11	1.020E-11	7.660E-12	5.956E-12	4.758E-12
NE	1.509E-10	6.704E-11	4.061E-11	2.053E-11	1.242E-11	8.329E-12	5.968E-12	4.482E-12	3.485E-12	2.783E-12
ENE	1.108E-10	4.922E-11	2.982E-11	1.507E-11	9.121E-12	6.116E-12	4.382E-12	3.291E-12	2.558E-12	2.044E-12
E	1.337E-10	5.939E-11	3.598E-11	1.818E-11	1.101E-11	7.379E-12	5.288E-12	3.970E-12	3.087E-12	2.466E-12
ESE	2.789E-10	1.239E-10	7.505E-11	3.793E-11	2.296E-11	1.539E-11	1.103E-11	8.283E-12	6.440E-12	5.144E-12
SE	4.316E-10	1.918E-10	1.162E-10	5.871E-11	3.553E-11	2.383E-11	1.707E-11	1.282E-11	9.967E-12	7.962E-12
SSE	5.616E-10	2.495E-10	1.511E-10	7.638E-11	4.623E-11	3.160E-11	2.221E-11	1.668E-11	1.297E-11	1.036E-11

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****										
SEGMENT BOUNDARIES IN MILES										
DIRECTION FROM SITE	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.691E-08	7.560E-09	1.973E-09	8.863E-10	5.014E-10	1.928E-10	5.578E-11	2.211E-11	1.181E-11	7.308E-12
SSW	1.827E-08	3.742E-09	9.769E-10	4.388E-10	2.482E-10	9.545E-11	2.761E-11	1.094E-11	5.844E-12	3.617E-12
SW	1.686E-08	3.045E-09	7.948E-10	3.570E-10	2.019E-10	7.766E-11	2.247E-11	8.904E-12	4.755E-12	2.943E-12
WSW	9.740E-09	2.018E-09	5.267E-10	2.366E-10	1.338E-10	5.146E-11	1.489E-11	5.901E-12	3.151E-12	1.950E-12
W	5.73E-09	1.174E-09	3.064E-10	1.376E-10	7.785E-11	2.994E-11	8.661E-12	3.433E-12	1.833E-12	1.135E-12
WNW	6.271E-09	1.284E-09	3.353E-10	1.506E-10	8.520E-11	3.276E-11	9.478E-12	3.757E-12	2.006E-12	1.242E-12
NW	2.813E-08	5.761E-09	1.504E-09	6.755E-10	3.821E-10	1.469E-10	4.251E-11	1.685E-11	8.998E-12	5.569E-12
NNW	2.941E-08	6.023E-09	1.572E-09	7.062E-10	3.995E-10	1.536E-10	4.445E-11	1.762E-11	9.407E-12	5.823E-12
N	5.950E-08	1.219E-08	3.182E-09	1.429E-09	8.084E-10	3.109E-10	8.993E-11	3.564E-11	1.903E-11	1.178E-11
NNE	2.419E-08	4.954E-09	1.293E-09	5.808E-10	3.286E-10	1.264E-10	3.656E-11	1.449E-11	7.737E-12	4.789E-12
NE	1.415E-08	2.898E-09	7.566E-10	3.398E-10	1.922E-10	7.393E-11	2.139E-11	8.476E-12	4.527E-12	2.802E-12
ENE	1.039E-08	2.128E-09	5.555E-10	2.495E-10	1.412E-10	5.428E-11	1.570E-11	6.224E-12	3.324E-12	2.057E-12
E	1.254E-08	2.568E-09	6.703E-10	3.011E-10	1.703E-10	6.549E-11	1.895E-11	7.510E-12	4.010E-12	2.482E-12
ESE	2.615E-08	5.356E-09	1.398E-09	6.280E-10	3.553E-10	1.366E-10	3.953E-11	1.567E-11	8.366E-12	5.178E-12
SE	4.047E-08	8.291E-09	2.164E-09	9.720E-10	5.499E-10	2.115E-10	6.118E-11	2.425E-11	1.295E-11	8.014E-12
SSE	5.266E-08	1.079E-08	2.816E-09	1.265E-09	7.154E-10	2.751E-10	7.959E-11	3.155E-11	1.685E-11	1.043E-11

VENTS GROUND LEVEL RELEASES - OCT-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q	X/Q	X/Q	D/Q
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(PER SQ.METER)
			NO DECAY					
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	8.195E-06	8.168E-06	7.269E-06	3.211E-08
A	SITE BOUNDARY	SSW	0.82	1327.	2.828E-06	2.819E-06	2.503E-06	1.467E-08
A	SITE BOUNDARY	SW	0.98	1569.	1.716E-06	1.709E-06	1.503E-06	7.715E-09
A	SITE BOUNDARY	WSW	0.93	1489.	1.344E-06	1.339E-06	1.181E-06	5.854E-09
A	SITE BOUNDARY	W	0.91	1468.	7.418E-07	7.393E-07	6.526E-07	3.534E-09
A	SITE BOUNDARY	WNW	0.94	1509.	9.868E-07	9.828E-07	8.664E-07	3.600E-09
A	SITE BOUNDARY	NW	0.81	1307.	4.934E-06	4.919E-06	4.372E-06	2.350E-08
A	SITE BOUNDARY	NNW	0.69	1106.	1.371E-05	1.367E-05	1.227E-05	3.484E-08
A	SITE BOUNDARY	N	0.67	1086.	2.258E-05	2.251E-05	2.023E-05	7.269E-08
A	SITE BOUNDARY	NNE	0.60	965.	9.881E-06	9.853E-06	8.912E-06	3.581E-08
A	SITE BOUNDARY	NE	0.62	1005.	4.847E-06	4.835E-06	4.359E-06	1.969E-08
A	SITE BOUNDARY	ENE	0.59	945.	4.200E-06	4.190E-06	3.794E-06	1.592E-08
A	SITE BOUNDARY	E	0.53	845.	5.397E-06	5.386E-06	4.910E-06	2.306E-08
A	SITE BOUNDARY	ESE	0.54	865.	8.519E-06	8.502E-06	7.740E-06	4.632E-08
A	SITE BOUNDARY	SE	0.65	1046.	8.771E-06	8.751E-06	7.873E-06	5.266E-08
A	SITE BOUNDARY	SSE	0.81	1307.	7.083E-06	7.062E-06	6.277E-06	4.399E-08
A	NEAR. RESIDENCE	SW	1.40	2253.	7.343E-07	7.303E-07	6.261E-07	3.081E-09
A	NEAR. RESIDENCE	WSW	1.30	2092.	5.971E-07	5.941E-07	5.122E-07	2.457E-09
A	NEAR. RESIDENCE	W	1.00	1689.	5.946E-07	5.924E-07	5.199E-07	2.787E-09
A	NEAR. RESIDENCE	WNW	1.60	2575.	2.936E-07	2.915E-07	2.475E-07	9.347E-10
A	NEAR. RESIDENCE	NW	0.90	1448.	3.825E-06	3.813E-06	3.369E-06	1.797E-08
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.529E-06	1.514E-06	1.269E-06	2.883E-09
A	NEAR. RESIDENCE	N	3.00	4828.	1.013E-06	9.985E-07	8.013E-07	1.988E-09
A	NEAR. RESIDENCE	NNE	2.70	4345.	4.389E-07	4.333E-07	3.514E-07	1.031E-09
A	NEAR. RESIDENCE	ENE	1.70	2736.	4.487E-07	4.456E-07	3.763E-07	1.335E-09
A	NEAR. RESIDENCE	E	1.80	2897.	4.422E-07	4.390E-07	3.690E-07	1.401E-09
A	NEAR. RESIDENCE	ESE	2.40	3863.	3.821E-07	3.787E-07	3.100E-07	1.468E-09
A	NEAR. RESIDENCE	SE	2.20	3541.	6.280E-07	6.229E-07	5.141E-07	2.792E-09
A	NEAREST COW	S	10.50	16899.	5.899E-08	5.617E-08	3.875E-08	9.772E-11
A	NEAREST GARDEN	SW	1.40	2253.	7.343E-07	7.303E-07	6.261E-07	3.081E-09
A	NEAREST GARDEN	WSW	1.30	2092.	5.971E-07	5.941E-07	5.122E-07	2.457E-09
A	NEAREST GARDEN	WNW	2.40	3863.	1.251E-07	1.238E-07	1.015E-07	3.521E-10
A	NEAREST GARDEN	NW	2.70	4345.	3.581E-07	3.543E-07	2.868E-07	1.199E-09
A	NEAREST GARDEN	NNW	1.90	3058.	1.529E-06	1.514E-06	1.269E-06	2.883E-09
A	NEAREST GARDEN	N	3.00	4828.	1.013E-06	9.985E-07	8.013E-07	1.988E-09
A	NEAREST GARDEN	NNE	2.70	4345.	4.389E-07	4.333E-07	3.514E-07	1.031E-09
A	NEAREST GARDEN	ENE	1.70	2736.	4.487E-07	4.456E-07	3.763E-07	1.335E-09
A	NEAREST GARDEN	E	1.80	2897.	4.422E-07	4.390E-07	3.690E-07	1.401E-09
A	NEAREST GARDEN	ESE	2.40	3863.	3.821E-07	3.787E-07	3.100E-07	1.468E-09
A	NEAREST GARDEN	SE	2.20	3541.	6.280E-07	6.229E-07	5.141E-07	2.792E-09

Atmospheric Diffusion Estimates

Ground Level Releases

July-December 1992



VENTS GROUND LEVEL RELEASES - JUL-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	0.1250	0.500	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	5.719E-05	1.917E-05	1.020E-05	5.093E-06	2.041E-06	1.104E-06	6.99E-07	4.878E-07	3.632E-07	2.87E-07	9.500
SSW	2.337E-05	7.938E-06	4.208E-06	2.091E-06	8.299E-07	4.457E-07	2.808E-07	1.951E-07	1.125E-07	9.061E-08	
SW	1.088E-05	4.922E-06	2.614E-06	1.295E-06	5.034E-07	2.664E-07	1.658E-07	1.440E-07	1.125E-07	9.061E-08	
WSW	1.071E-05	3.704E-06	1.945E-06	9.582E-07	3.721E-07	1.967E-07	1.224E-07	8.420E-08	6.193E-08	4.778E-08	
W	7.024E-06	2.364E-06	1.244E-06	6.153E-07	2.415E-07	1.287E-07	8.062E-08	5.575E-08	3.191E-08	2.52E-08	
WNW	1.282E-05	4.335E-06	2.249E-06	1.106E-06	4.377E-07	2.348E-07	1.478E-07	7.611E-08	5.916E-08	4.74E-08	
NW	3.666E-05	1.235E-05	6.524E-06	3.240E-06	1.291E-06	6.950E-07	3.588E-07	1.054E-07	2.269E-07	1.494E-07	
NNW	7.788E-05	2.683E-05	1.297E-05	6.476E-06	2.671E-06	1.473E-06	9.464E-07	5.025E-07	3.952E-07	3.24E-07	
N	1.043E-04	3.288E-05	1.723E-05	8.644E-06	3.572E-06	1.971E-06	1.268E-06	8.953E-07	7.735E-07	4.39E-07	
NNE	4.292E-05	1.343E-05	7.153E-06	3.614E-06	1.482E-06	8.142E-07	5.218E-07	3.675E-07	2.165E-07	1.758E-07	
NE	2.871E-05	8.960E-06	4.707E-06	2.366E-06	9.787E-07	5.407E-07	3.479E-07	2.458E-07	1.455E-07	1.184E-07	
ENE	1.932E-05	6.319E-06	3.304E-06	1.663E-06	6.788E-07	3.716E-07	2.374E-07	1.668E-07	9.792E-08	7.93E-08	
E	1.654E-05	5.365E-06	2.944E-06	1.501E-06	6.087E-07	3.315E-07	2.110E-07	1.478E-07	1.104E-07	8.428E-08	
ESE	2.309E-05	7.603E-06	4.019E-06	2.009E-06	8.147E-07	4.441E-07	2.829E-07	1.983E-07	1.402E-07	9.38E-08	
SE	3.736E-05	1.224E-05	6.559E-06	3.299E-06	1.332E-06	7.242E-07	4.603E-07	3.220E-07	2.403E-07	1.87E-07	
SSE	5.638E-05	1.861E-05	9.926E-06	4.977E-06	2.001E-06	1.084E-06	6.873E-07	4.799E-07	3.575E-07	2.790E-07	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	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	9.839E-08	6.420E-08	3.720E-08	2.538E-08	1.891E-08	1.489E-08	1.218E-08	1.023E-08	8.786E-09	7.668E-09
SSW	7.497E-08	2.494E-08	1.356E-08	7.434E-09	4.737E-09	3.227E-09	2.673E-09	2.317E-09	2.082E-09	1.868E-09	1.68E-09
SW	4.252E-08	1.310E-08	7.588E-09	4.588E-09	2.787E-09	1.699E-09	1.069E-09	6.627E-10	4.639E-10	3.148E-10	2.08E-10
WSW	3.149E-08	1.581E-08	1.009E-08	5.674E-09	3.797E-09	2.787E-09	2.168E-09	1.756E-09	1.464E-09	1.247E-09	1.08E-09
W	2.145E-08	1.072E-08	6.939E-09	3.959E-09	2.679E-09	1.984E-09	1.554E-09	1.266E-09	1.061E-09	9.082E-10	7.90E-10
NNW	3.941E-08	2.022E-08	1.316E-08	7.575E-09	5.152E-09	3.831E-09	3.012E-09	2.461E-09	2.067E-09	1.774E-09	1.54E-09
NW	1.180E-07	6.089E-08	3.942E-08	2.285E-08	1.555E-08	1.157E-08	9.094E-09	7.429E-09	6.239E-09	5.52E-09	4.66E-09
NNW	2.683E-07	1.424E-07	9.422E-08	5.591E-08	3.871E-08	2.916E-08	2.317E-08	1.909E-08	1.615E-08	1.394E-08	1.22E-08
N	3.597E-07	1.911E-07	1.268E-07	7.514E-08	5.205E-08	3.923E-08	3.117E-08	2.569E-08	2.173E-08	1.874E-08	1.64E-08
NNE	1.466E-07	7.752E-08	5.125E-08	3.024E-08	2.090E-08	1.572E-08	1.297E-08	1.026E-08	8.674E-09	7.401E-09	6.55E-09
NE	9.808E-08	5.258E-08	3.489E-08	2.069E-08	1.434E-08	1.081E-08	8.595E-09	7.085E-09	5.996E-09	5.178E-09	4.54E-09
ENE	6.609E-08	3.473E-08	2.286E-08	1.340E-08	9.216E-09	6.907E-09	5.464E-09	4.486E-09	3.783E-09	3.27E-09	2.85E-09
E	5.799E-08	3.023E-08	1.978E-08	1.150E-08	7.860E-09	5.860E-09	4.616E-09	3.775E-09	3.173E-09	2.74E-09	2.37E-09
ESE	7.045E-08	4.081E-08	2.678E-08	1.564E-08	1.072E-08	8.017E-09	6.332E-09	5.191E-09	4.373E-09	3.74E-09	3.28E-09
SE	1.241E-07	6.56E-08	4.204E-08	2.494E-08	1.707E-08	1.273E-08	1.004E-08	8.217E-09	6.913E-09	5.93E-09	5.18E-09
SSE	1.870E-07	9.701E-08	6.531E-08	3.670E-08	2.505E-08	1.867E-08	1.470E-08	1.202E-08	1.011E-08	8.69E-09	7.57E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT											
DIRECTION FROM SITE	5-1	1-2	2-3	3-4	SEGMENT BOUNDARIES IN MILES			10-20	20-30	30-40	40-50
S	9.935E-06	2.503E-06	7.225E-07	3.685E-07	2.304E-07	1.035E-07	5.794E-08	1.935E-08	1.221E-08	8.801E-09	
SSW	4.096E-06	9.395E-07	2.905E-07	1.466E-07	9.131E-08	4.059E-08	1.466E-08	7.255E-09	4.642E-09	3.33E-09	
SW	2.531E-06	5.740E-07	1.719E-07	8.518E-08	5.214E-08	2.257E-08	7.789E-09	3.79E-09	2.526E-09	1.643E-09	
WSW	1.877E-06	4.644E-07	1.270E-07	6.293E-08	3.864E-08	1.674E-08	5.831E-09	2.89E-09	1.762E-09	1.250E-09	
W	1.214E-06	2.95E-07	8.550E-08	4.182E-08	2.583E-08	1.137E-08	4.052E-09	1.97E-09	1.270E-09	9.100E-10	
NNW	2.204E-06	4.460E-07	1.529E-07	7.723E-08	4.800E-08	2.136E-08	7.738E-09	3.86E-09	2.468E-09	1.777E-09	
NW	6.358E-06	1.459E-06	4.538E-07	2.303E-07	1.435E-07	6.411E-08	2.333E-08	1.144E-08	7.951E-09	5.36E-09	
NNW	1.277E-05	2.984E-06	9.756E-07	4.825E-07	3.236E-07	1.490E-07	5.682E-08	2.92E-08	1.914E-08	1.396E-08	
N	1.687E-05	3.88E-06	1.306E-06	6.29E-07	4.38E-07	2.000E-07	7.636E-08	3.92E-08	2.57E-08	1.879E-08	
NNE	6.975E-06	1.659E-06	5.381E-07	2.794E-07	1.778E-07	8.119E-08	3.076E-08	1.508E-08	1.029E-08	7.491E-09	
NE	4.612E-06	1.092E-06	3.585E-07	1.873E-07	1.192E-07	5.501E-08	2.103E-08	1.087E-08	7.101E-09	5.18E-09	
ENE	2.831E-06	7.610E-07	2.450E-07	1.266E-07	7.995E-08	3.642E-08	1.364E-08	6.94E-09	4.49E-09	3.26E-09	
E	3.81E-06	4.839E-07	2.179E-07	1.11E-07	7.01E-08	3.176E-08	1.173E-08	5.85E-09	3.78E-09	2.72E-09	
ESE	3.922E-06	9.154E-07	2.920E-07	1.502E-07	4.285E-08	1.593E-08	1.593E-08	8.04E-09	5.05E-09	3.768E-09	
SE	6.577E-06	1.999E-06	4.754E-07	2.434E-07	1.594E-07	6.898E-08	2.545E-08	1.601E-08	8.241E-09	5.94E-09	
SSE	9.657E-06	2.255E-06	7.101E-07	3.626E-07	2.270E-07	1.020E-07	3.744E-08	1.878E-08	1.206E-08	8.694E-09	

VENTS GROUND LEVEL RELEASES - JUL-DEC 1992  
2,260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	CHI/Q	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000
S	5.713E-05	1.913E-05	1.017E-05	5.071E-06	2.928E-06	1.094E-06	4.915E-07	2.777E-07	1.525E-07	8.819E-08	4.722E-08
SSW	2.335E-05	7.920E-06	4.194E-06	2.082E-06	1.045E-06	4.18E-07	2.777E-07	1.525E-07	8.819E-08	4.722E-08	2.722E-08
SSW	1.406E-05	4.912E-06	2.606E-06	1.290E-06	6.547E-07	2.642E-07	1.266E-07	6.547E-07	3.260E-08	1.651E-08	8.358E-09
WSW	1.070E-05	3.697E-06	1.940E-06	9.547E-07	4.700E-07	1.955E-07	9.547E-07	4.700E-07	2.349E-08	1.191E-08	6.051E-09
W	7.017E-06	2.361E-06	1.240E-06	6.130E-07	3.041E-07	1.277E-07	6.130E-07	3.041E-07	1.508E-08	7.490E-09	3.814E-09
WNW	1.281E-05	4.324E-06	2.242E-06	1.101E-06	5.507E-07	2.642E-07	1.266E-07	6.547E-07	3.260E-08	1.651E-08	8.358E-09
NW	3.652E-05	1.232E-05	6.507E-06	3.229E-06	1.584E-06	7.600E-07	3.652E-07	1.821E-07	9.113E-08	4.590E-08	2.300E-08
NNW	7.771E-05	2.477E-05	1.292E-05	6.446E-06	3.252E-06	1.594E-06	7.600E-07	3.652E-07	1.821E-07	9.113E-08	4.590E-08
N	1.042E-04	3.272E-05	1.717E-05	8.609E-06	4.357E-06	2.153E-06	1.042E-06	5.253E-07	2.622E-07	1.311E-07	6.622E-08
NNE	4.287E-05	1.340E-05	6.902E-06	3.555E-06	1.715E-06	8.609E-07	4.357E-07	2.153E-07	1.042E-07	5.253E-08	2.622E-08
ENE	1.829E-05	5.835E-06	3.095E-06	1.555E-06	7.740E-07	3.860E-07	1.928E-07	9.644E-08	4.822E-08	2.411E-08	1.205E-08
E	1.652E-05	5.354E-06	2.834E-06	1.495E-06	7.405E-07	3.645E-07	1.829E-07	9.144E-08	4.590E-08	2.300E-08	1.155E-08
ESE	2.531E-05	7.587E-06	4.007E-06	2.001E-06	1.007E-06	5.034E-07	2.512E-07	1.256E-07	6.280E-08	3.140E-08	1.570E-08
SE	3.732E-05	1.223E-05	6.539E-06	3.285E-06	1.642E-06	8.210E-07	4.104E-07	2.052E-07	1.026E-07	5.130E-08	2.565E-08
SSE	5.632E-05	1.857E-05	9.897E-06	4.957E-06	2.478E-06	1.240E-06	6.201E-07	3.101E-07	1.551E-07	7.755E-08	3.877E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	CHI/Q	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000
S	1.858E-07	9.509E-08	6.132E-08	3.471E-08	2.313E-08	1.683E-08	1.253E-08	9.44E-09	7.14E-09	5.40E-09	4.06E-09
SSW	7.327E-08	3.719E-08	2.382E-08	1.536E-08	9.852E-09	6.433E-09	4.213E-09	2.812E-09	1.866E-09	1.23E-09	8.06E-10
SSW	4.162E-08	2.062E-08	1.298E-08	7.107E-09	4.632E-09	3.314E-09	2.514E-09	1.912E-09	1.456E-09	1.09E-09	8.13E-10
WSW	3.089E-08	1.535E-08	9.700E-09	5.346E-09	3.066E-09	1.752E-09	1.033E-09	6.15E-10	3.67E-10	2.27E-10	1.45E-10
W	2.078E-08	1.044E-08	6.654E-09	3.716E-09	2.245E-09	1.381E-09	8.425E-10	5.14E-10	3.14E-10	1.91E-10	1.18E-10
WNW	3.858E-08	1.962E-08	1.259E-08	7.087E-09	4.712E-09	3.045E-09	1.932E-09	1.201E-09	7.55E-10	4.64E-10	2.84E-10
NW	1.158E-07	5.916E-08	3.809E-08	2.453E-08	1.536E-08	9.466E-09	6.058E-09	3.948E-09	2.53E-09	1.63E-09	1.04E-09
NNW	2.618E-07	1.373E-07	8.988E-08	5.191E-08	3.055E-08	1.757E-08	1.035E-08	6.408E-09	3.948E-09	2.53E-09	1.63E-09
N	1.435E-07	7.843E-08	4.207E-08	2.207E-08	1.191E-08	6.467E-09	3.588E-09	2.01E-09	1.14E-09	6.35E-10	3.58E-10
NNE	1.435E-07	7.843E-08	4.207E-08	2.207E-08	1.191E-08	6.467E-09	3.588E-09	2.01E-09	1.14E-09	6.35E-10	3.58E-10
ENE	9.643E-08	5.061E-08	3.16E-08	1.916E-08	1.295E-08	8.514E-09	5.514E-09	3.572E-09	2.32E-09	1.52E-09	9.85E-10
E	6.499E-08	3.346E-08	2.176E-08	1.244E-08	8.344E-09	5.099E-09	3.144E-09	1.93E-09	1.18E-09	7.41E-10	4.64E-10
ESE	5.663E-08	2.917E-08	1.886E-08	1.070E-08	7.136E-09	4.513E-09	2.793E-09	1.68E-09	1.04E-09	6.41E-10	3.94E-10
SE	1.233E-07	6.341E-08	3.948E-08	2.561E-08	1.61E-08	9.787E-09	5.517E-09	3.31E-09	2.01E-09	1.25E-09	7.75E-10
SSE	1.829E-07	9.385E-08	6.055E-08	3.430E-08	2.023E-08	1.131E-08	6.704E-09	4.019E-09	2.45E-09	1.53E-09	9.48E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
DIRECTION FROM SITE	CHI/Q	0.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.894E-06	2.89E-06	7.148E-07	3.627E-07	1.444E-07	2.26E-07	1.002E-07	3.547E-08	1.695E-08	8.7E-09	7.13E-09
SSW	4.084E-06	9.359E-07	2.874E-07	1.444E-07	8.94E-08	5.11E-08	3.926E-08	1.368E-08	6.49E-09	3.0E-09	2.68E-09
SSW	2.549E-06	5.708E-07	1.702E-07	8.392E-08	3.78E-08	2.16E-08	1.313E-08	7.31E-09	3.55E-09	1.55E-09	1.34E-09
WSW	1.87E-06	4.23E-07	1.258E-07	6.207E-08	3.78E-08	2.16E-08	1.313E-08	7.31E-09	3.55E-09	1.55E-09	1.34E-09
W	1.211E-06	2.730E-07	8.270E-08	4.124E-08	2.536E-08	1.41E-08	8.09E-09	4.80E-09	2.75E-09	1.21E-09	7.08E-10
WNW	2.188E-06	4.933E-07	1.514E-07	7.611E-08	4.709E-08	2.87E-08	1.604E-08	9.25E-09	5.41E-09	2.45E-09	1.45E-09
NW	6.33E-06	1.452E-06	4.498E-07	2.277E-07	1.41E-07	8.09E-08	4.80E-09	2.75E-09	1.21E-09	6.49E-09	5.68E-09
NNW	1.268E-05	3.63E-06	9.631E-06	5.00E-07	3.14E-07	1.93E-07	1.131E-08	6.704E-09	4.019E-09	2.45E-09	1.53E-09
N	1.62E-05	3.63E-06	9.631E-06	5.00E-07	3.14E-07	1.93E-07	1.131E-08	6.704E-09	4.019E-09	2.45E-09	1.53E-09
NNE	6.92E-06	1.688E-06	5.318E-07	2.747E-07	1.72E-07	1.06E-07	6.66E-08	3.94E-08	2.39E-08	1.45E-08	8.54E-09
ENE	4.566E-06	1.085E-06	3.542E-07	1.841E-07	1.16E-07	7.35E-08	4.51E-08	2.75E-08	1.69E-08	1.04E-08	6.35E-09
E	3.23E-06	7.561E-07	2.421E-07	1.245E-07	7.83E-08	4.86E-08	3.06E-08	1.93E-08	1.20E-08	7.41E-09	4.64E-09
ESE	2.832E-06	6.796E-07	2.154E-07	1.101E-07	6.83E-08	4.26E-08	2.69E-08	1.69E-08	1.04E-08	6.35E-09	3.86E-09
SE	3.91E-06	9.103E-07	2.890E-07	1.480E-07	9.24E-08	5.74E-08	3.51E-08	2.19E-08	1.35E-08	8.35E-09	5.06E-09
SSE	6.356E-06	1.490E-06	4.703E-07	2.399E-07	1.499E-07	9.24E-08	5.74E-08	3.51E-08	2.19E-08	1.35E-08	8.35E-09
S	9.690E-06	2.242E-06	7.028E-07	3.57E-07	2.27E-07	9.885E-08	3.506E-08	1.678E-08	8.42E-09	4.12E-09	2.07E-09

VENTS GROUND LEVEL RELEASES - JUL-DEC 1992  
8.000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	CHI/Q	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500		
S	5.41E-05	1.750E-05	9.080E-06	4.452E-06	1.730E-06	9.117E-07	5.645E-07	3.860E-07	2.163E-07	1.719E-07	4.500
SSW	2.21E-05	1.750E-06	3.794E-06	1.828E-06	7.035E-07	3.682E-07	2.268E-07	1.544E-07	8.594E-08	6.811E-08	4.500
SW	1.33E-05	4.49E-06	2.328E-06	1.132E-06	5.269E-07	2.201E-07	1.339E-07	9.023E-08	5.149E-08	3.888E-08	4.500
WSW	1.03E-05	3.38E-06	1.732E-06	8.379E-07	3.155E-07	1.626E-07	9.891E-08	6.664E-08	4.814E-08	3.452E-08	4.500
W	6.66E-06	2.15E-06	1.108E-06	5.381E-07	2.048E-07	1.064E-07	6.513E-08	4.413E-08	3.201E-08	2.439E-08	4.500
NNW	1.23E-05	3.954E-06	2.002E-06	9.669E-07	3.711E-07	1.940E-07	1.194E-07	8.123E-08	5.914E-08	4.520E-08	4.500
NW	3.45E-05	1.127E-05	5.809E-06	2.834E-06	1.094E-06	5.743E-07	3.545E-07	2.418E-07	1.764E-07	1.350E-07	4.500
NNW	7.31E-05	2.264E-05	1.154E-05	5.662E-06	2.264E-06	1.216E-06	7.642E-07	5.287E-07	3.902E-07	3.017E-07	4.500
N	9.87E-05	2.99E-05	1.534E-05	7.561E-06	3.027E-06	1.628E-06	1.023E-06	7.083E-07	5.229E-07	4.044E-07	4.500
NNE	4.061E-05	1.225E-05	6.368E-06	3.160E-06	1.256E-06	6.724E-07	4.212E-07	2.907E-07	2.141E-07	1.553E-07	4.500
NE	2.716E-05	8.174E-06	4.190E-06	2.068E-06	8.295E-07	4.464E-07	2.808E-07	1.945E-07	1.436E-07	1.111E-07	4.500
ENE	1.858E-05	5.674E-06	2.943E-06	1.454E-06	5.753E-07	3.068E-07	1.917E-07	1.320E-07	9.792E-08	7.475E-08	4.500
E	1.565E-05	4.897E-06	2.621E-06	1.313E-06	5.159E-07	2.738E-07	1.704E-07	1.169E-07	8.571E-08	6.588E-08	4.500
ESE	2.185E-05	6.938E-06	3.579E-06	1.757E-06	6.907E-07	3.668E-07	2.285E-07	1.569E-07	1.152E-07	8.858E-08	4.500
SE	3.53E-05	1.119E-05	5.840E-06	2.884E-06	1.130E-06	5.982E-07	3.717E-07	2.548E-07	1.867E-07	1.434E-07	4.500
SSE	5.334E-05	1.699E-05	8.838E-06	4.552E-06	1.696E-06	8.953E-07	5.551E-07	3.798E-07	2.778E-07	2.131E-07	4.500

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	CHI/Q	5.000	7.500	10.000	15.000	20.000	30.000	35.000	40.000	45.000	50.000
S	1.405E-07	6.869E-08	4.752E-08	2.268E-08	1.444E-08	1.012E-08	7.544E-09	5.865E-09	4.703E-09	3.861E-09	3.235E-09
SSW	5.552E-08	2.688E-08	1.655E-08	8.740E-09	5.534E-09	3.865E-09	2.672E-09	2.227E-09	1.782E-09	1.460E-09	1.219E-09
SW	3.150E-08	1.488E-08	8.997E-09	4.632E-09	2.880E-09	1.984E-09	1.457E-09	1.119E-09	8.884E-10	7.228E-10	5.998E-10
WSW	2.33E-08	1.105E-08	6.703E-09	3.469E-09	2.168E-09	1.499E-09	1.055E-09	8.516E-10	6.779E-10	5.531E-10	4.601E-10
W	1.567E-08	7.52E-09	4.602E-09	2.417E-09	1.527E-09	1.064E-09	7.899E-10	6.120E-10	4.894E-10	4.008E-10	3.345E-10
NNW	2.920E-08	1.415E-08	8.729E-09	4.622E-09	2.933E-09	2.053E-09	1.528E-09	1.187E-09	9.517E-10	7.812E-10	6.533E-10
NW	8.747E-08	4.257E-08	2.631E-08	1.397E-08	8.878E-09	6.219E-09	4.633E-09	3.601E-09	2.887E-09	2.371E-09	1.984E-09
NNW	1.986E-07	9.35E-08	6.255E-08	3.404E-08	2.198E-08	1.557E-08	1.171E-08	9.168E-09	7.396E-09	6.104E-09	5.129E-09
N	2.68E-07	1.33E-07	8.601E-08	4.575E-08	2.956E-08	2.095E-08	1.574E-08	1.234E-08	9.958E-09	8.230E-09	6.909E-09
NNE	1.055E-07	5.407E-08	3.395E-08	1.841E-08	1.186E-08	8.395E-09	6.503E-09	4.930E-09	3.973E-09	3.276E-09	2.751E-09
NE	7.339E-08	3.667E-08	2.311E-08	1.259E-08	8.135E-09	5.769E-09	4.359E-09	3.398E-09	2.742E-09	2.249E-09	1.901E-09
ENE	4.895E-08	2.422E-08	1.514E-08	8.160E-09	5.232E-09	3.689E-09	2.761E-09	2.154E-09	1.735E-09	1.456E-09	1.194E-09
E	4.249E-08	2.110E-08	1.311E-08	7.008E-09	4.465E-09	3.133E-09	2.355E-09	1.816E-09	1.456E-09	1.195E-09	9.93E-10
ESE	5.742E-08	2.850E-08	1.774E-08	9.537E-09	6.100E-09	4.294E-09	3.210E-09	2.502E-09	2.011E-09	1.655E-09	1.385E-09
SE	9.38E-08	4.58E-08	2.847E-08	1.521E-08	9.702E-09	6.812E-09	5.082E-09	3.955E-09	3.173E-09	2.607E-09	2.181E-09
SSE	1.358E-07	6.775E-08	4.200E-08	2.239E-08	1.425E-08	9.998E-09	7.454E-09	5.797E-09	4.494E-09	3.616E-09	3.194E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
DIRECTION FROM SITE	CHI/Q	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.694E-06	1.971E-06	5.857E-07	2.868E-07	1.734E-07	7.304E-08	2.304E-08	9.051E-09	1.044E-08	5.902E-09	3.877E-09
SSW	3.671E-06	8.044E-07	2.355E-07	1.143E-07	6.873E-08	2.283E-08	9.051E-09	4.823E-09	3.913E-09	2.241E-09	1.466E-09
SW	2.27E-06	4.917E-07	1.394E-07	6.43E-07	3.97E-08	1.596E-08	1.596E-08	4.623E-09	2.02E-09	1.128E-09	7.263E-10
WSW	1.701E-06	3.636E-07	1.030E-07	4.90E-08	2.904E-08	1.184E-08	3.609E-09	2.609E-09	1.50E-09	8.579E-10	5.556E-10
W	1.08E-06	2.551E-07	6.772E-08	3.25E-08	1.945E-08	8.039E-09	2.50E-09	2.50E-09	1.08E-09	6.161E-10	4.025E-10
NNW	1.970E-06	4.248E-06	1.240E-06	6.014E-08	3.614E-08	1.509E-08	4.784E-09	1.444E-08	2.08E-09	1.195E-09	7.894E-10
NW	5.700E-06	1.255E-06	7.905E-07	3.961E-07	2.434E-07	1.453E-08	3.501E-08	3.624E-09	6.24E-09	9.218E-09	2.380E-09
NNW	1.140E-05	2.543E-06	1.059E-06	5.30E-07	3.564E-07	1.410E-07	4.704E-08	1.217E-08	1.241E-08	1.241E-08	8.209E-09
N	6.240E-06	1.420E-06	4.360E-07	2.17E-07	1.32E-07	5.722E-08	1.89E-08	1.89E-08	8.45E-09	4.658E-09	3.288E-09
NNE	4.13E-06	9.546E-07	2.904E-07	1.45E-07	8.68E-08	1.294E-08	1.294E-08	1.294E-08	5.80E-09	3.417E-09	2.272E-09
NE	2.89E-06	6.513E-07	1.985E-07	9.85E-08	6.015E-08	2.568E-08	8.049E-09	7.235E-09	3.79E-09	2.167E-09	1.493E-09
ENE	2.545E-06	5.853E-07	1.766E-07	8.707E-08	5.291E-08	2.25E-08	7.235E-09	3.19E-09	1.627E-09	1.200E-09	8.200E-10
E	3.516E-06	7.837E-07	2.368E-07	1.170E-07	7.119E-08	3.025E-08	9.836E-09	4.52E-09	2.518E-09	1.641E-09	1.141E-09
ESE	5.75E-06	1.283E-06	3.853E-07	1.89E-07	1.51E-07	4.868E-08	1.57E-08	6.81E-09	3.979E-09	2.617E-09	2.617E-09
SE	8.65E-06	1.930E-06	5.175E-07	2.82E-07	1.709E-07	7.203E-08	2.513E-08	1.042E-08	5.81E-09	3.63E-09	3.63E-09



## VENTS GROUND LEVEL RELEASES - JUL-DEC 1992

CORRECTED FOR OPEN TERRAIN RECIRCULATION

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

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DIRECTION

FROM SITE

	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.392E-07	8.087E-08	4.152E-08	1.974E-08	7.091E-09	3.517E-09	2.071E-09	1.356E-09	9.540E-10	7.070E-10	5.449E-10
SSW	1.043E-07	3.525E-08	1.810E-08	8.605E-09	3.091E-09	1.533E-09	9.026E-10	5.910E-10	4.159E-10	3.082E-10	2.375E-10
SW	6.663E-08	2.253E-08	1.157E-08	5.500E-09	1.976E-09	9.797E-10	5.769E-10	3.777E-10	2.658E-10	1.970E-10	1.518E-10
WSW	5.588E-08	1.890E-08	9.702E-09	4.613E-09	1.657E-09	8.216E-10	4.838E-10	3.168E-10	2.229E-10	1.652E-10	1.273E-10
W	3.600E-08	1.217E-08	6.251E-09	2.972E-09	1.067E-09	5.294E-10	3.117E-10	2.041E-10	1.436E-10	1.064E-10	8.202E-11
WNW	6.770E-08	2.289E-08	1.176E-08	5.589E-09	2.007E-09	9.955E-10	5.862E-10	3.838E-10	2.701E-10	2.002E-10	1.542E-10
NW	2.203E-07	7.450E-08	3.825E-08	1.819E-08	6.532E-09	3.239E-09	1.907E-09	1.249E-09	8.788E-10	6.513E-10	5.019E-10
NNW	2.715E-07	9.180E-08	4.713E-08	2.241E-08	8.049E-09	3.992E-09	2.350E-09	1.539E-09	1.083E-09	8.026E-10	6.185E-10
N	3.709E-07	1.254E-07	6.440E-08	3.062E-08	1.100E-08	5.454E-09	3.212E-09	2.103E-09	1.480E-09	1.097E-09	8.451E-10
NNE	1.489E-07	5.036E-08	2.586E-08	1.229E-08	4.416E-09	2.190E-09	1.289E-09	8.443E-10	5.941E-10	4.403E-10	3.393E-10
NE	8.119E-08	2.746E-08	1.410E-08	6.702E-09	2.407E-09	1.194E-09	7.030E-10	4.603E-10	3.239E-10	2.400E-10	1.850E-10
ENE	5.914E-08	2.000E-08	1.027E-08	4.882E-09	1.753E-09	8.696E-10	5.120E-10	3.353E-10	2.359E-10	1.748E-10	1.347E-10
E	5.806E-08	1.963E-08	1.008E-08	4.793E-09	1.722E-09	8.538E-10	5.027E-10	3.292E-10	2.316E-10	1.717E-10	1.323E-10
ESE	1.069E-07	3.617E-08	1.857E-08	8.828E-09	3.171E-09	1.573E-09	9.260E-10	6.063E-10	4.266E-10	3.162E-10	2.437E-10
SE	1.774E-07	5.998E-08	3.079E-08	1.464E-08	5.259E-09	2.608E-09	1.536E-09	1.006E-09	7.075E-10	5.243E-10	4.041E-10
SSE	2.848E-07	9.632E-08	4.946E-08	2.351E-08	8.445E-09	4.188E-09	2.466E-09	1.615E-09	1.136E-09	8.421E-10	6.489E-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	4.328E-10	1.923E-10	1.165E-10	5.887E-11	3.563E-11	2.389E-11	1.712E-11	1.285E-11	9.995E-12	7.984E-12	6.517E-12
SSW	1.887E-10	8.382E-11	5.077E-11	2.566E-11	1.553E-11	1.041E-11	7.462E-12	5.604E-12	4.357E-12	3.480E-12	2.841E-12
SW	1.206E-10	5.357E-11	3.245E-11	1.640E-11	9.927E-12	6.656E-12	4.769E-12	3.581E-12	2.785E-12	2.224E-12	1.816E-12
WSW	1.011E-10	4.493E-11	2.722E-11	1.376E-11	8.326E-12	5.582E-12	4.000E-12	3.004E-12	2.355E-12	1.865E-12	1.523E-12
W	6.516E-11	2.895E-11	1.753E-11	8.863E-12	5.369E-12	3.597E-12	2.577E-12	1.935E-12	1.505E-12	1.202E-12	9.810E-13
WNW	1.225E-10	5.444E-11	3.297E-11	1.667E-11	1.009E-11	6.764E-12	4.846E-12	3.639E-12	2.830E-12	2.260E-12	1.845E-12
NW	3.987E-10	1.771E-10	1.073E-10	5.423E-11	3.282E-11	2.201E-11	1.577E-11	1.184E-11	9.207E-12	7.355E-12	6.003E-12
NNW	4.913E-10	2.183E-10	1.322E-10	6.683E-11	4.045E-11	2.712E-11	1.943E-11	1.459E-11	1.135E-11	9.063E-12	7.397E-12
N	6.713E-10	2.982E-10	1.807E-10	9.131E-11	5.527E-11	3.706E-11	2.655E-11	1.994E-11	1.550E-11	1.238E-11	1.011E-11
NNE	2.695E-10	1.197E-10	7.253E-11	3.666E-11	2.219E-11	1.488E-11	1.066E-11	8.005E-12	6.224E-12	4.972E-12	4.058E-12
NE	1.470E-10	6.528E-11	3.954E-11	1.999E-11	1.210E-11	8.111E-12	5.812E-12	4.364E-12	3.393E-12	2.711E-12	2.212E-12
ENE	1.070E-10	4.755E-11	2.880E-11	1.456E-11	8.811E-12	5.908E-12	4.233E-12	3.179E-12	2.472E-12	1.974E-12	1.611E-12
E	1.051E-10	4.668E-11	2.828E-11	1.429E-11	8.651E-12	5.800E-12	4.156E-12	3.121E-12	2.427E-12	1.938E-12	1.582E-12
ESE	1.936E-10	8.599E-11	5.209E-11	2.633E-11	1.593E-11	1.068E-11	7.656E-12	5.749E-12	4.670E-12	3.570E-12	2.914E-12
SE	3.210E-10	1.426E-10	8.638E-11	4.366E-11	2.643E-11	1.772E-11	1.270E-11	9.533E-12	7.412E-12	5.921E-12	4.833E-12
SSE	5.155E-10	2.290E-10	1.387E-10	7.012E-11	4.244E-11	2.845E-11	2.039E-11	1.531E-11	1.190E-11	9.509E-12	7.762E-12

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

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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	4.059E-08	8.313E-09	2.170E-09	9.747E-10	5.514E-10	2.121E-10	6.135E-11	2.431E-11	1.298E-11	8.036E-12
SSW	1.769E-08	3.624E-09	9.460E-10	4.249E-10	2.404E-10	9.244E-11	2.674E-11	1.060E-11	5.660E-12	3.503E-12
SW	1.131E-08	2.316E-09	6.046E-10	2.716E-10	1.536E-10	5.908E-11	1.709E-11	6.774E-12	3.617E-12	2.239E-12
WSW	9.483E-09	1.942E-09	5.071E-10	2.277E-10	1.288E-10	4.955E-11	1.433E-11	5.681E-12	3.034E-12	1.878E-12
W	6.110E-09	1.252E-09	3.267E-10	1.467E-10	8.301E-11	3.192E-11	9.235E-12	3.660E-12	1.955E-12	1.210E-12
WNW	1.149E-08	2.354E-09	6.144E-10	2.759E-10	1.561E-10	6.003E-11	1.737E-11	6.883E-12	3.676E-12	2.275E-12
NW	3.739E-08	7.658E-09	1.999E-09	8.979E-10	5.080E-10	1.953E-10	5.651E-11	2.240E-11	1.196E-11	7.403E-12
NNW	4.607E-08	9.437E-09	2.464E-09	1.106E-09	6.259E-10	2.407E-10	6.963E-11	2.760E-11	1.474E-11	9.122E-12
N	6.295E-08	1.289E-08	3.366E-09	1.512E-09	8.553E-10	3.289E-10	9.515E-11	3.771E-11	2.014E-11	1.246E-11
NNE	2.527E-08	5.177E-09	1.351E-09	6.070E-10	3.434E-10	1.320E-10	3.820E-11	1.514E-11	8.085E-12	5.004E-12
NE	1.378E-08	2.822E-09	7.368E-10	3.309E-10	1.872E-10	7.199E-11	2.083E-11	8.255E-12	4.408E-12	2.728E-12
ENE	1.004E-08	2.056E-09	5.367E-10	2.410E-10	1.364E-10	5.244E-11	1.517E-11	6.012E-12	3.211E-12	1.987E-12
E	9.854E-09	2.018E-09	5.269E-10	2.366E-10	1.339E-10	5.148E-11	1.489E-11	5.903E-12	3.152E-12	1.951E-12
ESE	1.815E-08	3.718E-09	9.705E-10	4.359E-10	2.466E-10	9.483E-11	2.743E-11	1.087E-11	5.806E-12	3.594E-12
SE	3.010E-08	6.165E-09	1.610E-09	7.229E-10	4.089E-10	1.573E-10	4.550E-11	1.803E-11	9.629E-12	5.960E-12
SSE	4.834E-08	9.901E-09	2.585E-09	1.161E-09	6.567E-10	2.526E-10	7.306E-11	2.896E-11	1.546E-11	9.571E-12

B150

VENTS GROUND LEVEL RELEASES - JUL-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q	X/Q	X/Q	D/Q
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(PER SQ.METER)
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	8.756E-06	8.726E-06	7.766E-06	3.531E-08
A	SITE BOUNDARY	SSW	0.82	1327.	3.344E-06	3.333E-06	2.961E-06	1.420E-08
A	SITE BOUNDARY	SW	0.98	1569.	1.376E-06	1.370E-06	1.205E-06	5.869E-09
A	SITE BOUNDARY	WSW	0.93	1489.	1.157E-06	1.154E-06	1.017E-06	5.636E-09
A	SITE BOUNDARY	W	0.91	1468.	7.686E-07	7.660E-07	6.762E-07	3.768E-09
A	SITE BOUNDARY	WNW	0.94	1509.	1.291E-06	1.286E-06	1.134E-06	6.597E-09
A	SITE BOUNDARY	NW	0.81	1307.	5.382E-06	5.367E-06	4.770E-06	3.124E-08
A	SITE BOUNDARY	NNW	0.69	1106.	1.487E-05	1.482E-05	1.330E-05	5.459E-08
A	SITE BOUNDARY	N	0.67	1086.	2.028E-05	2.022E-05	1.816E-05	7.691E-08
A	SITE BOUNDARY	NNE	0.60	965.	1.008E-05	1.005E-05	9.088E-06	3.742E-08
A	SITE BOUNDARY	NE	0.62	1005.	6.250E-06	6.231E-06	5.620E-06	1.917E-08
A	SITE BOUNDARY	ENE	0.59	945.	4.824E-06	4.811E-06	4.357E-06	1.538E-08
A	SITE BOUNDARY	E	0.53	845.	4.957E-06	4.945E-06	4.510E-06	1.813E-08
A	SITE BOUNDARY	ESE	0.54	865.	6.766E-06	6.751E-06	6.147E-06	3.215E-08
A	SITE BOUNDARY	SE	0.65	1046.	8.153E-06	8.131E-06	7.317E-06	3.917E-08
A	SITE BOUNDARY	SSE	0.81	1307.	8.213E-06	8.187E-06	7.278E-06	4.039E-08
A	NEAR. RESIDENCE	SW	1.40	2253.	5.889E-07	5.855E-07	5.021E-07	2.344E-09
A	NEAR. RESIDENCE	WSW	1.30	2092.	5.162E-07	5.137E-07	4.428E-07	2.366E-09
A	NEAR. RESIDENCE	W	1.00	1609.	6.153E-07	6.130E-07	5.381E-07	2.972E-09
A	NEAR. RESIDENCE	WNW	1.60	2575.	3.798E-07	3.773E-07	3.202E-07	1.713E-09
A	NEAR. RESIDENCE	NW	0.90	1448.	4.177E-06	4.164E-06	3.678E-06	2.389E-08
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.634E-06	1.620E-06	1.356E-06	4.517E-09
A	NEAR. RESIDENCE	N	3.00	4828.	8.953E-07	8.826E-07	7.083E-07	2.103E-09
A	NEAR. RESIDENCE	NNE	2.70	4345.	4.494E-07	4.436E-07	3.598E-07	1.077E-09
A	NEAR. RESIDENCE	ENE	1.70	2736.	5.206E-07	5.163E-07	4.364E-07	1.289E-09
A	NEAR. RESIDENCE	E	1.80	2897.	4.128E-07	4.094E-07	3.444E-07	1.101E-09
A	NEAR. RESIDENCE	ESE	2.40	3863.	3.068E-07	3.037E-07	2.488E-07	1.019E-09
A	NEAR. RESIDENCE	SE	2.20	3541.	5.954E-07	5.897E-07	4.872E-07	2.076E-09
A	NEAREST COW	S	10.50	16899.	6.009E-08	5.726E-08	3.948E-08	1.075E-10
A	NEAREST GARDEN	SW	1.40	2253.	5.889E-07	5.855E-07	5.021E-07	2.344E-09
A	NEAREST GARDEN	WSW	1.30	2092.	5.162E-07	5.137E-07	4.428E-07	2.366E-09
A	NEAREST GARDEN	WNW	2.40	3863.	1.606E-07	1.590E-07	1.303E-07	6.451E-10
A	NEAREST GARDEN	NW	2.70	4345.	3.761E-07	3.724E-07	3.013E-07	1.594E-09
A	NEAREST GARDEN	NNW	1.90	3058.	1.634E-06	1.620E-06	1.356E-06	4.517E-09
A	NEAREST GARDEN	N	3.00	4828.	8.953E-07	8.826E-07	7.083E-07	2.103E-09
A	NEAREST GARDEN	NNE	2.70	4345.	4.494E-07	4.436E-07	3.598E-07	1.077E-09
A	NEAREST GARDEN	ENE	1.70	2736.	5.206E-07	5.163E-07	4.364E-07	1.289E-09
A	NEAREST GARDEN	E	1.80	2897.	4.128E-07	4.094E-07	3.444E-07	1.101E-09
A	NEAREST GARDEN	ESE	2.40	3863.	3.068E-07	3.037E-07	2.488E-07	1.019E-09
A	NEAREST GARDEN	SE	2.20	3541.	5.954E-07	5.897E-07	4.872E-07	2.076E-09

Atmospheric Diffusion Estimates

Ground Level Releases

January-December 1992

VENTS GROUND LEVEL RELEASES - JAN-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.885E-05	1.955E-05	1.041E-05	5.207E-06	2.895E-06	1.836E-06	7.207E-07	5.04E-07	3.500E-07	2.935E-07	2.369E-07
SSW	2.509E-05	8.543E-06	4.545E-06	2.263E-06	8.992E-07	4.834E-07	2.508E-07	1.219E-07	1.575E-07	1.222E-07	9.855E-08
SW	1.548E-05	5.241E-06	2.772E-06	1.378E-06	5.454E-07	2.823E-07	1.838E-07	1.255E-07	9.44E-08	7.335E-08	5.899E-08
WSW	1.085E-05	3.740E-06	1.967E-06	9.702E-07	3.788E-07	2.011E-07	1.266E-07	8.664E-08	6.366E-08	4.94E-08	3.960E-08
W	9.518E-06	3.223E-06	1.692E-06	8.355E-07	3.271E-07	1.741E-07	1.089E-07	7.522E-08	5.594E-08	4.301E-08	3.450E-08
WNW	1.433E-05	4.876E-06	2.557E-06	1.262E-06	4.976E-07	2.661E-07	1.364E-07	7.550E-08	8.253E-08	6.655E-08	5.351E-08
NW	3.659E-05	6.512E-06	3.126E-06	1.523E-06	1.286E-06	6.919E-07	3.693E-07	3.035E-07	2.253E-07	1.755E-07	1.412E-07
NNW	6.565E-05	1.100E-05	5.505E-06	2.736E-06	2.263E-06	1.455E-06	9.97E-07	5.67E-07	4.234E-07	3.322E-07	2.709E-07
N	8.159E-05	2.581E-05	1.365E-05	6.865E-06	1.260E-06	1.566E-06	9.97E-07	7.095E-07	5.297E-07	4.15E-07	3.379E-07
NNE	4.399E-05	1.385E-05	7.358E-06	3.67E-06	1.260E-06	8.360E-07	5.364E-07	3.781E-07	2.839E-07	2.231E-07	1.812E-07
NE	2.881E-05	9.007E-06	4.746E-06	2.389E-06	9.870E-07	5.448E-07	2.90E-07	1.541E-07	1.861E-07	1.464E-07	1.191E-07
ENE	1.782E-05	5.669E-06	3.017E-06	1.521E-06	6.232E-07	3.420E-07	1.850E-07	1.156E-07	1.56E-07	9.68E-08	7.358E-08
E	1.485E-05	4.814E-06	2.637E-06	1.344E-06	5.43E-07	2.962E-07	1.855E-07	1.130E-07	9.89E-08	7.698E-08	6.224E-08
ESE	1.968E-05	6.562E-06	3.514E-06	1.763E-06	7.884E-07	3.756E-07	2.42E-07	1.60E-07	1.25E-07	9.86E-08	7.968E-08
SE	3.672E-05	1.194E-05	6.381E-06	3.211E-06	1.503E-06	7.107E-07	4.59E-07	3.13E-07	2.37E-07	1.85E-07	1.503E-07
SSE	5.530E-05	1.796E-05	9.484E-06	4.746E-06	1.925E-06	1.450E-06	6.61E-07	4.61E-07	3.50E-07	2.745E-07	2.223E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.967E-07	1.023E-07	6.692E-08	3.889E-08	2.59E-08	1.64E-08	1.544E-08	1.200E-08	1.071E-08	9.250E-09	8.078E-09
SSW	8.157E-08	4.196E-08	2.722E-08	1.565E-08	1.463E-08	7.991E-09	6.495E-09	5.04E-09	4.244E-09	3.653E-09	3.166E-09
SW	4.877E-08	2.496E-08	1.613E-08	9.229E-09	6.243E-09	4.42E-09	3.60E-09	2.948E-09	2.47E-09	2.115E-09	1.840E-09
WSW	3.264E-08	1.654E-08	1.062E-08	6.021E-09	4.051E-09	2.866E-09	2.32E-09	1.835E-09	1.58E-09	1.352E-09	1.174E-09
W	2.847E-08	1.447E-08	9.313E-09	5.305E-09	3.586E-09	2.454E-09	2.00E-09	1.62E-09	1.48E-09	1.213E-09	1.056E-09
NNW	4.423E-08	2.265E-08	1.466E-08	8.400E-09	5.935E-09	4.23E-09	3.35E-09	2.71E-09	2.24E-09	1.941E-09	1.691E-09
NW	1.169E-07	6.023E-08	3.912E-08	2.253E-08	1.532E-08	1.39E-08	8.96E-09	7.56E-09	6.13E-09	5.259E-09	4.586E-09
NNW	2.256E-07	1.195E-07	7.910E-08	4.676E-08	3.434E-08	2.434E-08	1.93E-08	1.591E-08	1.34E-08	1.161E-08	1.018E-08
N	2.619E-07	1.493E-07	9.862E-08	5.839E-08	4.136E-08	3.07E-08	2.40E-08	1.93E-08	1.67E-08	1.444E-08	1.268E-08
NNE	9.512E-07	8.004E-08	5.297E-08	3.129E-08	2.137E-08	1.80E-08	1.22E-08	1.03E-08	8.98E-09	7.75E-09	6.796E-09
NE	1.942E-08	5.280E-08	3.502E-08	2.675E-08	1.57E-08	1.803E-08	8.62E-09	7.08E-09	5.99E-09	5.17E-09	4.540E-09
ENE	6.131E-08	3.232E-08	2.135E-08	1.255E-08	6.645E-09	5.489E-09	5.49E-09	4.24E-09	3.56E-09	2.972E-09	2.690E-09
E	5.172E-08	2.694E-08	1.762E-08	1.024E-08	6.997E-09	5.217E-09	4.19E-09	3.31E-09	2.82E-09	2.42E-09	2.16E-09
ESE	6.610E-08	3.428E-08	2.236E-08	1.295E-08	8.827E-09	5.172E-09	5.17E-09	4.22E-09	3.55E-09	3.048E-09	2.659E-09
SE	1.250E-07	6.536E-08	4.288E-08	2.503E-08	1.716E-08	1.83E-08	1.03E-08	8.35E-09	6.99E-09	6.016E-09	5.258E-09
SSE	1.849E-07	9.678E-08	6.557E-08	3.717E-08	2.552E-08	1.911E-08	1.50E-08	1.29E-08	1.045E-08	8.991E-09	7.865E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT											
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	1.013E-05	2.360E-06	7.945E-07	3.807E-07	2.387E-07	1.076E-07	3.65E-08	1.996E-08	1.284E-08	9.244E-09	
SSW	4.419E-06	1.017E-06	3.153E-07	1.596E-07	9.931E-08	4.421E-08	1.599E-08	7.94E-09	5.07E-09	3.460E-09	
SW	2.781E-06	6.179E-07	1.902E-07	9.586E-08	5.944E-08	2.433E-08	9.436E-09	4.65E-09	2.95E-09	2.14E-09	
WSW	1.918E-06	4.313E-07	1.302E-07	6.487E-08	3.99E-08	1.790E-08	6.167E-09	3.00E-09	1.90E-09	1.35E-09	
W	1.652E-06	3.721E-07	1.28E-07	5.639E-08	3.47E-08	1.50E-08	5.432E-09	2.672E-09	1.60E-09	1.24E-09	
WNW	2.497E-06	5.646E-07	1.730E-07	8.703E-08	5.394E-08	2.389E-08	8.588E-09	4.251E-09	2.710E-09	1.944E-09	
NW	6.347E-06	1.455E-06	4.514E-07	2.289E-07	1.42E-07	6.345E-08	2.302E-08	1.144E-08	7.38E-09	5.24E-09	
NNW	1.077E-05	2.531E-06	8.249E-07	4.289E-07	2.72E-07	1.21E-07	4.754E-08	2.497E-08	1.59E-08	1.13E-08	
N	1.33E-05	3.159E-06	1.079E-06	5.360E-07	3.40E-07	1.53E-07	5.936E-08	3.052E-08	1.98E-08	1.48E-08	
NNE	7.167E-06	1.700E-06	5.350E-07	2.877E-07	1.82E-07	8.81E-08	3.636E-08	1.636E-08	1.064E-08	7.74E-09	
NE	4.645E-06	1.182E-06	3.611E-07	1.865E-07	1.199E-07	5.56E-08	2.108E-08	1.088E-08	7.105E-09	5.14E-09	
ENE	2.944E-06	6.978E-07	2.258E-07	1.171E-07	7.419E-08	3.380E-08	1.276E-08	6.52E-09	4.25E-09	3.07E-09	
E	3.41E-06	6.17E-07	1.946E-07	9.85E-08	6.27E-08	2.81E-08	1.044E-08	5.248E-09	3.37E-09	2.40E-09	
ESE	5.41E-06	7.984E-07	2.513E-07	1.283E-07	8.02E-08	3.65E-08	1.321E-08	6.13E-09	4.24E-09	3.05E-09	
SE	6.208E-06	1.464E-06	4.675E-07	2.405E-07	1.514E-07	6.862E-08	2.550E-08	1.291E-08	8.38E-09	6.05E-09	
SSE	9.262E-06	2.163E-06	6.906E-07	3.555E-07	2.235E-07	1.016E-07	3.786E-08	1.922E-08	1.244E-08	9.04E-09	

VENTS GROUND LEVEL RELEASES - JAN-DEC 1992  
2,260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE		CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES									
SECTOR		0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	5.000	5.500	6.000	6.500	7.000	7.500	8.000	8.500	9.000
S		5.870E-05	1.951E-05	1.037E-05	5.184E-06	2.601E-06	1.155E-06	7.155E-07	4.976E-07	3.694E-07	2.877E-07	2.320E-07	1.947E-07	1.681E-07	1.472E-07	1.304E-07	1.172E-07	1.071E-07	9.947E-08	9.301E-08	8.747E-08
SSW		5.506E-05	1.852E-05	1.029E-05	5.052E-06	2.589E-06	1.125E-06	7.012E-07	4.880E-07	3.602E-07	2.785E-07	2.228E-07	1.855E-07	1.589E-07	1.380E-07	1.212E-07	1.080E-07	9.79E-08	9.047E-08	8.493E-08	7.939E-08
SW		1.546E-05	5.229E-06	2.782E-06	1.561E-06	8.635E-07	4.895E-07	2.895E-07	1.616E-07	9.249E-08	5.255E-08	3.066E-08	1.816E-08	1.055E-08	6.046E-09	3.466E-09	2.031E-09	1.181E-09	6.866E-10	4.046E-10	2.406E-10
WSW		1.084E-05	3.732E-06	1.961E-06	1.061E-06	6.032E-07	3.355E-07	1.955E-07	1.127E-07	6.432E-08	3.742E-08	2.152E-08	1.243E-08	7.432E-09	4.362E-09	2.552E-09	1.512E-09	8.822E-10	5.252E-10	3.082E-10	1.812E-10
W		9.509E-06	3.217E-06	1.688E-06	9.549E-07	5.257E-07	2.966E-07	1.654E-07	9.466E-08	5.322E-08	3.032E-08	1.742E-08	1.012E-08	5.912E-09	3.462E-09	2.032E-09	1.212E-09	7.122E-10	4.252E-10	2.502E-10	1.482E-10
WNW		1.431E-05	4.867E-06	2.549E-06	1.327E-06	7.274E-07	4.046E-07	2.246E-07	1.252E-07	7.042E-08	3.942E-08	2.242E-08	1.252E-08	7.042E-09	3.942E-09	2.242E-09	1.252E-09	7.042E-10	3.942E-10	2.242E-10	1.252E-10
NW		3.655E-05	1.230E-05	6.495E-06	3.224E-06	1.678E-06	8.67E-07	4.452E-07	2.252E-07	1.162E-07	6.042E-08	3.162E-08	1.642E-08	8.522E-09	4.422E-09	2.222E-09	1.122E-09	5.722E-10	2.922E-10	1.522E-10	7.822E-11
NNW		6.556E-05	2.091E-05	1.096E-05	5.478E-06	2.647E-06	1.352E-06	7.042E-07	3.742E-07	1.942E-07	1.012E-07	5.322E-08	2.822E-08	1.482E-08	7.822E-09	4.122E-09	2.122E-09	1.082E-09	5.622E-10	2.922E-10	1.522E-10
N		8.148E-05	2.575E-05	1.360E-05	6.832E-06	3.585E-06	1.885E-06	9.842E-07	5.142E-07	2.742E-07	1.442E-07	7.622E-08	4.022E-08	2.122E-08	1.122E-08	5.922E-09	3.122E-09	1.622E-09	8.422E-10	4.422E-10	2.322E-10
NNE		4.394E-05	1.382E-05	7.311E-06	3.679E-06	1.908E-06	1.008E-06	5.242E-07	2.742E-07	1.442E-07	7.622E-08	4.022E-08	2.122E-08	1.122E-08	5.922E-09	3.122E-09	1.622E-09	8.422E-10	4.422E-10	2.322E-10	1.222E-10
ENE		2.877E-05	8.984E-06	4.728E-06	2.376E-06	1.214E-06	6.366E-07	3.366E-07	1.766E-07	9.266E-08	4.966E-08	2.666E-08	1.406E-08	7.466E-09	3.966E-09	2.066E-09	1.066E-09	5.566E-10	2.966E-10	1.566E-10	8.066E-11
E		1.780E-05	5.655E-06	3.006E-06	1.514E-06	7.922E-07	4.222E-07	2.222E-07	1.182E-07	6.222E-08	3.322E-08	1.722E-08	9.222E-09	4.822E-09	2.522E-09	1.322E-09	6.822E-10	3.622E-10	1.922E-10	1.022E-10	5.322E-11
ESE		1.484E-05	4.803E-06	2.628E-06	1.338E-06	7.042E-07	3.742E-07	1.942E-07	1.012E-07	5.322E-08	2.822E-08	1.482E-08	7.822E-09	4.122E-09	2.122E-09	1.122E-09	5.722E-10	2.922E-10	1.522E-10	7.822E-11	4.022E-11
SE		1.966E-05	6.549E-06	3.503E-06	1.756E-06	9.242E-07	4.842E-07	2.542E-07	1.342E-07	7.042E-08	3.742E-08	1.942E-08	1.012E-08	5.322E-09	2.822E-09	1.482E-09	7.822E-10	4.122E-10	2.122E-10	1.122E-10	5.722E-11
SSE		3.667E-05	1.192E-05	6.359E-06	3.197E-06	1.642E-06	8.622E-07	4.522E-07	2.322E-07	1.222E-07	6.422E-08	3.422E-08	1.822E-08	9.622E-09	5.022E-09	2.622E-09	1.322E-09	6.822E-10	3.622E-10	1.922E-10	1.022E-10
		5.523E-05	1.792E-05	9.453E-06	4.725E-06	2.494E-06	1.312E-06	6.813E-07	3.613E-07	1.949E-07	1.040E-07	5.613E-08	2.949E-08	1.549E-08	8.049E-09	4.249E-09	2.249E-09	1.149E-09	5.949E-10	3.149E-10	1.649E-10

ANNUAL AVERAGE		CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES									
BEARING		5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	55.000	60.000	65.000	70.000	75.000	80.000	85.000	90.000	95.000
S		1.921E-07	9.875E-08	6.379E-08	3.618E-08	2.044E-08	1.150E-08	6.533E-09	3.708E-09	2.133E-09	1.208E-09	6.881E-10	3.931E-10	2.208E-10	1.258E-10	7.041E-11	4.041E-11	2.281E-11	1.281E-11	7.241E-12	4.041E-12
SSW		7.959E-08	4.043E-08	2.590E-08	1.452E-08	8.122E-09	4.657E-09	2.657E-09	1.507E-09	8.522E-10	4.822E-10	2.722E-10	1.552E-10	8.722E-11	4.922E-11	2.772E-11	1.572E-11	8.822E-12	4.972E-12	2.772E-12	1.572E-12
SW		4.758E-08	2.404E-08	1.534E-08	8.553E-09	4.853E-09	2.753E-09	1.553E-09	8.753E-10	4.953E-10	2.753E-10	1.553E-10	8.753E-11	4.953E-11	2.753E-11	1.553E-11	8.753E-12	4.953E-12	2.753E-12	1.553E-12	8.753E-13
WSW		1.95E-08	1.601E-08	1.017E-08	5.635E-09	3.207E-09	1.878E-09	1.078E-09	6.128E-10	3.528E-10	2.028E-10	1.178E-10	6.728E-11	3.828E-11	2.178E-11	1.278E-11	7.228E-12	4.128E-12	2.328E-12	1.328E-12	7.728E-13
W		2.788E-08	1.402E-08	8.923E-09	4.970E-09	2.866E-09	1.626E-09	9.266E-10	5.266E-10	3.026E-10	1.726E-10	9.826E-11	5.626E-11	3.226E-11	1.826E-11	1.026E-11	5.826E-12	3.326E-12	1.926E-12	1.126E-12	6.426E-13
NNW		4.338E-08	2.193E-08	1.403E-08	7.862E-09	4.410E-09	2.510E-09	1.410E-09	7.910E-10	4.410E-10	2.510E-10	1.410E-10	7.910E-11	4.410E-11	2.510E-11	1.410E-11	7.910E-12	4.410E-12	2.510E-12	1.410E-12	7.910E-13
NW		1.144E-07	5.844E-08	3.756E-08	2.188E-08	1.248E-08	7.148E-09	4.148E-09	2.348E-09	1.348E-09	7.648E-10	4.348E-10	2.448E-10	1.348E-10	7.648E-11	4.348E-11	2.448E-11	1.348E-11	7.648E-12	4.348E-12	2.448E-12
NNW		2.199E-07	1.150E-07	7.515E-08	4.328E-08	2.517E-08	1.457E-08	8.327E-09	4.727E-09	2.727E-09	1.527E-09	8.627E-10	4.927E-10	2.827E-10	1.627E-10	9.127E-11	5.127E-11	2.927E-11	1.627E-11	9.127E-12	5.127E-12
N		2.747E-07	1.436E-07	9.380E-08	5.398E-08	3.135E-08	1.835E-08	1.035E-08	5.835E-09	3.335E-09	1.935E-09	1.135E-09	6.335E-10	3.635E-10	2.135E-10	1.235E-10	6.835E-11	3.935E-11	2.235E-11	1.235E-11	6.835E-12
NNE		1.477E-07	7.705E-08	5.034E-08	2.899E-08	1.654E-08	9.434E-09	5.334E-09	3.034E-09	1.734E-09	9.834E-10	5.634E-10	3.234E-10	1.834E-10	1.034E-10	5.834E-11	3.334E-11	1.934E-11	1.134E-11	6.334E-12	3.534E-12
NE		9.674E-08	5.068E-08	3.315E-08	1.911E-08	1.088E-08	6.148E-09	3.448E-09	1.948E-09	1.148E-09	6.448E-10	3.648E-10	2.048E-10	1.148E-10	6.448E-11	3.648E-11	2.048E-11	1.148E-11	6.448E-12	3.648E-12	2.048E-12
ENE		5.978E-08	3.111E-08	2.026E-08	1.162E-08	6.788E-09	3.888E-09	2.188E-09	1.288E-09	7.188E-10	4.088E-10	2.288E-10	1.288E-10	7.188E-11	4.088E-11	2.288E-11	1.288E-11	7.188E-12	4.088E-12	2.288E-12	1.288E-12
E		5.050E-08	2.599E-08	1.680E-08	9.529E-09	5.358E-09	3.058E-09	1.758E-09	9.858E-10	5.458E-10	3.158E-10	1.758E-10	9.858E-11	5.458E-11	3.158E-11	1.758E-11	9.858E-12	5.458E-12	3.158E-12	1.758E-12	9.858E-13
ESE		6.468E-08	3.316E-08	2.130E-08	1.210E-08	6.868E-09	3.868E-09	2.168E-09	1.268E-09	7.168E-10	4.068E-10	2.268E-10	1.268E-10	7.168E-11	4.068E-11	2.268E-11	1.268E-11	7.168E-12	4.068E-12	2.268E-12	1.268E-12
SE		1.220E-07	6.298E-08	4.080E-08	2.322E-08	1.352E-08	7.622E-09	4.322E-09	2.422E-09	1.322E-09	7.422E-10	4.222E-10	2.322E-10	1.322E-10	7.422E-11	4.222E-11	2.322E-11	1.322E-11	7.422E-12	4.222E-12	2.322E-12
SSE		1.804E-07	9.329E-08	6.050E-08	3.449E-08	2.049E-08	1.186E-08	6.699E-09	3.899E-09	2.249E-09	1.299E-09	7.249E-10	4.049E-10	2.249E-10	1.299E-10	7.249E-11	4.049E-11	2.249E-11	1.299E-11	7.249E-12	4.049E-12

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
		3-4	4-5	5-10	10-20	20-30	30-40	40-50			
DIRECTION	5-1	2-3	1-2	1-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30
FROM SITE	1.040E-05	2.346E-06	1.011E-06	4.011E-07	1.611E-07	6.111E-08	2.311E-08	8.611E-09	3.211E-09	1.211E-09	4.511E-10
S	4.405E-06	1.011E-06	4.011E-07	1.611E-07	6.111E-08	2.311E-08	8.611E-09	3.211E-09	1.211E-09	4.511E-10	1.611E-10
SSW	2.602E-06	6.139E-07	2.389E-07	9.289E-08	3.489E-08	1.289E-08	4.789E-09	1.789E-09	6.489E-10	2.389E-10	8.789E-11
SW	1.915E-06	4.289E-07	1.689E-07	6.289E-08	2.389E-08	8.789E-09	3.289E-09	1.189E-09	4.389E-10	1.589E-10	5.689E-11
WSW	1.647E										



VENTS GROUND LEVEL RELEASES - JAN-DEC 1992  
8.000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	5.568E-05	1.784E-05	9.267E-06	4.553E-06	1.776E-06	9.380E-07	5.819E-07	3.985E-07	2.916E-07	2.238E-07	1.781E-07
SSW	2.374E-05	7.796E-06	4.046E-06	1.978E-06	7.621E-07	3.992E-07	2.461E-07	1.676E-07	1.221E-07	9.340E-08	7.405E-08
SW	1.465E-05	4.783E-06	2.468E-06	1.204E-06	4.623E-07	2.414E-07	1.484E-07	1.009E-07	7.335E-08	5.600E-08	4.433E-08
WSW	1.027E-05	3.413E-06	1.751E-06	8.483E-07	3.212E-07	1.662E-07	1.014E-07	6.857E-08	4.964E-08	3.774E-08	2.977E-08
W	9.005E-06	2.942E-06	1.507E-06	7.306E-07	2.774E-07	1.438E-07	8.796E-08	5.955E-08	4.316E-08	3.286E-08	2.595E-08
WNW	1.355E-05	4.450E-06	2.277E-06	1.104E-06	4.219E-07	2.198E-07	1.350E-07	9.168E-08	6.664E-08	5.085E-08	4.024E-08
NW	3.462E-05	1.125E-05	5.799E-06	2.830E-06	1.091E-06	5.717E-07	3.525E-07	2.403E-07	1.751E-07	1.340E-07	1.062E-07
NNW	6.211E-05	1.913E-05	9.793E-06	4.812E-06	1.918E-06	1.028E-06	6.452E-07	4.458E-07	3.287E-07	2.539E-07	2.031E-07
N	7.719E-05	2.355E-05	1.215E-05	6.001E-06	2.395E-06	1.285E-06	8.061E-07	5.570E-07	4.107E-07	3.173E-07	2.538E-07
NNE	4.162E-05	1.264E-05	6.532E-06	3.231E-06	1.268E-06	6.903E-07	4.330E-07	2.991E-07	2.205E-07	1.703E-07	1.362E-07
NE	2.725E-05	8.219E-06	4.225E-06	2.088E-06	8.364E-07	4.498E-07	2.828E-07	1.957E-07	1.444E-07	1.117E-07	8.941E-08
ENE	1.686E-05	5.173E-06	2.685E-06	1.330E-06	5.282E-07	2.824E-07	1.768E-07	1.219E-07	8.972E-08	6.920E-08	5.528E-08
E	1.405E-05	4.393E-06	2.348E-06	1.175E-06	4.613E-07	2.446E-07	1.521E-07	1.044E-07	7.649E-08	5.877E-08	4.679E-08
ESE	1.862E-05	5.989E-06	3.129E-06	1.542E-06	6.005E-07	3.169E-07	1.964E-07	1.344E-07	9.827E-08	7.537E-08	5.991E-08
SE	3.474E-05	1.090E-05	5.680E-06	2.807E-06	1.105E-06	5.869E-07	3.656E-07	2.512E-07	1.843E-07	1.418E-07	1.130E-07
SSE	5.232E-05	1.639E-05	8.444E-06	4.149E-06	1.632E-06	8.671E-07	5.402E-07	3.711E-07	2.724E-07	2.096E-07	1.670E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.456E-07	7.141E-08	4.435E-08	2.369E-08	1.510E-08	1.060E-08	7.907E-09	6.152E-09	4.936E-09	4.054E-09	3.393E-09
SSW	6.038E-08	2.927E-08	1.803E-08	9.526E-09	6.031E-09	4.211E-09	3.128E-09	2.425E-09	1.939E-09	1.589E-09	1.326E-09
SW	3.610E-08	1.741E-08	1.068E-08	5.615E-09	3.541E-09	2.465E-09	1.827E-09	1.414E-09	1.129E-09	9.232E-10	7.697E-10
WSW	2.418E-08	1.155E-08	7.046E-09	3.674E-09	2.306E-09	1.601E-09	1.183E-09	9.139E-10	7.287E-10	5.954E-10	4.960E-10
W	2.109E-08	1.011E-08	6.181E-09	3.238E-09	2.042E-09	1.423E-09	1.055E-09	8.169E-10	6.529E-10	5.345E-10	4.460E-10
WNW	3.277E-08	1.582E-08	9.724E-09	5.125E-09	3.242E-09	2.263E-09	1.681E-09	1.303E-09	1.043E-09	8.545E-10	7.137E-10
NW	8.667E-08	4.210E-08	2.598E-08	1.377E-08	8.737E-09	6.113E-09	4.550E-09	3.534E-09	2.831E-09	2.323E-09	1.942E-09
NNW	1.669E-07	8.331E-08	5.237E-08	2.844E-08	1.833E-08	1.298E-08	9.746E-09	7.624E-09	6.146E-09	5.069E-09	4.256E-09
N	2.086E-07	1.041E-07	6.541E-08	3.550E-08	2.287E-08	1.618E-08	1.215E-08	9.498E-09	7.653E-09	6.309E-09	5.296E-09
NNE	1.119E-07	5.582E-08	3.507E-08	1.904E-08	1.227E-08	8.682E-09	6.519E-09	5.099E-09	4.109E-09	3.389E-09	2.845E-09
NE	7.354E-08	3.679E-08	2.316E-08	1.260E-08	8.131E-09	5.759E-09	4.326E-09	3.385E-09	2.729E-09	2.251E-09	1.890E-09
ENE	4.537E-08	2.254E-08	1.412E-08	7.631E-09	4.902E-09	3.460E-09	2.593E-09	2.025E-09	1.630E-09	1.342E-09	1.126E-09
E	3.829E-08	1.880E-08	1.168E-08	6.238E-09	3.975E-09	2.789E-09	2.079E-09	1.617E-09	1.296E-09	1.064E-09	8.902E-10
ESE	4.897E-08	2.394E-08	1.483E-08	7.896E-09	5.022E-09	3.519E-09	2.622E-09	2.037E-09	1.633E-09	1.340E-09	1.121E-09
SE	9.253E-08	4.559E-08	2.840E-08	1.523E-08	9.735E-09	6.846E-09	5.114E-09	3.983E-09	3.198E-09	2.629E-09	2.201E-09
SSE	1.368E-07	6.752E-08	4.211E-08	2.262E-08	1.448E-08	1.020E-08	7.625E-09	5.945E-09	4.778E-09	3.930E-09	3.293E-09

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

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	9.078E-06	2.020E-06	6.035E-07	2.963E-07	1.796E-07	7.588E-08	2.446E-08	1.072E-08	6.190E-09	4.070E-09
SSW	3.960E-06	8.710E-07	2.555E-07	1.242E-07	7.472E-08	3.119E-08	9.863E-09	4.263E-09	2.441E-09	1.595E-09
SW	2.421E-06	5.290E-07	1.542E-07	7.460E-08	4.474E-08	1.857E-08	5.820E-09	2.497E-09	1.423E-09	9.272E-10
WSW	1.719E-06	3.694E-07	1.056E-07	5.052E-08	3.006E-08	1.236E-08	3.816E-09	1.622E-09	9.203E-10	5.981E-10
W	1.481E-06	3.187E-07	9.149E-08	4.392E-08	2.620E-08	1.080E-08	3.360E-09	1.441E-09	8.225E-10	5.368E-10
WNW	2.238E-06	4.836E-07	1.403E-07	6.778E-08	4.062E-08	1.688E-08	5.310E-09	2.291E-09	1.312E-09	8.581E-10
NW	5.690E-06	1.247E-06	3.661E-07	1.781E-07	1.072E-07	4.484E-08	1.424E-08	6.187E-09	3.557E-09	2.333E-09
NNW	9.653E-06	2.166E-06	6.677E-07	3.337E-07	2.048E-07	8.814E-08	2.927E-08	1.311E-08	7.667E-09	5.087E-09
N	1.195E-05	2.703E-06	8.341E-07	4.169E-07	2.559E-07	1.101E-07	3.653E-08	1.635E-08	9.552E-09	6.332E-09
NNE	6.422E-06	1.454E-06	4.480E-07	2.238E-07	1.373E-07	5.986E-08	1.959E-08	8.773E-09	5.127E-09	3.401E-09
NE	4.163E-06	9.427E-07	2.925E-07	1.466E-07	9.014E-08	3.890E-08	1.296E-08	5.818E-09	3.404E-09	2.259E-09
ENE	2.636E-06	5.971E-07	1.830E-07	9.109E-08	5.573E-08	2.387E-08	7.860E-09	3.498E-09	2.037E-09	1.347E-09
E	2.281E-06	5.236E-07	1.577E-07	7.771E-08	4.719E-08	1.997E-08	6.441E-09	2.821E-09	1.627E-09	1.069E-09
ESE	3.059E-06	6.836E-07	2.037E-07	9.986E-08	6.044E-08	2.545E-08	8.160E-09	3.561E-09	2.050E-09	1.346E-09
SE	5.564E-06	1.253E-06	3.788E-07	1.872E-07	1.139E-07	4.838E-08	1.572E-08	6.924E-09	4.007E-09	2.639E-09
SSE	8.301E-06	1.851E-06	5.597E-07	2.767E-07	1.684E-07	7.163E-08	2.334E-08	1.031E-08	5.980E-09	3.945E-09

## VENTS GROUND LEVEL RELEASES - JAN-DEC 1992

CORRECTED FOR OPEN TERRAIN RECIRCULATION

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RELATIVE DEPOSITION PER UNIT AREA (MM<sup>3</sup>-2) AT FIXED POINTS BY DOWNWIND SECTORS

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DIRECTION FROM SITE	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.619E-07	8.856E-08	4.547E-08	2.162E-08	7.765E-09	3.851E-09	2.268E-09	1.485E-09	1.045E-09	7.743E-10	5.967E-10
SSW	1.102E-07	3.726E-08	1.913E-08	9.096E-09	3.267E-09	1.620E-09	9.541E-10	6.247E-10	4.396E-10	3.258E-10	2.511E-10
SW	6.540E-08	2.212E-08	1.135E-08	5.398E-09	1.939E-09	9.616E-10	5.662E-10	3.708E-10	2.609E-10	1.933E-10	1.490E-10
WSW	5.794E-08	1.959E-08	1.006E-08	4.783E-09	1.718E-09	8.520E-10	5.017E-10	3.285E-10	2.311E-10	1.713E-10	1.320E-10
W	5.685E-08	1.922E-08	9.870E-09	4.693E-09	1.686E-09	8.359E-10	4.922E-10	3.223E-10	2.268E-10	1.681E-10	1.295E-10
WNW	8.156E-08	2.758E-08	1.416E-08	6.733E-09	2.418E-09	1.199E-09	7.062E-10	4.624E-10	3.254E-10	2.411E-10	1.858E-10
NW	2.260E-07	7.643E-08	3.924E-08	1.866E-08	6.701E-09	3.323E-09	1.957E-09	1.281E-09	9.016E-10	6.682E-10	5.149E-10
NNW	2.508E-07	8.480E-08	4.354E-08	2.070E-08	7.435E-09	3.687E-09	2.171E-09	1.422E-09	1.006E-09	7.413E-10	5.713E-10
N	2.995E-07	1.013E-07	5.200E-08	2.472E-08	8.880E-09	4.404E-09	2.593E-09	1.698E-09	1.195E-09	8.854E-10	6.823E-10
NNE	1.501E-07	5.347E-08	2.746E-08	1.305E-08	4.689E-09	2.325E-09	1.369E-09	8.965E-10	6.308E-10	4.675E-10	3.603E-10
NE	8.999E-08	3.043E-08	1.562E-08	7.428E-09	2.668E-09	1.323E-09	7.791E-10	5.102E-10	3.590E-10	2.660E-10	2.050E-10
ENE	6.326E-08	2.139E-08	1.098E-08	5.222E-09	1.876E-09	9.302E-10	5.477E-10	3.586E-10	2.524E-10	1.870E-10	1.441E-10
E	5.885E-08	1.990E-08	1.022E-08	4.858E-09	1.745E-09	8.654E-10	5.096E-10	3.337E-10	2.348E-10	1.740E-10	1.341E-10
ESE	1.071E-07	3.623E-08	1.860E-08	8.845E-09	3.177E-09	1.576E-09	9.277E-10	6.074E-10	4.274E-10	3.168E-10	2.441E-10
SE	1.781E-07	6.023E-08	3.093E-08	1.470E-08	5.281E-09	2.619E-09	1.542E-09	1.010E-09	7.105E-10	5.266E-10	4.058E-10
SSE	2.814E-07	9.516E-08	4.886E-08	2.323E-08	8.344E-09	4.138E-09	2.436E-09	1.595E-09	1.123E-09	8.319E-10	6.411E-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	4.740E-10	2.106E-10	1.276E-10	6.447E-11	3.902E-11	2.616E-11	1.875E-11	1.408E-11	1.095E-11	8.743E-12	7.136E-12
SSW	1.994E-10	8.860E-11	5.367E-11	2.713E-11	1.642E-11	1.101E-11	7.888E-12	5.923E-12	4.605E-12	3.679E-12	3.003E-12
SW	1.184E-10	5.250E-11	3.185E-11	1.610E-11	9.744E-12	6.533E-12	4.681E-12	3.515E-12	2.733E-12	2.183E-12	1.782E-12
WSW	1.049E-10	4.659E-11	2.822E-11	1.426E-11	8.633E-12	5.789E-12	4.148E-12	3.115E-12	2.422E-12	1.934E-12	1.579E-12
W	1.029E-10	4.571E-11	2.769E-11	1.399E-11	8.470E-12	5.679E-12	4.069E-12	3.056E-12	2.376E-12	1.898E-12	1.549E-12
WNW	1.476E-10	6.558E-11	3.972E-11	2.008E-11	1.215E-11	8.148E-12	5.839E-12	4.384E-12	3.409E-12	2.723E-12	2.223E-12
NW	4.091E-10	1.817E-10	1.101E-10	5.564E-11	3.368E-11	2.258E-11	1.618E-11	1.215E-11	9.446E-12	7.545E-12	6.159E-12
NNW	4.538E-10	2.016E-10	1.221E-10	6.173E-11	3.736E-11	2.505E-11	1.795E-11	1.348E-11	1.048E-11	8.371E-12	6.833E-12
N	5.421E-10	2.488E-10	1.459E-10	7.373E-11	4.462E-11	2.992E-11	2.144E-11	1.610E-11	1.252E-11	9.999E-12	8.161E-12
NNE	2.862E-10	1.271E-10	7.702E-11	3.893E-11	2.356E-11	1.530E-11	1.132E-11	8.500E-12	6.609E-12	5.279E-12	4.309E-12
NE	1.629E-10	7.235E-11	4.383E-11	2.215E-11	1.341E-11	8.990E-12	6.442E-12	4.837E-12	3.761E-12	3.004E-12	2.452E-12
ENE	1.145E-10	5.086E-11	3.081E-11	1.557E-11	9.426E-12	6.320E-12	4.528E-12	3.400E-12	2.644E-12	2.112E-12	1.724E-12
E	1.065E-10	4.732E-11	2.866E-11	1.449E-11	8.769E-12	5.879E-12	4.213E-12	3.163E-12	2.460E-12	1.965E-12	1.604E-12
ESE	1.939E-10	8.615E-11	5.218E-11	2.638E-11	1.596E-11	1.070E-11	7.670E-12	5.759E-12	4.478E-12	3.577E-12	2.920E-12
SE	3.224E-10	1.432E-10	8.675E-11	4.385E-11	2.654E-11	1.779E-11	1.275E-11	9.574E-12	7.444E-12	5.946E-12	4.853E-12
SSE	5.093E-10	2.263E-10	1.371E-10	6.928E-11	4.193E-11	2.811E-11	2.014E-11	1.513E-11	1.176E-11	9.395E-12	7.668E-12

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RELATIVE DEPOSITION PER UNIT AREA (MM<sup>3</sup>-2) BY DOWNWIND SECTORS

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DIRECTION FROM SITE	1-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.445E-08	9.104E-09	2.377E-09	1.067E-09	6.039E-10	2.322E-10	6.718E-11	2.663E-11	1.422E-11	8.801E-12
SSW	1.870E-08	3.831E-09	1.000E-09	4.491E-10	2.541E-10	9.771E-11	2.827E-11	1.120E-11	5.983E-12	3.703E-12
SW	1.110E-08	2.273E-09	5.935E-10	2.665E-10	1.508E-10	5.799E-11	1.678E-11	6.649E-12	3.550E-12	2.198E-12
WSW	9.834E-09	2.014E-09	5.258E-10	2.362E-10	1.336E-10	5.138E-11	1.486E-11	5.891E-12	3.146E-12	1.947E-12
W	9.648E-09	1.976E-09	5.159E-10	2.317E-10	1.311E-10	5.041E-11	1.458E-11	5.780E-12	3.086E-12	1.910E-12
WNW	1.384E-08	2.835E-09	7.402E-10	3.324E-10	1.881E-10	7.232E-11	2.092E-11	8.292E-12	4.428E-12	2.741E-12
NW	3.836E-08	7.857E-09	2.051E-09	9.212E-10	5.211E-10	2.004E-10	5.798E-11	2.298E-11	1.227E-11	7.595E-12
NNW	4.256E-08	8.717E-09	2.276E-09	1.022E-09	5.782E-10	2.223E-10	6.432E-11	2.549E-11	1.361E-11	8.426E-12
N	5.083E-08	1.041E-08	2.718E-09	1.221E-09	6.905E-10	2.656E-10	7.682E-11	3.045E-11	1.626E-11	1.006E-11
NNE	2.684E-08	5.497E-09	1.435E-09	6.445E-10	3.646E-10	1.402E-10	4.056E-11	1.608E-11	8.585E-12	5.314E-12
NE	1.527E-08	3.128E-09	8.166E-10	3.668E-10	2.075E-10	7.979E-11	2.308E-11	9.149E-12	4.886E-12	3.024E-12
ENE	1.074E-08	2.199E-09	5.741E-10	2.578E-10	1.459E-10	5.609E-11	1.623E-11	6.432E-12	3.434E-12	2.126E-12
E	9.988E-09	2.046E-09	5.341E-10	2.399E-10	1.357E-10	5.218E-11	1.510E-11	5.983E-12	3.195E-12	1.978E-12
ESE	1.818E-08	3.725E-09	9.723E-10	4.367E-10	2.470E-10	9.500E-11	2.748E-11	1.089E-11	5.817E-12	3.601E-12
SE	3.023E-08	6.192E-09	1.616E-09	7.259E-10	4.107E-10	1.579E-10	4.569E-11	1.811E-11	9.670E-12	5.985E-12
SSE	4.776E-08	9.782E-09	2.554E-09	1.147E-09	6.488E-10	2.495E-10	7.218E-11	2.861E-11	1.528E-11	9.456E-12

VENTS GROUND LEVEL RELEASES - JAN-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q	X/Q	X/Q	D/Q
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	(PER SQ.METER)
					NO DECAY	2.260 DAY DECAY	8.060 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	8.940E-06	8.909E-06	7.929E-06	3.867E-08
A	SITE BOUNDARY	SSW	0.82	1327.	3.615E-06	3.601E-06	3.200E-06	1.501E-08
A	SITE BOUNDARY	SW	0.98	1569.	1.462E-06	1.455E-06	1.280E-06	5.761E-09
A	SITE BOUNDARY	WSW	0.93	1489.	1.171E-06	1.167E-06	1.029E-06	5.845E-09
A	SITE BOUNDARY	W	0.91	1468.	1.044E-06	1.041E-06	9.186E-07	5.950E-09
A	SITE BOUNDARY	WNW	0.94	1509.	1.473E-06	1.468E-06	1.294E-06	7.947E-09
A	SITE BOUNDARY	NW	0.81	1307.	5.374E-06	5.359E-06	4.763E-06	3.205E-08
A	SITE BOUNDARY	NNW	0.69	1106.	1.260E-05	1.256E-05	1.127E-05	5.042E-08
A	SITE BOUNDARY	N	0.67	1086.	1.604E-05	1.599E-05	1.437E-05	6.210E-08
A	SITE BOUNDARY	NNE	0.60	965.	1.038E-05	1.035E-05	9.364E-06	3.973E-08
A	SITE BOUNDARY	NE	0.62	1005.	6.294E-06	6.274E-06	5.660E-06	2.125E-08
A	SITE BOUNDARY	ENE	0.59	945.	4.394E-06	4.382E-06	3.969E-06	1.645E-08
A	SITE BOUNDARY	E	0.53	845.	4.445E-06	4.435E-06	4.044E-06	1.838E-08
A	SITE BOUNDARY	ESE	0.54	865.	5.846E-06	5.834E-06	5.312E-06	3.221E-08
A	SITE BOUNDARY	SE	0.65	1046.	7.932E-06	7.909E-06	7.118E-06	3.933E-08
A	SITE BOUNDARY	SSE	0.81	1307.	7.839E-06	7.811E-06	6.946E-06	3.990E-08
A	NEAR. RESIDENCE	SW	1.40	2253.	6.358E-07	6.316E-07	5.420E-07	2.300E-09
A	NEAR. RESIDENCE	WSW	1.30	2092.	5.244E-07	5.217E-07	4.498E-07	2.453E-09
A	NEAR. RESIDENCE	W	1.00	1609.	8.355E-07	8.324E-07	7.306E-07	4.693E-09
A	NEAR. RESIDENCE	WNW	1.60	2575.	4.315E-07	4.287E-07	3.638E-07	2.063E-09
A	NEAR. RESIDENCE	NW	0.90	1448.	4.171E-06	4.158E-06	3.673E-06	2.451E-08
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.383E-06	1.370E-06	1.147E-06	4.172E-09
A	NEAR. RESIDENCE	N	3.00	4828.	7.043E-07	6.937E-07	5.570E-07	1.698E-09
A	NEAR. RESIDENCE	NNE	2.70	4345.	4.622E-07	4.560E-07	3.700E-07	1.144E-09
A	NEAR. RESIDENCE	ENE	1.70	2736.	4.785E-07	4.745E-07	4.011E-07	1.379E-09
A	NEAR. RESIDENCE	E	1.80	2897.	3.690E-07	3.659E-07	3.078E-07	1.116E-09
A	NEAR. RESIDENCE	ESE	2.40	3863.	2.639E-07	2.613E-07	2.141E-07	1.021E-09
A	NEAR. RESIDENCE	SE	2.20	3541.	5.849E-07	5.789E-07	4.785E-07	2.085E-09
A	NEAREST COW	S	10.50	16899.	6.266E-08	5.958E-08	4.114E-08	1.177E-10
A	NEAREST GARDEN	SW	1.40	2253.	6.358E-07	6.316E-07	5.420E-07	2.300E-09
A	NEAREST GARDEN	WSW	1.30	2092.	5.244E-07	5.217E-07	4.498E-07	2.453E-09
A	NEAREST GARDEN	WNW	2.40	3863.	1.817E-07	1.799E-07	1.474E-07	7.771E-10
A	NEAREST GARDEN	NW	2.70	4345.	3.739E-07	3.700E-07	2.995E-07	1.635E-09
A	NEAREST GARDEN	NNW	1.90	3058.	1.383E-06	1.370E-06	1.147E-06	4.172E-09
A	NEAREST GARDEN	N	3.00	4828.	7.043E-07	6.937E-07	5.570E-07	1.698E-09
A	NEAREST GARDEN	NNE	2.70	4345.	4.622E-07	4.560E-07	3.700E-07	1.144E-09
A	NEAREST GARDEN	ENE	1.70	2736.	4.785E-07	4.745E-07	4.011E-07	1.379E-09
A	NEAREST GARDEN	E	1.80	2897.	3.690E-07	3.659E-07	3.078E-07	1.116E-09
A	NEAREST GARDEN	ESE	2.40	3863.	2.639E-07	2.613E-07	2.141E-07	1.021E-09
A	NEAREST GARDEN	SE	2.20	3541.	5.849E-07	5.789E-07	4.785E-07	2.085E-09



Atmospheric Diffusion Estimates

Elevated Releases

July-September 1992

ERP ELEVATED STACK RELEASES - JUL-SEP 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
SSW	2.899E-08	1.067E-07	1.481E-07	1.338E-07	1.14E-07	9.13E-08	7.58E-08	6.37E-08	5.35E-08	4.42E-08	3.68E-08
SSW	3.262E-10	3.502E-08	6.27E-08	6.667E-08	6.08E-08	4.28E-08	3.94E-08	3.57E-08	3.11E-08	2.71E-08	2.36E-08
WSW	3.079E-09	2.731E-08	5.089E-08	6.463E-08	1.158E-07	8.45E-08	6.49E-08	5.05E-08	4.11E-08	3.44E-08	2.93E-08
W	1.453E-10	1.624E-08	5.022E-08	8.235E-08	1.419E-07	9.27E-08	6.10E-08	4.96E-08	4.02E-08	3.21E-08	2.69E-08
NNW	1.217E-09	6.001E-08	1.463E-07	1.837E-07	1.804E-07	1.14E-07	7.98E-08	5.93E-08	4.62E-08	3.73E-08	3.03E-08
NNW	2.051E-08	1.163E-07	2.182E-07	2.921E-07	3.68E-07	2.25E-07	1.58E-07	1.19E-07	9.59E-08	7.62E-08	6.254E-08
NNW	1.571E-08	1.497E-07	2.221E-07	3.054E-07	3.887E-07	2.96E-07	1.94E-07	1.44E-07	1.12E-07	8.95E-08	7.350E-08
NNW	1.613E-07	2.265E-07	2.413E-07	2.413E-07	2.86E-07	2.83E-07	2.67E-07	2.35E-07	2.10E-07	1.66E-07	1.354E-07
N	1.718E-07	2.612E-07	2.406E-07	1.765E-07	1.71E-07	7.26E-08	7.94E-08	6.59E-08	5.45E-08	4.55E-08	3.83E-08
NNE	2.353E-08	9.170E-08	1.087E-07	8.992E-08	6.703E-08	4.62E-08	3.80E-08	3.10E-08	2.46E-08	1.94E-08	1.54E-08
NE	6.958E-09	3.092E-08	3.660E-08	3.322E-08	2.96E-08	2.48E-08	2.05E-08	1.70E-08	1.33E-08	1.03E-08	8.18E-09
ENE	3.883E-11	2.750E-09	6.253E-09	8.120E-09	9.52E-09	8.84E-09	7.79E-09	6.67E-09	5.79E-09	4.93E-09	4.17E-09
E	1.553E-10	1.079E-08	2.010E-08	2.071E-08	1.954E-08	1.704E-08	1.45E-08	1.24E-08	1.06E-08	9.30E-09	8.19E-09
ESE	3.024E-10	2.189E-08	3.705E-08	3.325E-08	2.665E-08	2.17E-08	1.73E-08	1.50E-08	1.27E-08	1.09E-08	9.40E-09
SE	3.185E-10	2.170E-08	4.156E-08	3.324E-08	2.659E-08	2.13E-08	1.72E-08	1.50E-08	1.27E-08	1.09E-08	9.40E-09
SSE	8.289E-09	5.428E-08	7.878E-08	8.946E-08	7.687E-08	6.62E-08	5.66E-08	4.75E-08	4.06E-08	3.45E-08	2.94E-08

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.287E-08	3.964E-08	2.553E-08	1.449E-08	9.94E-09	7.410E-09	5.79E-09	4.67E-09	3.89E-09	3.24E-09	2.878E-09
SSW	4.393E-08	3.454E-08	2.245E-08	1.290E-08	9.02E-09	6.72E-09	5.27E-09	4.26E-09	3.56E-09	3.04E-09	2.640E-09
SSW	2.819E-08	2.481E-08	1.661E-08	9.701E-09	7.25E-09	5.65E-09	4.67E-09	3.75E-09	3.16E-09	2.71E-09	2.369E-09
WSW	2.424E-08	1.701E-08	1.247E-08	7.915E-09	5.501E-09	3.98E-09	3.141E-09	2.59E-09	2.15E-09	1.844E-09	1.608E-09
W	2.633E-08	1.467E-08	1.085E-08	7.477E-09	4.284E-09	3.34E-09	2.73E-09	2.30E-09	1.97E-09	1.719E-09	1.51E-09
NNW	5.316E-08	2.992E-08	2.035E-08	1.258E-08	8.535E-09	6.38E-09	5.06E-09	4.17E-09	3.47E-09	2.96E-09	2.581E-09
NNW	6.228E-08	3.512E-08	2.412E-08	1.481E-08	1.007E-08	7.68E-09	5.98E-09	4.96E-09	4.12E-09	3.53E-09	3.077E-09
NNW	1.153E-07	6.498E-08	4.229E-08	2.439E-08	1.58E-08	1.22E-08	9.76E-09	7.98E-09	6.73E-09	5.83E-09	5.076E-09
N	3.561E-08	2.241E-08	1.855E-08	1.462E-08	1.193E-08	9.645E-09	7.86E-09	6.18E-09	5.17E-09	4.42E-09	3.845E-09
NNE	2.706E-08	3.925E-08	2.545E-08	1.463E-08	9.645E-09	7.374E-09	5.78E-09	4.70E-09	3.95E-09	3.39E-09	2.954E-09
NE	1.382E-08	2.292E-08	1.491E-08	8.602E-09	5.848E-09	4.34E-09	3.45E-09	2.84E-09	2.37E-09	2.03E-09	1.77E-09
ENE	4.894E-09	8.977E-09	6.024E-09	3.607E-09	2.510E-09	1.86E-09	1.57E-09	1.35E-09	1.14E-09	9.88E-10	8.651E-10
E	8.866E-09	9.818E-09	6.343E-09	3.613E-09	2.435E-09	1.79E-09	1.38E-09	1.13E-09	9.53E-10	8.17E-10	7.087E-10
ESE	9.993E-09	1.325E-08	8.899E-09	5.344E-09	3.730E-09	2.62E-09	2.48E-09	1.85E-09	1.57E-09	1.357E-09	1.191E-09
SE	1.257E-08	7.740E-09	6.022E-09	4.450E-09	3.361E-09	2.78E-09	2.30E-09	2.06E-09	1.74E-09	1.502E-09	1.316E-09
SSE	6.971E-08	4.183E-08	2.712E-08	1.557E-08	1.055E-08	7.82E-09	6.12E-09	4.96E-09	4.18E-09	3.58E-09	3.120E-09

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES				
DIRECTION FROM SITE		0.5-1	1-2	2-3	3-4	4-5
S	1.326E-07	1.07E-07	7.507E-08	6.040E-08	5.53E-08	5.10
SSW	5.873E-06	5.826E-06	4.867E-06	5.207E-08	3.85E-08	3.53E-08
SSW	5.273E-08	9.094E-08	6.406E-08	4.128E-08	2.191E-08	1.350E-08
WSW	5.695E-08	1.06E-07	6.683E-08	3.966E-08	2.747E-08	1.022E-08
W	1.433E-07	1.517E-07	8.089E-08	4.660E-08	3.11E-08	1.001E-08
NNW	2.297E-07	2.889E-07	1.597E-07	9.514E-08	6.31E-08	7.454E-09
NNW	2.631E-07	3.50E-07	2.502E-07	1.131E-07	7.40E-08	1.244E-08
NNW	2.738E-07	2.735E-07	2.570E-07	2.009E-07	1.371E-07	1.477E-08
N	2.167E-07	1.245E-07	7.846E-08	5.451E-08	6.60E-08	1.490E-08
NNE	9.659E-08	2.87E-08	4.567E-08	3.240E-08	2.63E-08	1.430E-08
NE	4.303E-08	2.819E-08	2.074E-08	1.529E-08	3.041E-08	8.780E-09
ENE	1.835E-08	1.86E-08	7.622E-09	5.771E-09	1.30E-08	3.657E-09
E	3.199E-08	1.66E-08	1.435E-08	1.065E-08	8.771E-09	3.657E-09
ESE	3.199E-08	2.53E-08	1.772E-08	1.271E-08	1.61E-08	3.95E-09
SE	3.789E-08	3.757E-08	2.712E-08	1.921E-08	1.43E-08	5.415E-09
SSE	7.408E-08	7.316E-08	5.564E-08	5.026E-08	7.05E-08	1.591E-08

ERP ELEVATED STACK RELEASES - JUL-SEP 1992  
2-260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR		0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000
S	S	2.897E-08	1.066E-07	1.479E-07	1.236E-07	1.111E-07	9.152E-08	7.548E-08	6.295E-08	5.377E-08	4.500E-08
SSW	S	2.600E-10	3.298E-08	6.517E-08	6.654E-08	6.071E-08	5.187E-08	4.372E-08	3.500E-08	2.929E-08	2.429E-08
SSW	SSW	3.072E-09	2.728E-08	5.081E-08	6.647E-08	1.549E-07	8.293E-08	6.346E-08	5.004E-08	4.011E-08	3.400E-08
WSW	WSW	1.452E-10	1.622E-08	5.013E-08	8.215E-08	1.414E-07	9.250E-08	6.544E-08	4.988E-08	3.977E-08	3.181E-08
W	W	1.216E-09	5.995E-08	1.461E-07	1.823E-07	1.797E-07	1.411E-07	1.093E-07	8.511E-08	6.701E-08	5.070E-08
WNW	WNW	2.050E-08	1.162E-07	2.179E-07	2.946E-07	3.668E-07	2.257E-07	1.541E-07	1.071E-07	7.574E-08	5.203E-08
NW	NW	7.568E-08	1.496E-07	2.218E-07	3.050E-07	4.877E-07	2.858E-07	1.940E-07	1.450E-07	1.090E-07	8.284E-08
NNW	NNW	1.813E-07	2.263E-07	2.410E-07	2.410E-07	2.880E-07	2.815E-07	2.618E-07	2.345E-07	2.077E-07	1.844E-07
N	N	1.718E-07	2.610E-07	2.494E-07	1.763E-07	1.299E-07	9.705E-08	7.918E-08	6.466E-08	5.422E-08	4.635E-08
NNE	NNE	2.853E-08	9.164E-08	1.086E-07	8.978E-08	6.964E-08	5.406E-08	4.579E-08	3.806E-08	3.200E-08	2.770E-08
NE	NE	6.956E-09	3.090E-08	3.656E-08	3.316E-08	2.919E-08	2.479E-08	2.066E-08	1.770E-08	1.525E-08	1.328E-08
ENE	ENE	3.882E-11	2.748E-09	4.245E-09	8.103E-09	9.468E-09	8.420E-09	7.701E-09	6.648E-09	5.746E-09	5.017E-09
E	E	1.553E-10	1.078E-08	2.508E-08	2.868E-08	1.949E-08	1.088E-08	1.447E-08	1.246E-08	1.062E-08	9.237E-09
ESE	ESE	3.023E-10	2.187E-08	3.701E-08	3.520E-08	2.457E-08	1.783E-08	1.285E-08	1.040E-08	8.654E-09	7.512E-09
SE	SE	3.184E-10	2.169E-08	4.151E-08	4.318E-08	3.950E-08	3.310E-08	2.730E-08	2.249E-08	1.913E-08	1.636E-08
SSE	SSE	8.286E-09	5.425E-08	7.870E-08	8.036E-08	7.670E-08	6.652E-08	5.614E-08	4.742E-08	4.046E-08	3.417E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING		5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000
S	S	6.231E-08	3.910E-08	2.507E-08	1.410E-08	9.591E-09	7.078E-09	5.450E-09	4.368E-09	3.619E-09	3.061E-09
SSW	SSW	4.340E-08	3.400E-08	2.198E-08	1.250E-08	8.462E-09	6.395E-09	4.938E-09	3.966E-09	3.278E-09	2.769E-09
SSW	SSW	2.784E-08	2.437E-08	1.621E-08	9.553E-09	6.920E-09	5.320E-09	4.222E-09	3.468E-09	2.883E-09	2.444E-09
WSW	WSW	2.393E-08	1.668E-08	1.214E-08	7.609E-09	5.106E-09	3.745E-09	2.949E-09	2.308E-09	1.939E-09	1.641E-09
W	W	2.602E-08	1.441E-08	1.060E-08	7.226E-09	5.484E-09	4.049E-09	3.143E-09	2.566E-09	2.104E-09	1.784E-09
WNW	WNW	5.268E-08	2.952E-08	1.998E-08	1.204E-08	8.225E-09	6.108E-09	4.794E-09	3.866E-09	3.224E-09	2.731E-09
NW	NW	4.185E-08	3.475E-08	2.378E-08	1.449E-08	9.705E-09	7.220E-09	5.700E-09	4.707E-09	3.887E-09	3.306E-09
NNW	NNW	1.144E-07	6.415E-08	4.156E-08	2.376E-08	1.402E-08	1.179E-08	9.259E-09	7.500E-09	6.322E-09	5.389E-09
N	N	3.541E-08	2.222E-08	1.834E-08	1.437E-08	1.164E-08	9.535E-09	7.311E-09	5.919E-09	4.922E-09	4.182E-09
NNE	NNE	2.674E-08	3.867E-08	2.496E-08	1.421E-08	9.556E-09	7.626E-09	5.414E-09	4.311E-09	3.667E-09	3.113E-09
NE	NE	1.370E-08	2.257E-08	1.461E-08	8.343E-09	5.612E-09	4.128E-09	3.240E-09	2.611E-09	2.192E-09	1.854E-09
ENE	ENE	4.839E-09	8.652E-09	5.913E-09	3.509E-09	2.421E-09	1.613E-09	1.151E-09	8.200E-09	6.172E-09	5.159E-09
E	E	8.789E-09	9.696E-09	6.238E-09	3.524E-09	2.254E-09	1.720E-09	1.311E-09	1.000E-09	8.935E-10	7.601E-10
ESE	ESE	9.882E-09	1.303E-08	8.723E-09	5.189E-09	3.588E-09	2.690E-09	2.133E-09	1.746E-09	1.457E-09	1.247E-09
SE	SE	1.246E-08	7.641E-09	5.920E-09	4.335E-09	3.242E-09	2.612E-09	2.235E-09	1.917E-09	1.605E-09	1.367E-09
SSE	SSE	6.894E-08	4.104E-08	2.643E-08	1.496E-08	1.000E-08	7.339E-09	5.649E-09	4.537E-09	3.748E-09	3.165E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT											
DIRECTION FROM SITE		5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	S	1.325E-07	1.074E-07	7.475E-08	6.035E-08	4.545E-08	3.802E-08	1.454E-08	7.097E-09	4.395E-09	3.951E-09
SSW	SSW	5.863E-08	5.808E-08	4.842E-08	5.170E-08	4.607E-08	3.077E-08	1.290E-08	6.417E-09	3.981E-09	3.951E-09
SSW	SSW	5.263E-08	9.057E-08	6.366E-08	4.091E-08	3.008E-08	2.151E-08	9.863E-09	5.538E-09	3.489E-09	2.735E-09
WSW	WSW	5.683E-08	1.065E-07	6.641E-08	3.931E-08	2.715E-08	1.637E-08	7.504E-09	3.771E-09	2.349E-09	2.449E-09
W	W	1.435E-07	1.511E-07	8.042E-08	4.622E-08	3.089E-08	1.530E-08	7.202E-09	4.069E-09	2.549E-09	1.788E-09
WNW	WNW	2.294E-07	2.881E-07	1.900E-07	9.454E-08	6.263E-08	3.042E-08	1.211E-08	6.147E-09	3.892E-09	2.777E-09
NW	NW	2.428E-07	3.591E-07	2.560E-07	1.125E-07	7.358E-08	3.590E-08	1.446E-08	7.312E-09	4.677E-09	3.313E-09
NNW	NNW	2.377E-07	2.747E-07	2.823E-07	1.998E-07	1.361E-07	6.527E-08	2.448E-08	1.190E-08	7.551E-09	5.312E-09
N	N	2.165E-07	1.233E-07	7.823E-08	5.429E-08	4.024E-08	2.333E-08	1.404E-08	9.147E-09	5.937E-09	4.101E-09
NNE	NNE	9.648E-08	6.888E-08	4.543E-08	3.216E-08	2.619E-08	2.093E-08	1.453E-08	7.075E-09	4.422E-09	3.149E-09
NE	NE	3.379E-08	2.812E-08	2.065E-08	1.520E-08	1.293E-08	1.706E-08	8.523E-09	4.169E-09	2.637E-09	1.860E-09
ENE	ENE	4.294E-08	8.877E-09	7.574E-09	5.722E-09	4.753E-09	6.654E-09	3.560E-09	1.855E-09	1.266E-09	9.133E-10
E	E	1.828E-08	1.864E-08	1.429E-08	1.058E-08	8.701E-09	7.958E-09	5.607E-09	1.739E-09	1.077E-09	7.601E-10
ESE	ESE	3.195E-08	2.585E-08	1.747E-08	1.058E-08	1.004E-08	1.042E-08	5.263E-09	2.702E-09	1.746E-09	1.249E-09
SE	SE	3.783E-08	3.747E-08	2.701E-08	1.909E-08	1.411E-08	7.947E-09	4.201E-09	2.617E-09	1.882E-09	1.370E-09
SSE	SSE	7.409E-08	7.299E-08	5.542E-08	4.995E-08	6.991E-08	4.074E-08	1.530E-08	7.363E-09	4.554E-09	3.171E-09

ERP ELEVATED STACK RELEASES - JUL-SEP 1992  
8,000 DAY DECAY, TERRAIN DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES											
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500		
S	2.898E-08	1.057E-07	1.451E-07	1.308E-07	1.007E-07	8.933E-08	7.396E-08	6.108E-08	5.155E-08	4.496E-08	4.050E-08		
SSW	2.261E-10	3.272E-08	4.401E-08	6.532E-08	5.954E-08	5.074E-08	4.263E-08	4.888E-08	5.02E-08	4.89E-08	4.455E-08		
SW	3.079E-09	2.706E-08	4.991E-08	6.580E-08	1.144E-07	8.530E-08	4.263E-08	4.954E-08	5.02E-08	3.31E-08	2.864E-08		
WSW	1.452E-10	1.609E-08	4.939E-08	8.140E-08	1.140E-07	9.130E-08	6.470E-08	4.754E-08	3.831E-08	3.16E-08	2.603E-08		
W	1.216E-09	5.699E-08	1.443E-07	1.601E-07	1.772E-07	1.120E-07	7.766E-08	5.754E-08	4.473E-08	3.60E-08	2.964E-08		
WNW	2.051E-08	1.153E-07	2.154E-07	2.912E-07	3.620E-07	2.216E-07	1.502E-07	1.159E-07	9.09E-08	7.31E-08	6.09E-08		
NW	7.570E-08	1.484E-07	2.181E-07	3.011E-07	4.824E-07	2.652E-07	1.502E-07	1.099E-07	1.08E-07	6.64E-08	7.06E-08		
NNW	1.813E-07	2.244E-07	2.365E-07	2.371E-07	2.843E-07	2.774E-07	2.580E-07	2.509E-07	1.69E-07	1.31E-07	1.31E-07		
N	1.718E-07	2.588E-07	2.353E-07	1.719E-07	1.196E-07	9.432E-08	7.682E-08	6.274E-08	5.291E-08	4.45E-08	3.862E-08		
NNE	2.653E-08	9.086E-08	1.064E-07	8.772E-08	6.798E-08	5.460E-08	4.446E-08	3.663E-08	3.108E-08	2.66E-08	2.32E-08		
NE	6.957E-09	3.064E-08	3.588E-08	3.256E-08	2.865E-08	2.427E-08	2.035E-08	1.721E-08	1.477E-08	1.26E-08	1.13E-08		
ENE	3.883E-11	2.726E-09	6.159E-09	8.020E-09	9.358E-09	8.680E-09	7.544E-09	6.76E-09	5.64E-09	4.80E-09	4.27E-09		
E	1.553E-10	1.069E-08	1.973E-08	2.032E-08	1.914E-08	1.664E-08	1.413E-08	1.202E-08	1.032E-08	8.95E-09	7.86E-09		
ESE	3.024E-10	2.169E-08	3.627E-08	2.243E-08	2.593E-08	2.108E-08	1.732E-08	1.445E-08	1.223E-08	1.02E-08	9.167E-09		
SE	3.185E-10	2.151E-08	4.080E-08	2.245E-08	2.877E-08	2.316E-08	2.457E-08	2.199E-08	1.866E-08	1.57E-08	1.360E-08		
SSE	8.288E-09	5.380E-08	7.739E-08	7.915E-08	7.548E-08	6.522E-08	5.483E-08	4.614E-08	3.94E-08	3.47E-08	3.02E-08		

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES											
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000		
S	6.064E-08	3.749E-08	2.335E-08	1.238E-08	7.869E-09	5.506E-09	4.090E-09	3.175E-09	2.561E-09	2.19E-09	1.783E-09		
SSW	4.259E-08	3.299E-08	2.071E-08	1.108E-08	7.183E-09	5.113E-09	3.864E-09	3.03E-09	2.56E-09	2.03E-09	1.721E-09		
SW	2.751E-08	2.394E-08	1.546E-08	8.557E-09	5.448E-09	4.162E-09	3.253E-09	2.67E-09	2.289E-09	1.73E-09	1.475E-09		
WSW	2.344E-08	1.613E-08	1.144E-08	6.856E-09	4.447E-09	3.174E-09	2.406E-09	1.91E-09	1.548E-09	1.291E-09	1.096E-09		
W	2.529E-08	1.397E-08	1.021E-08	6.15E-09	4.761E-09	3.417E-09	2.509E-09	2.046E-09	1.67E-09	1.39E-09	1.181E-09		
WNW	5.07E-08	2.771E-08	1.822E-08	1.032E-08	6.547E-09	4.610E-09	3.508E-09	2.770E-09	2.24E-09	1.86E-09	1.574E-09		
NW	5.972E-08	3.266E-08	2.169E-08	1.246E-08	8.003E-09	5.667E-09	4.368E-09	3.42E-09	2.84E-09	2.35E-09	1.990E-09		
NNW	1.115E-07	6.086E-08	3.822E-08	2.047E-08	1.278E-08	8.831E-09	6.566E-09	5.132E-09	4.24E-09	3.48E-09	2.95E-09		
N	3.394E-08	2.117E-08	1.751E-08	1.381E-08	1.098E-08	8.456E-09	6.449E-09	5.108E-09	4.16E-09	3.48E-09	2.95E-09		
NNE	2.583E-08	3.766E-08	2.359E-08	1.273E-08	8.150E-09	5.727E-09	4.294E-09	3.361E-09	2.715E-09	2.24E-09	1.894E-09		
NE	1.330E-08	2.213E-08	1.390E-08	7.516E-09	4.785E-09	3.364E-09	2.54E-09	2.027E-09	1.63E-09	1.37E-09	1.14E-09		
ENE	4.686E-09	8.689E-09	5.635E-09	3.141E-09	2.011E-09	1.416E-09	1.21E-09	9.12E-10	7.48E-10	6.22E-10	5.29E-10		
E	8.530E-09	9.434E-09	5.892E-09	3.131E-09	1.948E-09	1.342E-09	9.872E-10	7.595E-10	6.092E-10	5.00E-10	4.18E-10		
ESE	9.549E-09	1.277E-08	8.309E-09	4.653E-09	2.995E-09	2.115E-09	1.586E-09	1.229E-09	9.985E-10	8.23E-10	6.918E-10		
SE	1.191E-08	7.231E-09	5.592E-09	4.113E-09	3.089E-09	2.508E-09	2.138E-09	1.84E-09	1.59E-09	1.35E-09	1.125E-09		
SSE	6.750E-08	3.924E-08	2.454E-08	1.317E-08	8.341E-09	5.834E-09	4.345E-09	3.30E-09	2.74E-09	2.33E-09	1.873E-09		

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES										
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50		
S	1.308E-07	1.658E-07	7.274E-08	5.824E-08	6.365E-08	3.455E-08	1.281E-08	5.578E-09	3.22E-09	2.12E-09		
SSW	5.764E-08	5.691E-08	4.729E-08	5.058E-08	4.510E-08	3.967E-08	1.149E-08	5.174E-09	3.01E-09	2.04E-09		
SW	5.190E-08	8.94E-08	6.294E-08	4.039E-08	2.96E-08	2.097E-08	8.844E-09	4.221E-09	2.51E-09	1.75E-09		
WSW	5.622E-08	1.054E-07	6.539E-08	3.855E-08	2.65E-08	1.67E-08	6.805E-09	3.20E-09	1.91E-09	1.25E-09		
W	1.412E-07	1.488E-07	7.877E-08	4.508E-08	3.00E-08	1.82E-08	6.591E-09	3.444E-09	2.07E-09	1.35E-09		
WNW	2.268E-07	2.839E-07	1.557E-07	9.214E-08	6.06E-08	2.61E-08	1.040E-08	4.68E-09	2.78E-09	1.89E-09		
NNW	2.395E-07	3.55E-07	1.958E-07	1.099E-07	7.13E-07	3.20E-08	2.099E-08	8.97E-09	5.18E-09	3.58E-09		
NW	2.341E-07	2.707E-07	2.524E-07	1.968E-07	1.33E-07	2.29E-08	1.537E-08	6.52E-09	5.12E-09	3.49E-09		
N	2.124E-07	1.200E-07	7.586E-08	5.240E-08	3.86E-08	2.29E-08	1.310E-08	5.35E-09	3.81E-09	2.54E-09		
NNE	9.465E-08	6.62E-08	4.411E-08	3.104E-08	2.521E-08	2.878E-08	7.72E-09	3.91E-09	2.05E-09	1.48E-09		
NE	3.324E-08	2.757E-08	2.014E-08	1.474E-08	1.25E-08	1.651E-08	3.193E-09	1.95E-09	9.08E-10	6.31E-10		
ENE	4.23E-09	8.79E-09	7.420E-09	5.563E-09	4.601E-09	6.44E-09	3.219E-09	1.36E-09	7.67E-10	5.06E-10		
E	1.798E-08	1.829E-08	1.596E-08	1.028E-08	8.43E-09	7.59E-09	4.78E-09	2.36E-09	1.27E-09	8.26E-10		
ESE	3.132E-08	1.52E-08	1.171E-08	1.22E-08	9.708E-09	1.007E-08	4.78E-09	2.18E-09	1.27E-09	8.26E-10		
SE	3.725E-08	3.64E-08	2.628E-08	1.843E-08	1.361E-08	7.542E-09	3.987E-09	2.51E-09	1.82E-09	1.31E-09		
SSE	7.295E-08	7.174E-08	5.412E-08	4.864E-08	6.85E-08	3.859E-08	1.355E-08	5.90E-09	3.40E-09	2.22E-09		

## ERP ELEVATED STACK RELEASES - JUL-SEP 1992

CORRECTED FOR OPEN TERRAIN RECIRCULATION

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

DIRECTION FROM SITE	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	7.698E-09	6.169E-09	5.106E-09	3.447E-09	1.652E-09	1.007E-09	6.781E-10	4.862E-10	3.637E-10	2.827E-10	2.625E-10
SSW	2.687E-09	2.273E-09	2.060E-09	1.497E-09	7.614E-10	4.755E-10	3.245E-10	2.342E-10	2.157E-10	1.631E-10	1.277E-10
SW	1.476E-09	1.160E-09	9.252E-10	6.041E-10	4.368E-10	2.350E-10	1.451E-10	9.843E-11	7.113E-11	5.382E-11	4.217E-11
WSW	1.188E-09	9.692E-10	8.284E-10	6.723E-10	4.722E-10	2.535E-10	1.560E-10	1.056E-10	7.615E-11	5.754E-11	4.505E-11
W	1.194E-09	2.581E-09	1.987E-09	1.260E-09	5.624E-10	3.026E-10	1.864E-10	1.262E-10	9.102E-11	6.879E-11	5.384E-11
WNW	5.313E-09	4.177E-09	5.483E-09	3.670E-09	1.946E-09	9.890E-10	5.944E-10	4.037E-10	3.120E-10	2.479E-10	2.084E-10
NW	1.057E-08	7.993E-09	5.902E-09	5.307E-09	2.821E-09	1.413E-09	8.484E-10	5.775E-10	4.325E-10	3.491E-10	2.981E-10
NNW	1.879E-08	1.422E-08	1.051E-08	6.354E-09	4.015E-09	2.133E-09	1.314E-09	1.046E-09	7.818E-10	6.291E-10	5.354E-10
N	2.491E-08	1.862E-08	1.341E-08	7.866E-09	3.274E-09	1.865E-09	1.210E-09	8.494E-10	6.287E-10	4.834E-10	3.826E-10
NNE	8.519E-09	6.479E-09	4.840E-09	2.959E-09	1.289E-09	7.518E-10	4.943E-10	3.497E-10	2.599E-10	2.002E-10	1.584E-10
NE	2.362E-09	1.857E-09	1.484E-09	9.706E-10	4.520E-10	2.720E-10	1.820E-10	1.300E-10	9.707E-11	7.491E-11	5.930E-11
ENE	3.018E-10	2.716E-10	2.494E-10	2.083E-10	1.108E-10	7.041E-11	4.847E-11	3.514E-11	2.644E-11	2.047E-11	1.621E-11
E	1.186E-09	9.602E-10	8.092E-10	5.548E-10	2.694E-10	1.651E-10	1.116E-10	8.011E-11	5.998E-11	4.634E-11	3.669E-11
ESE	2.354E-09	1.812E-09	1.388E-09	8.712E-10	3.899E-10	2.304E-10	1.526E-10	1.084E-10	8.072E-11	6.222E-11	4.925E-11
SE	2.677E-09	2.210E-09	1.926E-09	1.358E-09	6.745E-10	4.173E-10	2.833E-10	2.040E-10	1.530E-10	1.182E-10	9.361E-11
SSE	5.073E-09	4.274E-09	3.852E-09	2.785E-09	1.412E-09	8.807E-10	6.095E-10	4.333E-10	3.252E-10	3.024E-10	3.099E-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	2.112E-10	1.934E-10	1.404E-10	8.577E-11	5.519E-11	3.425E-11	2.459E-11	1.849E-11	1.458E-11	1.159E-11	9.459E-12
SSW	1.031E-10	1.088E-10	8.077E-11	5.012E-11	2.753E-11	1.955E-11	1.401E-11	1.052E-11	8.207E-12	6.556E-12	5.351E-12
SW	3.430E-11	6.054E-11	4.782E-11	3.100E-11	2.014E-11	1.209E-11	7.633E-12	5.767E-12	4.484E-12	3.582E-12	2.923E-12
WSW	3.625E-11	4.459E-11	3.387E-11	1.986E-11	1.202E-11	8.060E-12	5.820E-12	4.371E-12	3.398E-12	2.714E-12	2.216E-12
W	4.332E-11	1.951E-11	4.161E-11	2.692E-11	1.485E-11	1.008E-11	7.220E-12	5.422E-12	4.216E-12	3.367E-12	2.749E-12
WNW	1.835E-10	1.174E-10	8.616E-11	5.315E-11	3.330E-11	2.150E-11	1.502E-11	1.128E-11	8.796E-12	7.027E-12	5.735E-12
NW	2.660E-10	1.769E-10	1.320E-10	7.865E-11	4.796E-11	3.220E-11	2.295E-11	1.724E-11	1.343E-11	1.073E-11	8.755E-12
NNW	4.763E-10	3.139E-10	2.334E-10	1.457E-10	9.456E-11	6.359E-11	4.161E-11	3.005E-11	2.311E-11	1.846E-11	1.507E-11
N	3.099E-10	1.489E-10	9.225E-11	5.045E-11	1.037E-10	6.195E-11	4.439E-11	3.333E-11	2.591E-11	2.070E-11	1.690E-11
NNE	1.282E-10	1.890E-10	1.184E-10	6.231E-11	3.821E-11	2.558E-11	1.826E-11	1.365E-11	1.058E-11	8.429E-12	6.859E-12
NE	4.792E-11	8.877E-11	5.682E-11	3.061E-11	1.890E-11	1.263E-11	8.839E-12	6.682E-12	5.133E-12	4.100E-12	3.347E-12
ENE	1.307E-11	2.739E-11	2.158E-11	1.395E-11	9.028E-12	5.972E-12	4.176E-12	2.441E-12	1.901E-12	1.521E-12	1.243E-12
E	2.963E-11	3.988E-11	2.997E-11	1.878E-11	1.212E-11	8.078E-12	5.701E-12	4.199E-12	3.210E-12	2.313E-12	1.880E-12
ESE	3.983E-11	5.168E-11	3.879E-11	2.433E-11	1.576E-11	1.055E-11	7.482E-12	5.537E-12	4.246E-12	3.360E-12	2.720E-12
SE	7.557E-11	3.601E-11	2.211E-11	1.184E-11	7.401E-12	5.223E-12	4.011E-12	8.492E-12	6.554E-12	5.221E-12	4.261E-12
SSE	2.675E-10	2.156E-10	1.341E-10	6.997E-11	4.278E-11	2.863E-11	2.045E-11	1.530E-11	1.186E-11	9.448E-12	7.696E-12

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

DIRECTION FROM SITE	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.605E-09	1.764E-09	6.889E-10	3.678E-10	2.495E-10	1.738E-10	8.431E-11	3.597E-11	1.874E-11	1.168E-11
SSW	1.857E-09	7.978E-10	3.287E-10	2.010E-10	1.291E-10	9.508E-11	4.689E-11	1.946E-11	1.064E-11	6.599E-12
SW	8.346E-10	3.843E-10	1.504E-10	7.234E-11	4.271E-11	4.906E-11	2.991E-11	1.245E-11	5.811E-12	3.605E-12
WSW	7.903E-10	4.195E-10	1.618E-10	7.746E-11	4.549E-11	3.797E-11	1.949E-11	8.220E-12	4.414E-12	2.732E-12
W	1.796E-09	6.019E-10	1.933E-10	9.259E-11	5.437E-11	3.462E-11	2.482E-11	1.021E-11	5.476E-12	3.589E-12
WNW	4.387E-09	1.904E-09	6.234E-10	3.138E-10	2.109E-10	1.182E-10	5.166E-11	2.205E-11	1.140E-11	7.073E-12
NW	6.102E-09	2.747E-09	8.905E-10	4.421E-10	3.013E-10	1.767E-10	7.687E-11	3.270E-11	1.742E-11	1.080E-11
NNW	9.487E-09	3.698E-09	1.425E-09	7.990E-10	5.412E-10	3.142E-10	1.425E-10	6.306E-11	3.071E-11	1.858E-11
N	1.210E-08	3.668E-09	1.240E-09	6.364E-10	3.855E-10	1.595E-10	8.343E-11	6.607E-11	3.366E-11	2.084E-11
NNE	4.369E-09	1.422E-09	5.052E-10	2.628E-10	1.596E-10	1.441E-10	6.407E-11	2.602E-11	1.380E-11	8.482E-12
NE	1.339E-09	4.872E-10	1.852E-10	9.803E-11	5.971E-11	6.550E-11	3.123E-11	1.279E-11	6.682E-12	4.127E-12
ENE	2.427E-10	1.145E-10	4.899E-11	2.665E-11	1.631E-11	2.165E-11	1.346E-11	6.068E-12	2.731E-12	1.530E-12
E	7.297E-10	2.865E-10	1.133E-10	6.054E-11	3.693E-11	3.319E-11	1.830E-11	8.205E-12	4.251E-12	2.418E-12
ESE	1.253E-09	4.260E-10	1.556E-10	8.158E-11	4.960E-11	4.331E-11	2.373E-11	1.071E-11	5.601E-12	3.386E-12
SE	1.737E-09	7.120E-10	2.873E-10	1.543E-10	9.422E-11	3.862E-11	1.215E-11	5.319E-12	6.474E-12	5.260E-12
SSE	3.472E-09	1.481E-09	6.083E-10	3.474E-10	2.920E-10	1.909E-10	7.214E-11	2.913E-11	1.546E-11	9.513E-12



ERP ELEVATED STACK RELEASES - JUL-SEP 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q (PER SQ.METER)
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	1.457E-07	1.455E-07	1.426E-07	4.729E-09
A	SITE BOUNDARY	SSW	0.82	1327.	6.657E-08	6.646E-08	6.523E-08	1.887E-09
A	SITE BOUNDARY	SW	0.98	1569.	6.469E-08	6.454E-08	6.366E-08	6.329E-10
A	SITE BOUNDARY	WSW	0.93	1489.	7.199E-08	7.183E-08	7.105E-08	6.584E-10
A	SITE BOUNDARY	W	0.91	1468.	1.740E-07	1.736E-07	1.715E-07	1.415E-09
A	SITE BOUNDARY	WNW	0.94	1509.	2.770E-07	2.765E-07	2.733E-07	4.167E-09
A	SITE BOUNDARY	NW	0.81	1307.	2.363E-07	2.360E-07	2.323E-07	5.184E-09
A	SITE BOUNDARY	NNW	0.69	1106.	2.336E-07	2.334E-07	2.293E-07	1.125E-08
A	SITE BOUNDARY	N	0.67	1086.	2.476E-07	2.474E-07	2.429E-07	1.469E-08
A	SITE BOUNDARY	NNE	0.60	965.	1.018E-07	1.017E-07	1.003E-07	5.711E-09
A	SITE BOUNDARY	NE	0.62	1005.	3.406E-08	3.403E-08	3.351E-08	1.638E-09
A	SITE BOUNDARY	ENE	0.59	945.	3.907E-09	3.904E-09	3.856E-09	2.666E-10
A	SITE BOUNDARY	E	0.53	845.	1.199E-08	1.198E-08	1.186E-08	9.386E-10
A	SITE BOUNDARY	ESE	0.54	865.	2.532E-08	2.530E-08	2.503E-08	1.731E-09
A	SITE BOUNDARY	SE	0.65	1046.	3.464E-08	3.461E-08	3.408E-08	2.003E-09
A	SITE BOUNDARY	SSE	0.81	1307.	7.947E-08	7.939E-08	7.806E-08	3.574E-09
A	NEAR. RESIDENCE	SW	1.40	2253.	1.075E-07	1.071E-07	1.062E-07	5.051E-10
A	NEAR. RESIDENCE	WSW	1.30	2092.	1.223E-07	1.219E-07	1.209E-07	6.358E-10
A	NEAR. RESIDENCE	W	1.00	1609.	1.827E-07	1.823E-07	1.801E-07	1.260E-09
A	NEAR. RESIDENCE	WNW	1.60	2575.	3.304E-07	3.295E-07	3.248E-07	1.671E-09
A	NEAR. RESIDENCE	NW	0.90	1448.	2.638E-07	2.635E-07	2.597E-07	6.241E-09
A	NEAR. RESIDENCE	NNW	1.90	3058.	2.852E-07	2.845E-07	2.804E-07	2.390E-09
A	NEAR. RESIDENCE	N	3.00	4828.	6.509E-08	6.486E-08	6.274E-08	8.494E-10
A	NEAR. RESIDENCE	NNE	2.70	4345.	4.267E-08	4.243E-08	4.115E-08	4.275E-10
A	NEAR. RESIDENCE	ENE	1.70	2736.	9.374E-09	9.335E-09	9.212E-09	9.033E-11
A	NEAR. RESIDENCE	E	1.80	2897.	1.809E-08	1.804E-08	1.769E-08	1.928E-10
A	NEAR. RESIDENCE	ESE	2.40	3863.	1.860E-08	1.851E-08	1.800E-08	1.646E-10
A	NEAR. RESIDENCE	SE	2.20	3541.	3.076E-08	3.065E-08	2.991E-08	3.543E-10
A	NEAREST COW	S	10.59	16899.	2.384E-08	2.339E-08	2.166E-08	1.331E-10
A	NEAREST GARDEN	SW	1.40	2253.	1.075E-07	1.071E-07	1.062E-07	5.051E-10
A	NEAREST GARDEN	WSW	1.30	2092.	1.223E-07	1.219E-07	1.209E-07	6.358E-10
A	NEAREST GARDEN	WNW	2.40	3863.	1.659E-07	1.652E-07	1.617E-07	6.512E-10
A	NEAREST GARDEN	NW	2.70	4345.	1.716E-07	1.709E-07	1.675E-07	7.182E-10
A	NEAREST GARDEN	NNW	1.90	3058.	2.852E-07	2.845E-07	2.804E-07	2.390E-09
A	NEAREST GARDEN	N	3.00	4828.	6.509E-08	6.486E-08	6.274E-08	8.494E-10
A	NEAREST GARDEN	NNE	2.70	4345.	4.267E-08	4.243E-08	4.115E-08	4.275E-10
A	NEAREST GARDEN	ENE	1.70	2736.	9.374E-09	9.335E-09	9.212E-09	9.033E-11
A	NEAREST GARDEN	E	1.80	2897.	1.809E-08	1.804E-08	1.769E-08	1.928E-10
A	NEAREST GARDEN	ESE	2.40	3863.	1.860E-08	1.851E-08	1.800E-08	1.646E-10
A	NEAREST GARDEN	SE	2.20	3541.	3.076E-08	3.065E-08	2.991E-08	3.543E-10

Atmospheric Diffusion Estimates

Elevated Releases

October-December 1992

ERP ELEVATED STACK RELEASES - OCT-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES		ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES	
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	3.000
S	2.174E-09	2.750E-08	5.300E-08	6.095E-08	6.089E-08	5.27E-08	3.500
SSW	1.144E-09	2.155E-09	2.249E-08	3.602E-08	4.372E-08	3.936E-08	3.500
SW	7.293E-16	8.187E-10	3.127E-08	7.033E-08	1.55E-07	7.50E-08	3.500
WSW	6.773E-11	6.295E-09	2.869E-08	6.832E-08	9.91E-07	1.012E-07	3.500
WNW	3.970E-14	7.507E-09	4.581E-08	6.932E-08	9.358E-08	6.629E-08	3.500
W	3.864E-15	2.653E-09	5.009E-08	1.066E-07	1.655E-07	9.806E-08	3.500
NW	1.349E-15	1.194E-09	6.616E-08	1.027E-07	1.632E-07	2.185E-07	3.500
NNW	1.433E-09	6.503E-09	3.266E-08	7.600E-08	1.110E-07	1.107E-07	3.500
N	8.186E-09	5.363E-08	6.582E-08	6.15E-08	7.45E-08	6.348E-08	3.500
NNE	2.363E-09	4.213E-08	7.285E-08	7.076E-08	6.121E-08	5.005E-08	3.500
NE	1.705E-10	1.478E-08	3.212E-08	3.760E-08	3.901E-08	3.600E-08	3.500
ENE	6.600E-17	1.729E-10	3.982E-09	9.607E-09	1.607E-08	1.677E-08	3.500
E	3.273E-11	3.882E-09	1.083E-08	1.476E-08	1.810E-08	1.777E-08	3.500
ESE	1.593E-15	1.158E-09	1.826E-08	3.555E-08	4.656E-08	6.328E-08	3.500
SE	2.496E-11	3.143E-09	3.083E-08	5.703E-08	7.74E-08	6.317E-08	3.500
SSE	2.514E-10	1.769E-08	5.647E-08	8.201E-08	9.540E-08	8.117E-08	3.500

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES		ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES	
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000
S	3.663E-08	2.391E-08	1.544E-08	8.785E-09	6.048E-09	4.510E-09	3.500
SSW	2.373E-08	1.190E-08	1.016E-08	5.700E-09	3.908E-09	2.815E-09	3.500
SW	1.826E-08	1.198E-08	7.714E-08	4.362E-09	2.997E-09	2.233E-09	3.500
WSW	2.789E-08	1.961E-08	1.428E-08	8.969E-09	5.092E-09	3.524E-09	3.500
W	1.714E-08	9.878E-09	7.440E-08	5.080E-09	3.798E-09	2.832E-09	3.500
WNW	2.438E-08	1.383E-08	9.432E-09	5.739E-09	3.947E-09	2.952E-09	3.500
NW	4.640E-08	2.545E-08	1.706E-08	1.008E-08	6.770E-09	4.981E-09	3.500
NNW	5.117E-08	2.999E-08	1.965E-08	1.142E-08	7.799E-09	5.611E-09	3.500
N	2.507E-08	1.586E-08	1.334E-08	1.114E-08	9.697E-09	8.149E-09	3.500
NNE	2.698E-08	1.538E-08	1.365E-08	1.1960E-08	1.342E-08	1.003E-08	3.500
NE	1.908E-08	4.227E-08	2.789E-08	1.640E-08	1.130E-08	8.081E-09	3.500
ENE	1.214E-08	2.514E-08	1.547E-08	9.212E-09	6.582E-09	4.805E-09	3.500
E	1.180E-08	2.163E-08	1.451E-08	8.685E-09	6.041E-09	4.562E-09	3.500
ESE	2.229E-08	2.963E-08	1.982E-08	1.179E-08	8.149E-09	6.122E-09	3.500
SE	2.616E-08	1.618E-08	1.259E-08	9.059E-09	6.609E-09	5.168E-09	3.500
SSE	9.170E-08	5.017E-08	3.209E-08	1.806E-08	1.206E-08	8.538E-09	3.500

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES		CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES	
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20
S	5.087E-08	5.712E-08	4.307E-08	3.458E-08	3.803E-08	2.97E-08	9.047E-09
SSW	2.510E-08	4.007E-08	3.576E-08	3.343E-08	2.659E-08	1.509E-08	5.895E-09
SW	4.586E-08	8.974E-08	5.374E-08	3.106E-08	2.09E-08	1.148E-08	4.500E-09
WSW	4.049E-08	1.054E-07	7.390E-08	4.485E-08	3.142E-08	1.008E-08	8.871E-09
W	4.704E-08	7.50E-08	4.728E-08	2.898E-08	2.004E-08	1.041E-08	5.035E-09
WNW	6.468E-07	1.198E-07	7.069E-08	4.308E-08	2.887E-08	1.922E-08	5.765E-09
NW	1.080E-07	2.610E-07	1.509E-07	8.507E-08	5.549E-08	2.637E-08	1.016E-08
NNW	7.637E-08	1.018E-07	1.634E-07	8.591E-08	6.02E-08	3.101E-08	1.099E-08
N	6.50E-08	5.83E-08	4.185E-08	3.037E-08	2.561E-08	3.088E-08	1.998E-08
NNE	3.070E-08	3.64E-08	2.915E-08	2.164E-08	1.824E-08	3.073E-08	1.669E-08
NE	5.603E-09	1.503E-08	1.557E-08	1.279E-08	1.139E-08	1.729E-08	9.345E-09
ENE	1.103E-08	1.71E-08	1.592E-08	1.278E-08	1.120E-08	1.628E-08	8.404E-09
E	2.219E-08	4.25E-08	3.684E-08	2.747E-08	2.23E-08	2.764E-08	1.196E-08
ESE	5.632E-08	6.55E-08	5.454E-08	3.959E-08	2.91E-08	1.600E-08	8.754E-09
SE	5.920E-08	8.87E-08	7.415E-08	6.974E-08	9.542E-08	5.136E-08	1.852E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES		ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES	
BEARING	35.000	40.000	45.000	50.000	55.000	60.000	65.000
S	3.584E-09	2.835E-09	2.36E-09	2.02E-09	1.750E-09	1.500E-09	1.250E-09
SSW	2.221E-09	1.797E-09	1.462E-09	1.255E-09	1.084E-09	9.593E-10	8.593E-10
SW	1.559E-09	1.416E-09	1.174E-09	9.95E-10	8.593E-10	7.66E-10	6.89E-10
WSW	3.552E-09	2.882E-09	2.41E-09	2.08E-09	1.815E-09	1.615E-09	1.438E-09
W	2.355E-09	1.816E-09	1.59E-09	1.30E-09	1.138E-09	1.00E-09	8.89E-10
WNW	2.335E-09	1.95E-09	1.59E-09	1.36E-09	1.182E-09	1.05E-09	9.39E-10
NW	3.20E-09	2.83E-09	2.65E-09	2.26E-09	1.959E-09	1.759E-09	1.59E-09
NNW	4.18E-09	3.80E-09	3.60E-09	3.24E-09	2.814E-09	2.451E-09	2.15E-09
N	6.410E-09	5.40E-09	4.59E-09	3.76E-09	3.24E-09	2.76E-09	2.36E-09
NNE	7.91E-09	6.48E-09	5.45E-09	4.68E-09	4.096E-09	3.640E-09	3.210E-09
NE	4.655E-09	3.69E-09	3.02E-09	2.60E-09	2.24E-09	1.95E-09	1.71E-09
ENE	3.69E-09	3.31E-09	2.80E-09	2.43E-09	2.15E-09	1.89E-09	1.66E-09
E	3.29E-09	2.92E-09	2.54E-09	2.23E-09	1.95E-09	1.71E-09	1.50E-09
ESE	4.647E-09	3.98E-09	3.36E-09	2.88E-09	2.54E-09	2.210E-09	1.95E-09
SE	4.24E-09	3.50E-09	2.98E-09	2.59E-09	2.210E-09	1.95E-09	1.71E-09
SSE	6.601E-09	5.54E-09	4.60E-09	3.92E-09	3.39E-09	2.97E-09	2.59E-09



ERP ELEVATED STACK RELEASES - OCT-DEC 1992  
2,260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
SECTOR	0.250	0.500	0.750	1.000	DISTANCE IN MILES						
S	2.746E-09	2.749E-08	5.294E-08	6.086E-08	1.500	2.000	2.500	3.000	3.500	4.000	4.500
SSW	1.144E-09	2.247E-08	3.597E-08	4.360E-08	6.074E-08	5.229E-08	4.349E-08	3.625E-08	3.060E-08	2.627E-08	2.406E-08
SSW	7.291E-10	8.181E-10	3.123E-08	7.919E-08	1.152E-07	7.588E-08	5.289E-08	3.526E-08	3.499E-08	3.002E-08	2.608E-08
WSW	6.770E-11	6.289E-09	2.845E-08	6.617E-08	1.487E-07	1.008E-07	7.303E-08	5.576E-08	4.430E-08	3.630E-08	3.047E-08
W	3.968E-14	7.301E-09	4.375E-08	6.917E-08	9.305E-08	6.398E-08	4.675E-08	3.589E-08	2.862E-08	2.351E-08	1.977E-08
WNW	3.862E-15	2.650E-09	5.000E-08	1.064E-07	1.559E-07	9.845E-08	6.818E-08	5.326E-08	4.317E-08	3.445E-08	2.830E-08
NW	1.349E-09	1.196E-09	6.610E-08	1.935E-07	3.625E-07	2.178E-07	1.464E-07	1.085E-07	8.437E-08	6.752E-08	5.446E-08
NNW	1.432E-09	6.501E-08	3.263E-08	7.029E-08	1.187E-07	1.103E-07	1.049E-07	9.679E-08	9.076E-08	7.201E-08	5.892E-08
N	6.185E-09	5.360E-08	8.374E-08	8.205E-08	7.320E-08	6.312E-08	5.342E-08	4.451E-08	3.765E-08	3.235E-08	2.818E-08
NNE	2.362E-09	4.209E-08	7.276E-08	7.063E-08	6.104E-08	5.047E-08	4.203E-08	3.535E-08	3.023E-08	2.625E-08	2.314E-08
NE	1.704E-10	1.677E-08	3.207E-08	3.735E-08	3.888E-08	3.445E-08	2.939E-08	2.502E-08	2.155E-08	1.875E-08	1.653E-08
ENE	6.598E-17	1.727E-10	3.975E-08	1.562E-08	1.598E-08	1.688E-08	1.579E-08	1.425E-08	1.276E-08	1.144E-08	1.032E-08
E	3.271E-11	3.878E-09	1.081E-08	1.473E-08	1.896E-08	1.771E-08	1.614E-08	1.436E-08	1.278E-08	1.139E-08	1.022E-08
ESE	1.393E-15	1.157E-09	1.822E-08	3.550E-08	4.644E-08	4.317E-08	3.732E-08	3.199E-08	2.743E-08	2.383E-08	2.094E-08
SE	2.495E-11	1.141E-09	3.080E-08	5.664E-08	7.160E-08	6.500E-08	5.525E-08	4.651E-08	3.951E-08	3.395E-08	2.953E-08
SSE	2.513E-11	1.768E-08	5.642E-08	8.191E-08	9.551E-08	8.692E-08	7.502E-08	6.421E-08	5.536E-08	4.845E-08	4.107E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
BEARING	5.000	7.500	10.000	15.000	DISTANCE IN MILES						
S	3.633E-08	2.363E-08	1.520E-08	8.582E-09	5.855E-09	4.311E-09	3.388E-09	2.685E-09	2.231E-09	1.890E-09	1.625E-09
SSW	2.348E-08	1.565E-08	9.947E-09	5.522E-09	3.747E-09	2.725E-09	2.087E-09	1.665E-09	1.365E-09	1.146E-09	9.799E-10
SSW	1.804E-08	1.174E-08	7.506E-09	4.185E-09	2.834E-09	1.616E-09	1.283E-09	1.048E-09	8.765E-10	7.461E-10	6.488E-10
WSW	2.760E-08	1.932E-08	1.400E-08	8.708E-09	5.858E-09	3.359E-09	2.707E-09	2.250E-09	1.910E-09	1.648E-09	1.427E-09
W	1.695E-08	9.712E-09	7.278E-09	4.920E-09	3.692E-09	2.687E-09	1.989E-09	1.688E-09	1.403E-09	1.190E-09	1.027E-09
WNW	2.410E-08	1.560E-08	9.220E-09	5.550E-09	3.766E-09	2.794E-09	2.185E-09	1.766E-09	1.462E-09	1.235E-09	1.061E-09
NW	4.599E-08	2.511E-08	1.675E-08	9.804E-09	6.522E-09	4.754E-09	3.766E-09	2.981E-09	2.465E-09	2.078E-09	1.785E-09
NNW	5.067E-08	2.954E-08	1.925E-08	1.107E-08	7.479E-09	5.514E-09	4.356E-09	3.533E-09	2.994E-09	2.556E-09	2.204E-09
N	2.489E-08	1.570E-08	1.316E-08	1.032E-08	7.438E-09	5.870E-09	4.617E-09	3.803E-09	3.539E-09	3.060E-09	2.706E-09
NNE	2.673E-08	5.062E-08	3.399E-08	1.902E-08	1.208E-08	9.588E-09	7.450E-09	6.042E-09	5.035E-09	4.285E-09	3.706E-09
NE	1.887E-08	4.153E-08	2.724E-08	1.563E-08	1.078E-08	7.966E-09	6.366E-09	5.248E-09	4.403E-09	3.744E-09	3.237E-09
ENE	1.201E-08	2.281E-08	1.518E-08	8.953E-09	6.146E-09	4.585E-09	3.725E-09	3.169E-09	2.637E-09	2.246E-09	1.945E-09
E	1.170E-08	2.133E-08	1.424E-08	8.941E-09	5.814E-09	4.348E-09	3.425E-09	2.797E-09	2.436E-09	2.140E-09	1.855E-09
ESE	2.213E-08	2.928E-08	1.950E-08	1.150E-08	7.884E-09	5.874E-09	4.613E-09	3.758E-09	3.141E-09	2.681E-09	2.325E-09
SE	2.597E-08	1.601E-08	1.241E-08	8.667E-09	6.424E-09	4.989E-09	4.051E-09	3.368E-09	2.816E-09	2.389E-09	2.062E-09
SSE	9.092E-08	4.953E-08	3.155E-08	1.761E-08	1.166E-08	8.467E-09	6.518E-09	5.222E-09	4.507E-09	3.652E-09	3.117E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT											
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	SEGMENT BOUNDARIES IN MILES					
S	5.081E-08	5.697E-08	4.289E-08	3.437E-08	3.775E-08	2.270E-08	8.845E-09	4.350E-09	2.703E-09	1.893E-09	40-50
SSW	2.506E-08	3.995E-08	3.566E-08	3.317E-08	2.628E-08	1.485E-08	5.717E-09	2.744E-09	1.671E-09	1.149E-09	
SSW	4.579E-08	8.944E-08	5.345E-08	4.453E-08	2.073E-08	1.164E-08	4.523E-09	2.096E-09	1.288E-09	8.798E-10	
WSW	4.035E-08	1.090E-07	7.352E-08	4.453E-08	3.114E-08	1.880E-08	8.617E-09	4.338E-09	2.717E-09	1.914E-09	
W	4.695E-08	7.483E-08	4.700E-08	2.875E-08	1.983E-08	1.024E-08	4.876E-09	2.703E-09	1.694E-09	1.193E-09	
WNW	6.453E-08	1.193E-07	7.028E-08	4.273E-08	2.854E-08	1.596E-08	5.577E-09	2.812E-09	1.770E-09	1.235E-09	
NW	1.078E-07	2.603E-07	1.583E-07	8.456E-08	5.494E-08	2.637E-08	9.804E-09	4.806E-09	2.999E-09	2.082E-09	
NNW	4.356E-08	1.016E-07	1.029E-07	8.534E-08	5.974E-08	2.966E-08	1.129E-08	5.557E-09	3.557E-09	2.557E-09	
N	7.629E-08	7.068E-08	5.244E-08	3.759E-08	2.820E-08	1.621E-08	1.076E-08	7.608E-09	5.017E-09	3.547E-09	
NNE	3.500E-08	5.856E-08	4.166E-08	3.017E-08	2.539E-08	3.747E-08	1.940E-08	9.598E-09	6.061E-09	4.293E-09	
NE	5.622E-09	1.696E-08	2.899E-08	2.147E-08	1.805E-08	3.014E-08	1.612E-08	8.094E-09	5.251E-09	3.751E-09	
ENE	1.716E-08	1.565E-08	1.567E-08	1.268E-08	1.127E-08	1.702E-08	9.088E-09	4.676E-09	3.133E-09	2.251E-09	
E	2.101E-08	1.716E-08	1.565E-08	1.271E-08	1.112E-08	1.694E-08	8.562E-09	4.370E-09	2.835E-09	2.122E-09	
ESE	2.211E-08	4.256E-08	3.671E-08	2.735E-08	2.224E-08	1.694E-08	1.167E-08	5.906E-09	3.767E-09	2.685E-09	
SE	3.628E-08	6.541E-08	5.435E-08	3.940E-08	2.952E-08	1.662E-08	8.568E-09	4.996E-09	3.366E-09	2.394E-09	
SSE	5.914E-08	8.857E-08	7.388E-08	6.933E-08	9.469E-08	5.035E-08	1.806E-08	8.538E-09	5.244E-09	3.641E-09	

ERP ELEVATED STACK RELEASES - OCT-DEC 1992  
8.000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)		DISTANCE IN MILES											
SECTOR	BEARING	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	S	2.747E-09	2.726E-08	5.217E-08	6.011E-08	5.905E-08	5.117E-08	4.236E-08	3.516E-08	2.966E-08	3.51E-08	3.945E-08	
SSW	SSW	1.144E-09	7.098E-09	2.233E-08	3.586E-08	4.322E-08	5.858E-08	5.237E-08	4.510E-08	3.846E-08	3.289E-08	3.507E-08	
WSW	WSW	7.792E-16	8.185E-10	3.126E-08	7.929E-08	1.139E-07	7.969E-08	5.133E-08	3.792E-08	3.32E-08	2.347E-08	1.924E-08	
WSW	WSW	6.772E-11	6.239E-09	2.839E-08	6.591E-08	1.478E-07	9.979E-08	7.213E-08	4.97E-08	3.52E-08	2.57E-08	1.955E-08	
WNW	WNW	3.969E-14	7.306E-09	4.357E-08	6.863E-08	9.232E-08	6.340E-08	4.629E-08	3.52E-08	2.632E-08	2.349E-08	1.957E-08	
WNW	WNW	3.843E-15	2.652E-09	1.504E-08	1.059E-07	1.543E-07	9.681E-08	6.477E-08	5.204E-08	4.211E-08	3.466E-08	2.53E-08	
WNW	WNW	1.349E-15	1.196E-09	6.614E-08	1.918E-07	2.587E-07	1.42E-07	1.432E-07	1.058E-07	8.44E-08	7.067E-08	5.753E-08	
N	N	6.186E-09	5.315E-08	8.226E-08	8.061E-08	7.183E-08	6.174E-08	5.207E-08	4.323E-08	3.645E-08	3.12E-08	2.714E-08	
NNE	NNE	3.63E-09	4.174E-08	7.142E-08	6.927E-08	5.978E-08	4.97E-08	4.089E-08	3.29E-08	2.94E-08	2.53E-08	2.35E-08	
NE	NE	1.704E-10	1.465E-08	3.158E-08	3.703E-08	3.831E-08	3.381E-08	2.871E-08	2.436E-08	2.088E-08	1.81E-08	1.59E-08	
ENE	ENE	6.599E-17	1.728E-10	3.980E-09	1.591E-08	1.673E-08	1.673E-08	1.559E-08	1.403E-08	1.255E-08	1.12E-08	1.01E-08	
E	E	3.27E-11	3.864E-09	1.068E-08	1.460E-08	1.787E-08	1.768E-08	1.589E-08	1.414E-08	1.25E-08	1.11E-08	1.00E-08	
ESE	ESE	1.595E-15	1.158E-09	1.823E-08	3.554E-08	4.613E-08	4.257E-08	3.659E-08	3.112E-08	2.665E-08	2.30E-08	2.02E-08	
SE	SE	2.496E-11	3.131E-09	3.078E-08	5.697E-08	7.106E-08	6.494E-08	5.405E-08	4.529E-08	3.826E-08	3.27E-08	2.83E-08	
SSE	SSE	2.514E-10	1.755E-08	5.592E-08	8.144E-08	9.424E-08	8.559E-08	7.355E-08	6.267E-08	5.379E-08	4.56E-08	2.852E-07	

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)		DISTANCE IN MILES											
SECTOR	BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	S	3.529E-08	2.251E-08	1.407E-08	7.489E-09	4.790E-09	3.370E-09	2.516E-09	1.862E-09	1.588E-09	1.346E-09	1.09E-09	
SSW	SSW	2.251E-08	1.477E-08	9.135E-09	4.812E-09	2.790E-09	1.649E-09	1.246E-09	9.473E-10	7.60E-10	6.31E-10	5.07E-10	
SSW	SSW	2.705E-08	1.477E-08	9.135E-09	4.812E-09	2.790E-09	1.649E-09	1.246E-09	9.473E-10	7.60E-10	6.31E-10	5.07E-10	
WSW	WSW	2.714E-08	1.667E-08	1.314E-08	7.794E-09	5.058E-09	3.612E-09	2.739E-09	2.165E-09	1.745E-09	1.42E-09	1.15E-09	
WSW	WSW	1.714E-08	9.62E-09	7.148E-09	4.558E-09	3.182E-09	2.201E-09	1.730E-09	1.368E-09	1.15E-09	9.37E-10	7.709E-10	
WNW	WNW	2.32E-08	1.277E-08	8.421E-09	4.776E-09	3.028E-09	2.132E-09	1.618E-09	1.27E-09	1.032E-09	8.51E-10	7.217E-10	
WNW	WNW	4.414E-08	2.302E-08	1.520E-08	8.416E-09	5.332E-09	3.735E-09	2.824E-09	2.217E-09	1.81E-09	1.42E-09	1.15E-09	
WNW	WNW	4.932E-08	2.802E-08	1.772E-08	9.571E-09	6.006E-09	4.167E-09	3.114E-09	2.440E-09	2.012E-09	1.61E-09	1.25E-09	
N	N	2.39E-08	1.491E-08	1.259E-08	1.055E-08	8.980E-09	7.191E-09	5.801E-09	4.749E-09	3.954E-09	3.25E-09	2.59E-09	
NNE	NNE	2.59E-08	1.491E-08	1.259E-08	1.055E-08	8.980E-09	7.191E-09	5.801E-09	4.749E-09	3.954E-09	3.25E-09	2.59E-09	
NNE	NNE	1.82E-08	4.091E-08	2.607E-08	1.435E-08	9.245E-09	6.556E-09	5.067E-09	4.072E-09	3.38E-09	2.8E-09	2.384E-09	
ENE	ENE	1.179E-08	2.255E-08	1.455E-08	8.050E-09	5.117E-09	3.584E-09	2.792E-09	2.250E-09	1.832E-09	1.524E-09	1.28E-09	
E	E	1.159E-08	2.112E-08	1.368E-08	7.529E-09	4.844E-09	3.399E-09	2.536E-09	2.074E-09	1.66E-09	1.38E-09	1.160E-09	
ESE	ESE	2.139E-08	2.859E-08	1.850E-08	1.027E-08	6.557E-09	4.605E-09	3.437E-09	2.676E-09	2.150E-09	1.76E-09	1.48E-09	
SE	SE	2.485E-08	1.513E-08	1.169E-08	8.356E-09	6.052E-09	4.708E-09	3.855E-09	3.206E-09	2.60E-09	2.17E-09	1.845E-09	
SSE	SSE	8.887E-08	4.705E-08	2.903E-08	1.534E-08	9.651E-09	6.724E-09	4.996E-09	3.881E-09	3.114E-09	2.56E-09	2.150E-09	

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
DIRECTION FROM SITE	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	5.044E-08	5.605E-08	4.183E-08	3.327E-08	3.68E-08	2.158E-08	7.751E-09	3.47E-09	1.978E-09	1.320E-09	
SSW	2.496E-08	3.952E-08	3.476E-08	3.214E-08	2.95E-08	1.398E-08	5.012E-09	2.210E-09	1.279E-09	8.454E-10	
SSW	4.584E-08	6.835E-08	5.193E-08	2.95E-08	1.997E-08	1.051E-08	3.780E-09	1.673E-09	9.741E-10	6.408E-10	
WSW	4.014E-08	1.003E-07	7.264E-08	4.385E-08	3.061E-08	1.409E-08	7.766E-09	3.646E-09	2.177E-09	1.477E-09	
WSW	4.665E-08	7.20E-08	4.655E-08	2.845E-08	1.995E-08	1.011E-08	4.522E-09	2.31E-09	1.75E-09	9.337E-10	
WNW	6.425E-08	1.80E-07	6.889E-08	4.166E-08	2.769E-08	1.316E-08	4.809E-09	2.166E-09	1.281E-09	8.562E-10	
WNW	1.076E-07	2.574E-07	1.472E-07	8.224E-08	5.33E-08	2.439E-08	8.553E-09	3.746E-09	2.29E-09	1.48E-09	
WNW	4.350E-08	1.006E-07	1.014E-07	8.393E-08	5.840E-08	2.817E-08	9.797E-09	4.29E-09	2.46E-09	1.683E-09	
N	7.50E-08	6.330E-08	5.11E-08	3.640E-08	2.714E-08	1.590E-08	1.030E-08	6.95E-09	4.39E-09	2.99E-09	
NNE	6.37E-08	5.731E-08	4.054E-08	2.920E-08	2.454E-08	1.630E-08	1.768E-08	7.80E-09	4.26E-09	3.07E-09	
NNE	3.024E-08	3.602E-08	2.833E-08	2.083E-08	1.746E-08	9.29E-08	1.469E-08	6.77E-09	4.082E-09	2.810E-09	
ENE	5.602E-08	1.527E-08	1.527E-08	1.244E-08	1.05E-08	1.660E-08	8.191E-09	3.76E-09	2.46E-09	1.531E-09	
E	1.091E-08	1.697E-08	1.562E-08	1.244E-08	1.05E-08	1.567E-08	7.725E-09	3.49E-09	2.010E-09	1.371E-09	
ESE	3.219E-08	4.219E-08	3.600E-08	2.65E-08	1.99E-08	2.251E-08	1.045E-08	4.68E-09	2.63E-09	2.161E-09	
SE	3.67E-08	6.481E-08	5.321E-08	3.81E-08	2.85E-08	1.576E-08	8.072E-09	4.77E-09	3.158E-09	2.161E-09	
SSE	5.875E-08	8.755E-08	7.240E-08	6.770E-08	9.246E-08	4.834E-08	1.585E-08	6.84E-09	3.98E-09	2.575E-09	

ERP ELEVATED STACK RELEASES - OCT-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	DISTANCES IN MILES									
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
S	2.729E-09	2.504E-09	2.549E-09	2.902E-09	1.077E-09	6.871E-10	4.739E-10	3.440E-10	2.590E-10	2.035E-10
SSW	8.741E-10	1.083E-09	1.472E-09	1.333E-09	7.806E-10	5.129E-10	3.589E-10	2.624E-10	2.462E-10	1.863E-10
SW	6.767E-11	4.060E-10	8.645E-10	8.954E-10	1.090E-09	5.959E-10	3.699E-10	2.514E-10	1.818E-10	1.375E-10
WSW	5.521E-10	5.382E-10	5.894E-10	9.231E-10	4.899E-10	2.650E-10	1.636E-10	1.108E-10	7.996E-11	6.043E-11
W	1.218E-11	6.730E-10	6.503E-10	4.188E-10	1.965E-10	1.069E-10	6.614E-11	4.484E-11	3.238E-11	2.447E-11
WNW	2.978E-11	1.786E-10	8.784E-10	9.736E-10	5.676E-10	2.970E-10	1.820E-10	1.269E-10	1.018E-10	8.150E-11
NW	1.029E-10	6.171E-10	1.314E-09	3.546E-09	2.367E-09	1.179E-09	6.980E-10	4.648E-10	3.385E-10	2.643E-10
NNW	6.089E-10	8.793E-10	1.316E-09	1.235E-09	1.408E-09	7.672E-10	4.801E-10	3.990E-10	2.934E-10	2.313E-10
N	6.417E-09	5.208E-09	4.410E-09	3.036E-09	1.479E-09	9.079E-10	6.139E-10	4.410E-10	3.303E-10	2.552E-10
NNE	4.004E-09	3.217E-09	2.674E-09	1.812E-09	8.715E-10	5.318E-10	3.585E-10	2.571E-10	1.924E-10	1.466E-10
NE	1.356E-09	1.199E-09	1.162E-09	8.847E-10	4.658E-10	2.948E-10	2.025E-10	1.467E-10	1.103E-10	8.538E-11
ENE	1.624E-11	9.744E-11	2.075E-10	2.149E-10	1.342E-10	9.001E-11	6.358E-11	4.670E-11	3.537E-11	2.745E-11
E	2.896E-10	3.503E-10	4.676E-10	4.205E-10	2.453E-10	1.610E-10	1.126E-10	8.227E-11	6.215E-11	4.819E-11
ESE	1.029E-10	6.171E-10	1.314E-09	1.361E-09	8.502E-10	5.700E-10	4.027E-10	2.958E-10	2.240E-10	1.739E-10
SE	4.317E-10	1.203E-09	2.283E-09	2.301E-09	1.420E-09	9.485E-10	6.688E-10	4.909E-10	3.717E-10	2.884E-10
SSE	2.295E-09	2.673E-09	3.464E-09	3.078E-09	1.783E-09	1.168E-09	8.157E-10	5.959E-10	4.500E-10	4.278E-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	50.00
S	1.534E-10	1.300E-10	9.264E-11	5.567E-11	3.555E-11	2.306E-11	1.652E-11	1.241E-11	9.781E-12	7.798E-12
SSW	1.185E-10	7.713E-11	5.147E-11	2.920E-11	1.998E-11	1.371E-11	9.828E-12	7.383E-12	5.840E-12	4.665E-12
SW	8.715E-11	4.818E-11	3.046E-11	1.637E-11	1.012E-11	6.647E-12	4.244E-12	2.752E-12	1.952E-12	1.409E-12
WSW	3.803E-11	5.968E-11	4.654E-11	2.652E-11	1.605E-11	1.076E-11	7.832E-12	5.881E-12	4.572E-12	3.653E-12
W	1.539E-11	6.882E-12	2.670E-11	1.848E-11	9.507E-12	6.374E-12	4.567E-12	3.430E-12	2.667E-12	2.130E-12
WNW	6.250E-11	4.179E-11	3.118E-11	1.938E-11	1.175E-11	7.317E-12	5.325E-12	4.000E-12	3.159E-12	2.524E-12
NW	1.900E-10	1.173E-10	8.465E-11	5.230E-11	3.185E-11	2.132E-11	1.523E-11	1.144E-11	8.918E-12	7.124E-12
NNW	1.696E-10	1.077E-10	7.867E-11	4.811E-11	3.072E-11	2.037E-11	1.442E-11	1.046E-11	8.022E-12	6.409E-12
N	1.631E-10	7.780E-11	4.780E-11	2.561E-11	6.791E-11	3.978E-11	2.851E-11	2.141E-11	1.665E-11	1.330E-11
NNE	9.503E-11	1.778E-10	1.141E-10	6.170E-11	3.820E-11	2.558E-11	1.824E-11	1.362E-11	1.053E-11	8.362E-12
NE	5.454E-11	1.217E-10	7.836E-11	4.251E-11	2.631E-11	1.758E-11	1.244E-11	9.248E-12	7.216E-12	5.764E-12
ENE	1.751E-11	6.871E-11	5.632E-11	3.731E-11	2.422E-11	1.595E-11	1.109E-11	6.123E-12	4.764E-12	3.809E-12
E	3.075E-11	7.503E-11	5.978E-11	3.890E-11	2.517E-11	1.661E-11	1.158E-11	8.417E-12	6.361E-12	4.393E-12
ESE	1.109E-10	1.469E-10	1.091E-10	6.757E-11	4.322E-11	2.859E-11	2.003E-11	1.465E-11	1.114E-11	8.734E-12
SE	1.840E-10	8.713E-11	5.311E-11	2.793E-11	1.703E-11	1.175E-11	8.858E-12	2.195E-11	1.675E-11	1.318E-11
SSE	3.844E-10	3.147E-10	1.965E-10	1.029E-10	6.292E-11	4.207E-11	3.001E-11	2.242E-11	1.736E-11	1.382E-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	40-50
S	2.296E-09	1.109E-09	4.788E-10	2.621E-10	1.807E-10	1.186E-10	5.495E-11	2.378E-11	1.258E-11	7.855E-12
SSW	1.324E-09	7.844E-10	3.613E-10	2.280E-10	1.477E-10	7.493E-11	3.005E-11	1.383E-11	7.494E-12	4.696E-12
SW	7.764E-10	8.272E-10	3.828E-10	1.848E-10	1.089E-10	4.896E-11	1.672E-11	8.080E-12	4.776E-12	2.971E-12
WSW	7.264E-10	4.862E-10	1.695E-10	8.133E-11	4.775E-11	4.903E-11	2.631E-11	1.100E-11	5.940E-12	3.676E-12
W	5.525E-10	2.061E-10	6.850E-11	3.293E-11	1.933E-11	1.758E-11	1.632E-11	6.487E-12	3.464E-12	2.144E-12
WNW	7.652E-10	5.376E-10	1.906E-10	1.012E-10	7.038E-11	4.168E-11	1.861E-11	7.702E-12	4.058E-12	2.540E-12
NW	2.151E-09	2.101E-09	7.330E-10	3.463E-10	2.215E-10	1.189E-10	5.040E-11	2.169E-11	1.156E-11	7.171E-12
NNW	1.183E-09	1.085E-09	5.242E-10	2.999E-10	1.957E-10	1.085E-10	4.717E-11	2.075E-11	1.066E-11	6.451E-12
N	3.977E-09	1.571E-09	6.231E-10	3.333E-10	2.034E-10	8.343E-11	4.934E-11	4.277E-11	2.162E-11	1.339E-11
NNE	2.412E-09	9.296E-10	3.642E-10	1.942E-10	1.184E-10	1.311E-10	6.290E-11	2.601E-11	1.376E-11	8.441E-12
NE	1.047E-09	4.829E-10	2.048E-10	1.112E-10	6.803E-11	8.752E-11	4.327E-11	1.785E-11	9.387E-12	5.802E-12
ENE	1.863E-10	1.325E-10	6.387E-11	3.559E-11	2.187E-11	5.182E-11	3.572E-11	1.621E-11	7.024E-12	3.833E-12
E	4.206E-10	2.467E-10	1.133E-10	6.258E-11	3.839E-11	5.842E-11	3.744E-11	1.688E-11	8.538E-12	4.673E-12
ESE	1.180E-09	8.392E-10	4.045E-10	2.254E-10	1.385E-10	1.221E-10	6.598E-11	2.907E-11	1.485E-11	8.810E-12
SE	2.051E-09	1.406E-09	6.723E-10	3.740E-10	2.297E-10	9.353E-11	2.868E-11	1.200E-11	1.623E-11	1.339E-11
SSE	3.116E-09	1.797E-09	8.216E-10	4.832E-10	4.174E-10	2.776E-10	1.059E-10	4.281E-11	2.266E-11	1.391E-11

ERP ELEVATED STACK RELEASES - OCT-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q		X/Q		X/Q		D/Q (PER SQ.METER)
			(MILES)	(METERS)	NO DECAY		2.260 DAY DECAY		8.000 DAY DECAY		
					UNDEPLETED	DEPLETED	UNDEPLETED	DEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	5.531E-08	5.524E-08	5.524E-08	5.445E-08	5.445E-08	2.456E-09	
A	SITE BOUNDARY	SSW	0.82	1327.	2.720E-08	2.717E-08	2.717E-08	2.703E-08	2.703E-08	1.476E-09	
A	SITE BOUNDARY	SW	0.98	1569.	7.521E-08	7.508E-08	7.508E-08	7.517E-08	7.517E-08	9.187E-10	
A	SITE BOUNDARY	WSW	0.93	1489.	5.376E-08	5.365E-08	5.365E-08	5.341E-08	5.341E-08	6.426E-10	
A	SITE BOUNDARY	W	0.91	1468.	6.178E-08	6.166E-08	6.166E-08	6.123E-08	6.123E-08	4.870E-10	
A	SITE BOUNDARY	WNW	0.94	1509.	9.445E-08	9.424E-08	9.424E-08	9.397E-08	9.397E-08	1.081E-09	
A	SITE BOUNDARY	NW	0.81	1307.	9.693E-08	9.683E-08	9.683E-08	9.690E-08	9.690E-08	1.389E-09	
A	SITE BOUNDARY	NNW	0.69	1106.	2.213E-08	2.211E-08	2.211E-08	2.201E-08	2.201E-08	1.199E-09	
A	SITE BOUNDARY	N	0.67	1086.	7.612E-08	7.606E-08	7.606E-08	7.482E-08	7.482E-08	4.575E-09	
A	SITE BOUNDARY	NNE	0.60	965.	5.693E-08	5.687E-08	5.687E-08	5.609E-08	5.609E-08	2.945E-09	
A	SITE BOUNDARY	NE	0.62	1005.	2.365E-08	2.362E-08	2.362E-08	2.330E-08	2.330E-08	1.161E-09	
A	SITE BOUNDARY	ENE	0.59	945.	8.194E-10	8.183E-10	8.183E-10	8.191E-10	8.191E-10	1.350E-10	
A	SITE BOUNDARY	E	0.53	845.	4.482E-09	4.477E-09	4.477E-09	4.438E-09	4.438E-09	3.600E-10	
A	SITE BOUNDARY	ESE	0.54	865.	2.277E-09	2.275E-09	2.275E-09	2.276E-09	2.276E-09	7.177E-10	
A	SITE BOUNDARY	SE	0.65	1046.	1.609E-08	1.608E-08	1.608E-08	1.605E-08	1.605E-08	1.842E-09	
A	SITE BOUNDARY	SSE	0.81	1307.	6.436E-08	6.429E-08	6.429E-08	6.378E-08	6.378E-08	3.451E-09	
A	NEAR. RESIDENCE	SW	1.40	2253.	1.147E-07	1.144E-07	1.144E-07	1.134E-07	1.134E-07	1.251E-09	
A	NEAR. RESIDENCE	WSW	1.30	2092.	1.186E-07	1.182E-07	1.182E-07	1.176E-07	1.176E-07	6.544E-10	
A	NEAR. RESIDENCE	W	1.00	1609.	6.932E-08	6.917E-08	6.917E-08	6.863E-08	6.863E-08	4.188E-10	
A	NEAR. RESIDENCE	WNW	1.60	2575.	1.415E-07	1.410E-07	1.410E-07	1.393E-07	1.393E-07	4.911E-10	
A	NEAR. RESIDENCE	NW	0.90	1448.	1.423E-07	1.421E-07	1.421E-07	1.420E-07	1.420E-07	3.881E-09	
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.116E-07	1.113E-07	1.113E-07	1.099E-07	1.099E-07	8.571E-10	
A	NEAR. RESIDENCE	N	3.00	4828.	4.469E-08	4.451E-08	4.451E-08	4.323E-08	4.323E-08	4.410E-10	
A	NEAR. RESIDENCE	NNE	2.70	4345.	3.933E-08	3.914E-08	3.914E-08	3.804E-08	3.804E-08	3.120E-10	
A	NEAR. RESIDENCE	ENE	1.70	2736.	1.683E-08	1.676E-08	1.676E-08	1.665E-08	1.665E-08	1.136E-10	
A	NEAR. RESIDENCE	E	1.80	2897.	1.815E-08	1.810E-08	1.810E-08	1.788E-08	1.788E-08	1.876E-10	
A	NEAR. RESIDENCE	ESE	2.40	3863.	3.862E-08	3.849E-08	3.849E-08	3.778E-08	3.778E-08	4.301E-10	
A	NEAR. RESIDENCE	SE	2.20	3541.	6.126E-08	6.108E-08	6.108E-08	6.002E-08	6.002E-08	8.202E-10	
A	NEAREST COW	S	10.50	16899.	1.442E-08	1.419E-08	1.419E-08	1.305E-08	1.305E-08	8.767E-11	
A	NEAREST GARDEN	SW	1.40	2253.	1.147E-07	1.144E-07	1.144E-07	1.134E-07	1.134E-07	1.251E-09	
A	NEAREST GARDEN	WSW	1.50	2092.	1.186E-07	1.182E-07	1.182E-07	1.176E-07	1.176E-07	6.544E-10	
A	NEAREST GARDEN	WNW	2.40	3863.	7.334E-08	7.292E-08	7.292E-08	7.147E-08	7.147E-08	1.936E-10	
A	NEAREST GARDEN	NW	2.70	4345.	1.296E-07	1.290E-07	1.290E-07	1.261E-07	1.261E-07	5.862E-10	
A	NEAREST GARDEN	NNW	1.90	3058.	1.116E-07	1.113E-07	1.113E-07	1.099E-07	1.099E-07	8.571E-10	
A	NEAREST GARDEN	N	3.00	4828.	4.469E-08	4.451E-08	4.451E-08	4.323E-08	4.323E-08	4.410E-10	
A	NEAREST GARDEN	NNE	2.70	4345.	3.933E-08	3.914E-08	3.914E-08	3.804E-08	3.804E-08	3.120E-10	
A	NEAREST GARDEN	ENE	1.70	2736.	1.683E-08	1.676E-08	1.676E-08	1.665E-08	1.665E-08	1.136E-10	
A	NEAREST GARDEN	E	1.80	2897.	1.815E-08	1.810E-08	1.810E-08	1.788E-08	1.788E-08	1.876E-10	
A	NEAREST GARDEN	ESE	2.40	3863.	3.862E-08	3.849E-08	3.849E-08	3.778E-08	3.778E-08	4.301E-10	
A	NEAREST GARDEN	SE	2.20	3541.	6.126E-08	6.108E-08	6.108E-08	6.002E-08	6.002E-08	8.202E-10	

Atmospheric Diffusion Estimates

Elevated Releases

July-December 1992



ERP ELEVATED STACK RELEASES - JUL-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
SECTOR	0-250	0-500	0-750	1-000	1-500	2-000	2-500	3-000	3-500	4-000	4-500
S	1.519E-08	6.505E-08	9.808E-08	9.549E-08	8.481E-08	7.108E-08	5.888E-08	4.915E-08	4.160E-08	3.500E-08	3.000E-08
SSW	1.562E-10	1.932E-08	4.277E-08	5.055E-08	5.185E-08	4.530E-08	3.829E-08	3.253E-08	2.798E-08	2.469E-08	2.152E-08
SW	1.460E-09	1.358E-08	4.055E-08	7.340E-08	1.155E-07	7.975E-08	5.854E-08	4.980E-08	4.216E-08	3.574E-08	3.071E-08
WSW	1.045E-10	1.101E-08	3.898E-08	7.392E-08	1.452E-07	7.730E-08	6.997E-08	5.320E-08	4.216E-08	3.499E-08	2.892E-08
W	5.767E-10	3.295E-08	9.245E-08	1.231E-07	1.344E-07	8.814E-08	6.256E-08	4.713E-08	3.710E-08	3.019E-08	2.521E-08
WNW	9.724E-09	5.652E-08	1.298E-07	1.960E-07	2.566E-07	1.594E-07	1.094E-07	8.479E-08	6.836E-08	5.445E-08	4.469E-08
NW	3.589E-08	7.12E-08	1.401E-07	2.465E-07	4.227E-07	2.527E-07	1.694E-07	1.259E-07	9.816E-08	7.782E-08	6.342E-08
NNW	8.649E-08	1.108E-07	1.315E-07	1.515E-07	1.955E-07	1.920E-07	1.797E-07	1.628E-07	1.480E-07	1.170E-07	9.549E-08
N	8.470E-08	1.520E-07	1.581E-07	1.269E-07	9.693E-08	7.940E-08	6.585E-08	5.436E-08	4.575E-08	3.718E-08	3.066E-08
NNE	1.477E-08	6.562E-08	8.984E-08	7.984E-08	6.530E-08	5.343E-08	4.403E-08	3.686E-08	3.139E-08	2.717E-08	2.367E-08
ENE	3.368E-09	2.243E-08	3.424E-08	3.552E-08	3.439E-08	3.000E-08	2.547E-08	2.169E-08	1.868E-08	1.629E-08	1.440E-08
E	1.841E-11	1.355E-09	5.059E-09	8.903E-09	1.294E-08	1.313E-08	1.203E-08	1.072E-08	9.513E-09	8.474E-09	7.633E-09
ESE	9.085E-11	7.157E-09	1.522E-08	1.758E-08	1.874E-08	1.742E-08	1.541E-08	1.348E-08	1.182E-08	1.044E-08	9.335E-09
SE	1.934E-10	1.098E-08	2.716E-08	3.446E-08	3.711E-08	3.307E-08	2.819E-08	2.396E-08	2.054E-08	1.781E-08	1.549E-08
SSE	1.641E-10	1.194E-08	3.591E-08	5.049E-08	5.650E-08	5.002E-08	4.214E-08	3.539E-08	3.001E-08	2.577E-08	2.241E-08
	4.061E-09	3.504E-08	6.704E-08	8.128E-08	8.662E-08	7.748E-08	6.635E-08	5.652E-08	4.853E-08	4.165E-08	3.596E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES									
BEARING	5-000	7-500	10-000	15-000	20-000	30-000	35-000	40-000	45-000	50-000	
S	4.907E-08	3.136E-08	2.022E-08	1.149E-08	7.897E-09	5.885E-09	4.573E-09	3.698E-09	3.092E-09	2.639E-09	2.244E-09
SSW	3.331E-08	2.473E-08	1.599E-08	9.113E-09	6.337E-09	4.706E-09	3.660E-09	2.962E-09	2.468E-09	2.102E-09	1.822E-09
SW	2.297E-08	1.864E-08	1.193E-08	6.983E-09	5.014E-09	3.854E-09	3.109E-09	2.529E-09	2.117E-09	1.811E-09	1.575E-09
WSW	2.616E-08	1.838E-08	1.342E-08	8.479E-09	5.755E-09	4.275E-09	3.357E-09	2.739E-09	2.298E-09	1.970E-09	1.777E-09
W	2.500E-08	1.215E-08	9.057E-09	6.217E-09	4.718E-09	3.520E-09	2.764E-09	2.255E-09	1.892E-09	1.622E-09	1.433E-09
WNW	3.802E-08	2.146E-08	1.461E-08	8.884E-09	6.122E-09	4.585E-09	3.630E-09	2.968E-09	2.484E-09	2.123E-09	1.845E-09
NW	5.935E-08	3.004E-08	2.041E-08	1.235E-08	8.334E-09	6.169E-09	4.905E-09	4.004E-09	3.349E-09	2.863E-09	2.489E-09
NNW	8.158E-08	4.658E-08	3.038E-08	1.757E-08	1.194E-08	8.896E-09	7.044E-09	5.785E-09	4.930E-09	4.245E-09	3.666E-09
N	3.007E-08	1.897E-08	1.581E-08	1.279E-08	1.075E-08	8.855E-09	6.978E-09	5.690E-09	4.764E-09	4.075E-09	3.564E-09
NNE	2.706E-08	4.581E-08	2.989E-08	1.732E-08	1.182E-08	8.807E-09	6.934E-09	5.670E-09	4.766E-09	4.091E-09	3.570E-09
NE	1.459E-08	3.310E-08	2.174E-08	1.270E-08	8.716E-09	6.520E-09	5.239E-09	4.337E-09	3.672E-09	3.154E-09	2.754E-09
ENE	8.705E-09	1.643E-08	1.099E-08	6.555E-09	4.547E-09	3.424E-09	2.855E-09	2.419E-09	2.037E-09	1.752E-09	1.511E-09
E	1.041E-08	1.603E-08	1.049E-08	6.281E-09	4.331E-09	3.249E-09	2.571E-09	2.111E-09	1.837E-09	1.617E-09	1.421E-09
ESE	1.644E-08	2.184E-08	1.449E-08	8.733E-09	6.056E-09	4.558E-09	3.615E-09	2.973E-09	2.510E-09	2.162E-09	1.837E-09
SE	1.972E-08	1.218E-08	9.475E-09	6.874E-09	5.069E-09	4.016E-09	3.322E-09	2.849E-09	2.392E-09	2.050E-09	1.766E-09
SSE	8.127E-08	4.621E-08	2.974E-08	1.688E-08	1.135E-08	8.356E-09	6.516E-09	5.284E-09	4.410E-09	3.761E-09	3.265E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT		SEGMENT BOUNDARIES IN MILES									
DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	8.959E-08	8.108E-08	5.824E-08	4.682E-08	5.126E-08	3.035E-08	1.823E-08	5.897E-09	3.717E-09	2.642E-09	2.442E-09
SSW	4.104E-08	4.869E-08	4.188E-08	4.227E-08	3.600E-08	2.275E-08	9.403E-09	4.723E-09	2.974E-09	2.107E-09	2.181E-09
SW	4.912E-08	9.031E-08	5.864E-08	3.500E-08	2.544E-08	1.643E-08	7.200E-09	3.666E-09	2.538E-09	1.814E-09	1.974E-09
WSW	4.626E-08	1.082E-07	7.055E-08	4.259E-08	2.955E-08	1.791E-08	8.368E-09	4.303E-09	2.748E-09	1.974E-09	1.625E-09
W	9.268E-08	1.114E-07	6.321E-08	3.734E-08	2.531E-08	1.285E-08	6.183E-09	3.337E-09	2.262E-09	1.625E-09	2.127E-09
WNW	1.429E-07	1.999E-07	1.129E-07	7.76E-08	4.511E-08	3.107E-08	8.923E-09	4.613E-09	2.973E-09	2.669E-09	2.669E-09
NW	1.720E-07	3.079E-07	1.743E-07	9.834E-08	6.423E-08	3.107E-08	1.235E-08	6.241E-09	4.012E-09	4.244E-09	4.244E-09
NNW	1.556E-07	1.841E-07	1.762E-07	1.494E-07	9.469E-08	4.716E-08	1.792E-08	8.877E-09	5.819E-09	4.083E-09	4.083E-09
N	1.229E-07	9.580E-08	6.487E-08	4.571E-08	3.910E-08	2.003E-08	1.254E-08	8.111E-09	5.705E-09	4.098E-09	4.098E-09
NNE	8.002E-08	6.325E-08	4.367E-08	3.144E-08	2.693E-08	3.457E-08	1.766E-08	8.641E-09	5.687E-09	4.098E-09	4.098E-09
NE	3.219E-08	3.269E-08	2.516E-08	1.833E-08	1.577E-08	1.230E-08	6.649E-09	6.593E-09	3.998E-09	3.159E-09	3.159E-09
ENE	5.953E-09	1.213E-08	1.180E-08	9.435E-09	8.269E-09	1.230E-08	6.385E-09	3.497E-09	2.398E-09	1.754E-09	1.606E-09
E	1.448E-08	1.791E-08	1.518E-08	1.177E-08	1.005E-08	1.238E-08	6.385E-09	3.264E-09	2.138E-09	1.606E-09	1.606E-09
ESE	2.881E-08	3.472E-08	2.780E-08	2.046E-08	1.659E-08	1.745E-08	8.855E-09	4.689E-09	2.800E-09	2.166E-09	2.166E-09
SE	3.707E-08	5.229E-08	4.154E-08	2.932E-08	1.824E-08	1.265E-08	6.655E-09	4.233E-09	2.813E-09	2.054E-09	2.054E-09
SSE	6.626E-08	8.137E-08	6.538E-08	6.050E-08	8.364E-08	4.668E-08	1.722E-08	8.418E-09	5.303E-09	3.769E-09	3.769E-09

ERP ELEVATED STACK RELEASES - JUL-DEC 1992  
2.260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	1.518E-08	6.499E-08	9.796E-08	9.533E-08	8.460E-08	7.084E-08	5.863E-08	4.890E-08	4.135E-08	4.930E-08	5.469E-08	
SSW	7.560E-10	1.940E-08	4.271E-08	5.046E-08	5.171E-08	4.521E-08	3.809E-08	4.227E-08	4.456E-08	3.944E-08	3.531E-08	
SW	1.459E-09	1.336E-08	4.051E-08	7.325E-08	1.153E-07	7.938E-08	5.799E-08	4.448E-08	3.543E-08	2.908E-08	2.444E-08	
WSW	1.044E-10	1.100E-08	3.883E-08	7.375E-08	1.452E-07	9.685E-08	6.957E-08	5.283E-08	4.182E-08	3.417E-08	2.863E-08	
W	5.764E-10	3.226E-08	9.227E-08	1.228E-07	1.341E-07	8.772E-08	6.220E-08	4.680E-08	3.680E-08	2.991E-08	2.495E-08	
WNW	9.720E-09	5.648E-08	1.296E-07	1.956E-07	2.559E-07	1.588E-07	1.089E-07	8.429E-08	6.789E-08	5.402E-08	4.429E-08	
NW	3.588E-08	7.156E-08	1.399E-07	2.458E-07	4.218E-07	2.519E-07	1.689E-07	1.253E-07	9.764E-08	7.734E-08	6.317E-08	
NNW	8.667E-08	1.107E-07	1.314E-07	1.512E-07	1.948E-07	1.915E-07	1.790E-07	1.626E-07	1.471E-07	1.162E-07	9.470E-08	
N	8.468E-08	1.519E-07	1.580E-07	1.267E-07	9.675E-08	7.920E-08	6.565E-08	5.416E-08	4.555E-08	3.899E-08	3.387E-08	
NNE	1.477E-08	6.558E-08	8.976E-08	7.971E-08	6.512E-08	5.322E-08	4.382E-08	3.664E-08	3.117E-08	2.695E-08	2.365E-08	
NE	3.387E-09	2.242E-08	3.420E-08	3.546E-08	3.429E-08	2.988E-08	2.534E-08	2.156E-08	1.854E-08	1.616E-08	1.427E-08	
ENE	1.840E-11	1.394E-09	5.051E-09	8.881E-09	1.289E-08	1.306E-08	1.196E-08	1.064E-08	9.434E-09	8.394E-09	7.523E-09	
E	9.081E-11	7.152E-09	1.520E-08	1.755E-08	1.874E-08	1.737E-08	1.535E-08	1.341E-08	1.175E-08	1.037E-08	9.231E-09	
ESE	1.433E-10	1.098E-08	2.713E-08	3.441E-08	3.702E-08	3.296E-08	2.808E-08	2.384E-08	2.042E-08	1.770E-08	1.552E-08	
SE	1.641E-10	1.193E-08	3.588E-08	5.043E-08	5.638E-08	4.988E-08	4.199E-08	3.523E-08	2.985E-08	2.561E-08	2.226E-08	
SSE	4.060E-09	3.502E-08	6.698E-08	8.118E-08	8.644E-08	7.725E-08	6.608E-08	5.625E-08	4.826E-08	7.346E-08	9.408E-08	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)		DISTANCE IN MILES										
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	4.864E-08	3.096E-08	1.988E-08	1.120E-08	7.631E-09	5.638E-09	4.345E-09	3.484E-09	2.889E-09	2.445E-09	2.099E-09	
SSW	3.296E-08	2.435E-08	1.565E-08	8.831E-09	6.077E-09	4.467E-09	3.438E-09	2.754E-09	2.272E-09	1.915E-09	1.643E-09	
SW	2.268E-08	1.773E-08	1.163E-08	6.730E-09	4.771E-09	3.621E-09	2.884E-09	2.318E-09	1.917E-09	1.619E-09	1.392E-09	
WSW	2.586E-08	1.807E-08	1.312E-08	8.187E-09	5.501E-09	4.041E-09	3.139E-09	2.533E-09	2.102E-09	1.782E-09	1.536E-09	
W	2.125E-08	1.194E-08	8.854E-09	6.013E-09	4.515E-09	3.333E-09	2.589E-09	2.090E-09	1.735E-09	1.472E-09	1.269E-09	
WNW	3.764E-08	2.114E-08	1.432E-08	8.626E-09	5.885E-09	4.365E-09	3.422E-09	2.771E-09	2.297E-09	1.944E-09	1.674E-09	
NW	5.351E-08	2.968E-08	2.008E-08	1.203E-08	8.069E-09	5.923E-09	4.670E-09	3.781E-09	3.137E-09	2.660E-09	2.294E-09	
NNW	8.086E-08	4.595E-08	2.983E-08	1.709E-08	1.153E-08	8.491E-09	6.660E-09	5.418E-09	4.572E-09	3.899E-09	3.363E-09	
N	2.988E-08	1.879E-08	1.562E-08	1.256E-08	1.048E-08	8.573E-09	6.712E-09	5.437E-09	4.523E-09	3.844E-09	3.323E-09	
NNE	2.679E-08	4.514E-08	2.930E-08	1.681E-08	1.136E-08	8.383E-09	6.536E-09	5.293E-09	4.406E-09	3.746E-09	3.237E-09	
NE	1.642E-08	3.254E-08	2.125E-08	1.228E-08	8.331E-09	6.162E-09	4.895E-09	4.007E-09	3.354E-09	2.849E-09	2.460E-09	
ENE	8.609E-09	1.619E-08	1.078E-08	6.373E-09	4.380E-09	3.271E-09	2.701E-09	2.269E-09	1.894E-09	1.614E-09	1.398E-09	
E	1.032E-08	1.581E-08	1.045E-08	6.110E-09	4.174E-09	3.103E-09	2.432E-09	1.978E-09	1.705E-09	1.486E-09	1.285E-09	
ESE	1.633E-08	2.158E-08	1.439E-08	8.509E-09	5.848E-09	4.365E-09	3.432E-09	2.798E-09	2.343E-09	2.001E-09	1.737E-09	
SE	1.957E-08	1.204E-08	9.332E-09	6.719E-09	4.915E-09	3.862E-09	3.176E-09	2.692E-09	2.241E-09	1.905E-09	1.646E-09	
SSE	8.050E-08	4.550E-08	2.912E-08	1.635E-08	1.087E-08	7.918E-09	6.106E-09	4.897E-09	4.042E-09	3.410E-09	2.927E-09	

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

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	1-5	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.947E-08	8.087E-08	5.799E-08	4.653E-08	5.086E-08	2.997E-08	1.154E-08	5.652E-09	3.503E-09	2.449E-09
SSW	4.097E-08	4.854E-08	4.166E-08	4.196E-08	3.567E-08	2.240E-08	9.123E-09	4.485E-09	2.706E-09	1.920E-09
SW	4.903E-08	8.998E-08	5.829E-08	3.560E-08	2.516E-08	1.612E-08	6.949E-09	3.633E-09	2.527E-09	1.673E-09
WSW	4.816E-08	1.078E-07	7.015E-08	4.205E-08	2.925E-08	1.760E-08	8.089E-09	4.070E-09	2.542E-09	1.786E-09
W	9.250E-08	1.110E-07	6.285E-08	3.703E-08	2.505E-08	1.264E-08	5.979E-09	3.351E-09	2.097E-09	1.479E-09
WNW	1.427E-07	1.993E-07	1.124E-07	6.729E-07	4.471E-08	2.178E-08	8.673E-09	4.393E-09	2.776E-09	1.948E-09
NW	1.718E-07	3.072E-07	1.736E-07	9.781E-08	6.379E-08	3.071E-08	1.206E-08	5.994E-09	3.790E-09	2.666E-09
NNW	1.356E-07	1.836E-07	1.755E-07	1.396E-07	9.594E-08	4.654E-08	1.745E-08	8.568E-09	5.450E-09	3.900E-09
N	1.428E-07	9.561E-08	6.466E-08	4.551E-08	3.391E-08	1.984E-08	1.232E-08	8.338E-09	5.453E-09	3.852E-09
NNE	7.992E-08	6.307E-08	4.345E-08	3.113E-08	2.579E-08	3.402E-08	1.716E-08	8.439E-09	5.310E-09	3.753E-09
NE	3.214E-08	3.259E-08	2.504E-08	1.850E-08	1.562E-08	2.394E-08	1.252E-08	6.234E-09	4.012E-09	2.855E-09
ENE	5.940E-09	1.208E-08	1.173E-08	9.384E-09	8.184E-09	1.210E-08	6.467E-09	3.339E-09	2.250E-09	1.617E-09
E	1.446E-08	1.786E-08	1.511E-08	1.170E-08	9.971E-09	1.221E-08	6.213E-09	3.120E-09	2.004E-09	1.477E-09
ESE	2.678E-08	3.464E-08	2.769E-08	2.036E-08	1.647E-08	1.722E-08	8.634E-09	4.387E-09	2.806E-09	2.005E-09
SE	3.702E-08	5.217E-08	4.139E-08	2.977E-08	2.226E-08	1.251E-08	6.498E-09	3.869E-09	2.656E-09	1.909E-09
SSE	6.619E-08	8.118E-08	6.513E-08	6.015E-08	8.294E-08	4.600E-08	1.675E-08	7.981E-09	4.917E-09	3.418E-09

ERP ELEVATED STACK RELEASES - JUL-DEC 1992  
8,000 DAY DECAY, DEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE	CHI/Q (SEC/METER CUBED)	0.250	0.500	0.750	1.000	1.500	2.500	3.000	3.500	4.000	4.500
SECTOR											
S	1.518E-08	6.446E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08	9.622E-08
SSW	7.562E-09	1.924E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08	4.209E-08
SW	1.459E-09	1.326E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08	4.610E-08
WSW	1.045E-10	1.091E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08	3.835E-08
W	5.766E-10	3.181E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08	9.131E-08
WNW	9.723E-09	5.604E-08	1.284E-07	1.284E-07	1.284E-07	1.284E-07	1.284E-07	1.284E-07	1.284E-07	1.284E-07	1.284E-07
NW	3.588E-08	7.096E-08	1.382E-07	1.382E-07	1.382E-07	1.382E-07	1.382E-07	1.382E-07	1.382E-07	1.382E-07	1.382E-07
NNW	8.669E-08	1.098E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07	1.922E-07
N	8.469E-08	1.505E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07	1.548E-07
NNE	1.477E-08	6.503E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08	8.801E-08
NE	3.388E-09	2.223E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08	3.361E-08
ENE	1.041E-11	1.583E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09	5.013E-09
E	9.084E-11	7.094E-09	1.977E-08	1.977E-08	1.977E-08	1.977E-08	1.977E-08	1.977E-08	1.977E-08	1.977E-08	1.977E-08
ESE	1.434E-10	1.089E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08	2.678E-08
SE	1.691E-10	1.184E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08	3.553E-08
SSE	4.061E-09	3.473E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08	6.610E-08

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
BEARING											
S	4.727E-08	2.961E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08	1.847E-08
SSW	3.203E-08	2.341E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08	1.462E-08
SW	2.202E-08	1.713E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08	1.094E-08
WSW	2.538E-08	1.747E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08	1.234E-08
W	2.081E-08	1.169E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08	8.602E-08
WNW	3.628E-08	1.985E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08	1.506E-08
NW	5.153E-08	2.782E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08	1.828E-08
NNW	7.879E-08	4.359E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08	2.764E-08
N	2.868E-08	1.791E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08	1.092E-08
NNE	2.591E-08	4.418E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08	2.783E-08
NE	1.592E-08	3.201E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08	2.030E-08
ENE	8.420E-09	1.558E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08
E	1.009E-08	1.558E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08	9.086E-08
ESE	1.577E-08	2.109E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08	1.367E-08
SE	1.872E-08	1.139E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08	8.977E-08
SSE	7.874E-08	4.335E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08	2.690E-08

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

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.801E-08	7.926E-08	5.648E-08	4.510E-08	4.941E-08	2.856E-08	1.015E-08	4.432E-09	2.558E-09	1.702E-09
SSW	4.045E-08	4.777E-08	4.970E-08	4.088E-08	3.467E-08	2.142E-08	8.083E-09	3.615E-09	2.119E-09	1.414E-09
SW	4.871E-08	8.898E-08	5.715E-08	3.467E-08	2.442E-08	1.544E-08	6.803E-09	2.881E-09	1.736E-09	1.164E-09
WSW	4.776E-08	1.069E-07	6.920E-08	4.134E-08	2.870E-08	1.695E-08	7.103E-09	3.439E-09	2.051E-09	1.390E-09
W	9.148E-08	1.094E-07	6.182E-08	3.634E-08	2.454E-08	1.234E-08	4.503E-09	2.043E-09	1.698E-09	1.152E-09
WNW	1.414E-07	3.036E-07	1.100E-07	6.559E-08	4.328E-08	2.044E-08	7.458E-09	3.360E-09	1.992E-09	1.337E-09
NW	1.701E-07	1.702E-07	1.702E-07	9.534E-08	6.172E-08	3.888E-08	1.944E-08	4.732E-09	2.819E-09	1.899E-09
NNW	1.338E-07	1.813E-07	1.729E-07	1.574E-07	9.390E-08	4.423E-08	1.540E-08	4.684E-09	3.758E-09	2.548E-09
N	7.846E-08	9.535E-08	6.284E-08	3.008E-08	3.262E-08	1.898E-08	1.176E-08	7.625E-09	4.743E-09	3.231E-09
NNE	3.166E-08	3.202E-08	2.445E-08	1.794E-08	1.512E-08	2.232E-08	1.554E-08	6.923E-09	4.055E-09	2.710E-09
NE	5.912E-09	1.194E-08	1.155E-08	9.188E-09	7.094E-09	1.172E-08	5.822E-09	2.624E-09	1.612E-09	1.101E-09
ENE	1.426E-08	1.768E-08	1.483E-08	1.544E-08	9.737E-09	1.187E-08	5.599E-09	2.624E-09	1.421E-09	9.697E-10
E	2.699E-08	3.415E-08	2.708E-08	1.776E-08	1.590E-08	1.661E-08	7.737E-09	3.464E-09	2.007E-09	1.326E-09
ESE	3.674E-08	5.151E-08	4.045E-08	2.881E-08	2.136E-08	1.184E-08	6.735E-09	3.673E-09	2.527E-09	1.769E-09
SE	6.546E-08	8.005E-08	6.374E-08	5.866E-08	8.126E-08	4.391E-08	1.474E-08	6.384E-09	3.668E-09	2.416E-09



ERP ELEVATED STACK RELEASES - JUL-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M***-2) AT FIXED POINTS BY DOWNWIND SECTORS *****												
DIRECTION	DISTANCES IN MILES											
FROM SITE	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	
S	5.084E-09	4.242E-09	3.761E-09	2.687E-09	1.350E-09	8.386E-10	5.707E-10	4.114E-10	3.086E-10	2.411E-10	2.247E-10	
SSW	1.734E-09	1.647E-09	1.751E-09	1.411E-09	7.715E-10	4.952E-10	3.426E-10	2.490E-10	2.317E-10	1.753E-10	1.372E-10	
SW	7.352E-10	7.633E-10	8.933E-10	7.573E-10	7.805E-10	4.248E-10	2.634E-10	1.789E-10	1.293E-10	9.783E-11	7.659E-11	
WSW	8.533E-10	7.425E-10	7.027E-10	8.042E-10	4.815E-10	2.595E-10	1.600E-10	1.083E-10	7.815E-11	5.906E-11	4.622E-11	
W	5.722E-10	1.578E-09	1.284E-09	8.174E-10	3.700E-10	1.997E-10	1.232E-10	8.339E-11	6.018E-11	4.548E-11	3.559E-11	
WNW	2.534E-09	2.074E-09	3.061E-09	2.252E-09	1.221E-09	6.250E-10	3.775E-10	2.581E-10	2.014E-10	1.604E-10	1.352E-10	
NW	5.063E-09	4.113E-09	3.489E-09	4.381E-09	2.582E-09	1.290E-09	7.693E-10	5.182E-10	3.830E-10	3.045E-10	2.562E-10	
NNW	9.226E-09	7.202E-09	5.674E-09	3.661E-09	2.644E-09	1.415E-09	8.753E-10	7.055E-10	5.249E-10	4.199E-10	3.554E-10	
N	1.518E-08	1.157E-08	8.675E-09	5.325E-09	2.330E-09	1.362E-09	8.963E-10	6.346E-10	4.717E-10	3.633E-10	2.876E-10	
NNE	6.144E-09	4.763E-09	3.701E-09	2.356E-09	1.070E-09	6.361E-10	4.229E-10	3.010E-10	2.244E-10	1.730E-10	1.370E-10	
NE	1.833E-09	1.511E-09	1.315E-09	9.254E-10	4.592E-10	2.840E-10	1.928E-10	1.388E-10	1.040E-10	8.042E-11	6.367E-11	
ENE	1.516E-10	1.800E-10	2.369E-10	2.110E-10	1.231E-10	8.072E-11	5.641E-11	4.122E-11	3.114E-11	2.414E-11	1.912E-11	
E	7.146E-10	6.394E-10	6.295E-10	4.842E-10	2.567E-10	1.629E-10	1.121E-10	8.124E-11	6.112E-11	4.731E-11	3.746E-11	
ESE	1.170E-09	1.184E-09	1.349E-09	1.129E-09	6.320E-10	4.090E-10	2.841E-10	2.070E-10	1.561E-10	1.209E-10	9.577E-11	
SE	1.496E-09	1.680E-09	2.114E-09	1.854E-09	1.067E-09	6.967E-10	4.861E-10	3.549E-10	2.680E-10	2.077E-10	1.645E-10	
SSE	3.612E-09	3.432E-09	3.648E-09	2.939E-09	1.607E-09	1.032E-09	7.137E-10	5.188E-10	3.909E-10	3.683E-10	3.808E-10	

***** RELATIVE DEPOSITION PER UNIT AREA (M***-2) BY DOWNWIND SECTORS *****												
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	1.808E-10	1.600E-10	1.153E-10	6.994E-11	4.486E-11	2.836E-11	2.035E-11	1.529E-11	1.205E-11	9.595E-12	7.832E-12	
SSW	1.112E-10	9.215E-11	6.536E-11	3.911E-11	2.356E-11	1.648E-11	1.181E-11	8.870E-12	6.962E-12	5.561E-12	4.539E-12	
SW	6.210E-11	5.404E-11	3.869E-11	2.331E-11	1.487E-11	1.028E-11	6.903E-12	5.233E-12	4.069E-12	3.250E-12	2.653E-12	
WSW	3.718E-11	5.253E-11	4.054E-11	2.336E-11	1.414E-11	9.480E-12	6.878E-12	5.165E-12	4.016E-12	3.208E-12	2.618E-12	
W	2.863E-11	1.287E-11	3.377E-11	2.248E-11	1.204E-11	8.129E-12	5.825E-12	4.374E-12	3.401E-12	2.717E-12	2.217E-12	
WNW	1.198E-10	7.763E-11	5.724E-11	3.539E-11	2.196E-11	1.404E-11	9.920E-12	7.450E-12	5.831E-12	4.658E-12	3.802E-12	
NW	2.260E-10	1.455E-10	1.071E-10	6.479E-11	3.949E-11	2.648E-11	1.889E-11	1.419E-11	1.106E-11	8.832E-12	7.209E-12	
NNW	3.150E-10	2.054E-10	1.520E-10	9.436E-11	6.098E-11	4.086E-11	2.731E-11	1.975E-11	1.518E-11	1.212E-11	9.896E-12	
N	2.327E-10	1.115E-10	6.887E-11	3.739E-11	8.490E-11	5.029E-11	3.604E-11	2.706E-11	2.104E-11	1.681E-11	1.372E-11	
NNE	1.107E-10	1.837E-10	1.165E-10	6.218E-11	3.832E-11	2.566E-11	1.831E-11	1.368E-11	1.059E-11	8.429E-12	6.860E-12	
NE	5.140E-11	1.061E-10	6.815E-11	3.687E-11	2.280E-11	1.523E-11	1.073E-11	7.993E-12	6.229E-12	4.976E-12	4.061E-12	
ENE	1.541E-11	4.912E-11	3.985E-11	2.624E-11	1.702E-11	1.122E-11	7.812E-12	4.377E-12	3.407E-12	2.724E-12	2.226E-12	
E	3.022E-11	5.837E-11	4.565E-11	2.936E-11	1.898E-11	1.257E-11	8.795E-12	6.418E-12	4.867E-12	3.407E-12	2.771E-12	
ESE	7.721E-11	1.017E-10	7.579E-11	4.787E-11	3.020E-11	2.004E-11	1.408E-11	1.033E-11	7.872E-12	6.187E-12	4.979E-12	
SE	1.326E-10	6.290E-11	3.841E-11	2.030E-11	1.247E-11	8.657E-12	6.560E-12	1.557E-11	1.192E-11	9.408E-12	7.611E-12	
SSE	3.290E-10	2.677E-10	1.669E-10	8.727E-11	5.338E-11	3.570E-11	2.540E-11	1.904E-11	1.475E-11	1.175E-11	9.562E-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	3.391E-09	1.420E-09	5.784E-10	3.122E-10	2.133E-10	1.448E-10	6.887E-11	2.956E-11	1.550E-11	9.671E-12		
SSW	1.577E-09	7.907E-10	3.458E-10	2.152E-10	1.389E-10	8.448E-11	3.803E-11	1.650E-11	8.983E-12	5.598E-12		
SW	8.040E-10	6.172E-10	2.726E-10	1.315E-10	7.752E-11	4.901E-11	2.297E-11	1.015E-11	5.267E-12	3.272E-12		
WSW	7.567E-10	4.546E-10	1.659E-10	7.950E-11	4.668E-11	4.379E-11	2.308E-11	9.681E-12	5.217E-12	3.229E-12		
W	1.142E-09	3.937E-10	1.277E-10	6.121E-11	3.594E-11	2.566E-11	2.035E-11	8.250E-12	4.418E-12	2.734E-12		
WNW	2.482E-09	1.185E-09	3.958E-10	2.020E-10	1.370E-10	7.795E-11	3.428E-11	1.450E-11	7.539E-12	4.689E-12		
NW	4.324E-09	2.407E-09	8.077E-10	3.917E-10	2.594E-10	1.463E-10	6.295E-11	2.691E-11	1.434E-11	8.890E-12		
NNW	5.119E-09	2.324E-09	9.512E-10	5.365E-10	3.595E-10	2.060E-10	9.234E-11	4.081E-11	2.017E-11	1.220E-11		
N	7.829E-09	2.565E-09	9.157E-10	4.770E-10	2.897E-10	1.195E-10	6.559E-11	5.382E-11	2.733E-11	1.692E-11		
NNE	3.339E-09	1.163E-09	4.310E-10	2.267E-10	1.380E-10	1.377E-10	6.366E-11	2.610E-11	1.382E-11	8.487E-12		
NE	1.185E-09	4.849E-10	1.955E-10	1.050E-10	6.409E-11	7.708E-11	3.756E-11	1.545E-11	8.104E-12	5.008E-12		
ENE	2.131E-10	1.240E-10	5.682E-11	3.135E-11	1.923E-11	3.751E-11	2.517E-11	1.140E-11	4.989E-12	2.742E-12		
E	5.671E-10	2.656E-10	1.133E-10	6.161E-11	3.770E-11	4.644E-11	2.837E-11	1.277E-11	6.506E-12	3.604E-12		
ESE	1.214E-09	6.433E-10	2.866E-10	1.572E-10	9.636E-11	8.476E-11	4.596E-11	2.037E-11	1.047E-11	6.239E-12		
SE	1.902E-09	1.077E-09	4.898E-10	2.699E-10	1.655E-10	8.675E-11	2.084E-11	8.834E-12	1.161E-11	9.487E-12		
SSE	3.285E-09	1.647E-09	7.205E-10	4.188E-10	3.579E-10	2.365E-10	8.990E-11	3.633E-11	1.925E-11	1.183E-11		

ERP ELEVATED STACK RELEASES - JUL-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q (PER SQ.METER)
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	9.814E-08	9.801E-08	9.622E-08	3.533E-09
A	SITE BOUNDARY	SSW	0.82	1327.	4.586E-08	4.579E-08	4.514E-08	1.671E-09
A	SITE BOUNDARY	SW	0.98	1569.	7.022E-08	7.009E-08	6.972E-08	7.832E-10
A	SITE BOUNDARY	WSW	0.93	1489.	6.240E-08	6.227E-08	6.177E-08	6.501E-10
A	SITE BOUNDARY	W	0.91	1468.	1.150E-07	1.147E-07	1.135E-07	9.267E-10
A	SITE BOUNDARY	WNW	0.94	1509.	1.810E-07	1.807E-07	1.790E-07	2.544E-09
A	SITE BOUNDARY	NNW	0.81	1307.	1.630E-07	1.628E-07	1.611E-07	3.188E-09
A	SITE BOUNDARY	N	0.69	1106.	1.224E-07	1.223E-07	1.203E-07	5.963E-09
A	SITE BOUNDARY	NNE	0.67	1086.	1.574E-07	1.573E-07	1.545E-07	9.369E-09
A	SITE BOUNDARY	NE	0.60	965.	7.820E-08	7.813E-08	7.702E-08	4.256E-09
A	SITE BOUNDARY	ENE	0.62	1005.	2.858E-08	2.855E-08	2.814E-08	1.387E-09
A	SITE BOUNDARY	E	0.59	945.	2.283E-09	2.281E-09	2.259E-09	1.974E-10
A	SITE BOUNDARY	ESE	0.53	845.	8.040E-09	8.034E-09	7.957E-09	6.343E-10
A	SITE BOUNDARY	SE	0.54	865.	1.320E-08	1.319E-08	1.306E-08	1.198E-09
A	SITE BOUNDARY	SSE	0.65	1046.	2.488E-08	2.486E-08	2.460E-08	1.918E-09
A	SITE BOUNDARY	SW	0.81	1307.	7.152E-08	7.145E-08	7.055E-08	3.509E-09
A	NEAR. RESIDENCE	WSW	1.40	2253.	1.113E-07	1.110E-07	1.100E-07	8.975E-10
A	NEAR. RESIDENCE	W	1.30	2092.	1.204E-07	1.200E-07	1.192E-07	6.456E-10
A	NEAR. RESIDENCE	WNW	1.00	1609.	1.231E-07	1.228E-07	1.215E-07	8.174E-10
A	NEAR. RESIDENCE	NW	1.60	2575.	2.311E-07	2.303E-07	2.272E-07	1.050E-09
A	NEAR. RESIDENCE	NNW	0.90	1448.	1.999E-07	1.996E-07	1.978E-07	5.000E-09
A	NEAR. RESIDENCE	N	1.90	3058.	1.939E-07	1.934E-07	1.907E-07	1.584E-09
A	NEAR. RESIDENCE	NNE	3.00	4828.	5.436E-08	5.416E-08	5.248E-08	6.346E-10
A	NEAR. RESIDENCE	ENE	2.70	4345.	4.092E-08	4.071E-08	3.952E-08	3.667E-10
A	NEAR. RESIDENCE	E	1.70	2736.	1.330E-08	1.324E-08	1.313E-08	1.026E-10
A	NEAR. RESIDENCE	ESE	1.80	2897.	1.812E-08	1.807E-08	1.779E-08	1.901E-10
A	NEAR. RESIDENCE	SE	2.40	3863.	2.913E-08	2.902E-08	2.840E-08	3.042E-10
A	NEAREST COW	S	2.20	3541.	4.680E-08	4.665E-08	4.574E-08	5.993E-10
A	NEAREST GARDEN	SW	10.50	16899.	1.889E-08	1.855E-08	1.713E-08	1.092E-10
A	NEAREST GARDEN	WSW	1.40	2253.	1.113E-07	1.110E-07	1.100E-07	8.975E-10
A	NEAREST GARDEN	WNW	1.30	2092.	1.204E-07	1.200E-07	1.192E-07	6.456E-10
A	NEAREST GARDEN	NW	2.40	3863.	1.172E-07	1.167E-07	1.142E-07	4.131E-10
A	NEAREST GARDEN	NNW	2.70	4345.	1.495E-07	1.489E-07	1.457E-07	6.488E-10
A	NEAREST GARDEN	N	1.90	3058.	1.939E-07	1.934E-07	1.907E-07	1.584E-09
A	NEAREST GARDEN	NNE	3.00	4828.	5.436E-08	5.416E-08	5.248E-08	6.346E-10
A	NEAREST GARDEN	ENE	2.70	4345.	4.092E-08	4.071E-08	3.952E-08	3.667E-10
A	NEAREST GARDEN	E	1.70	2736.	1.330E-08	1.324E-08	1.313E-08	1.026E-10
A	NEAREST GARDEN	ESE	1.80	2897.	1.812E-08	1.807E-08	1.779E-08	1.901E-10
A	NEAREST GARDEN	SE	2.40	3863.	2.913E-08	2.902E-08	2.840E-08	3.042E-10
A	NEAREST GARDEN	SW	2.20	3541.	4.680E-08	4.665E-08	4.574E-08	5.993E-10

Atmospheric Diffusion Estimates

Elevated Releases

January-December 1992

ERP ELEVATED STACK RELEASES - JAN-DEC 1992  
NO DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES									
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500		
S	3.080E-08	5.512E-08	1.192E-07	1.052E-07	8.599E-08	6.990E-08	5.706E-08	4.724E-08	3.977E-08	4.714E-08	5.278E-08		
SSW	8.223E-09	3.307E-08	4.873E-08	4.999E-08	4.778E-08	4.139E-08	3.492E-08	3.899E-08	4.104E-08	3.622E-08	3.231E-08		
SW	4.278E-09	2.546E-08	5.123E-08	7.641E-08	1.121E-07	7.632E-08	5.536E-08	4.225E-08	3.354E-08	2.745E-08	2.302E-08		
WSW	1.646E-09	2.013E-08	5.433E-08	8.831E-08	1.476E-07	9.561E-08	6.743E-08	5.056E-08	3.965E-08	3.217E-08	2.680E-08		
W	4.751E-09	7.970E-08	1.484E-07	1.664E-07	1.580E-07	1.000E-07	6.956E-08	5.165E-08	4.022E-08	3.246E-08	2.692E-08		
WNW	6.802E-09	5.581E-08	1.558E-07	2.462E-07	3.012E-07	1.848E-07	1.258E-07	9.653E-08	7.719E-08	6.127E-08	5.014E-08		
NW	2.536E-08	6.029E-08	1.400E-07	2.519E-07	4.173E-07	2.471E-07	1.648E-07	1.216E-07	9.440E-08	7.464E-08	6.090E-08		
NNW	6.719E-08	9.705E-08	1.231E-07	1.391E-07	1.748E-07	1.701E-07	1.574E-07	1.413E-07	1.277E-07	1.008E-07	8.220E-08		
N	5.582E-08	1.124E-07	1.211E-07	9.991E-08	7.944E-08	6.661E-08	5.599E-08	4.657E-08	3.938E-08	3.383E-08	2.947E-08		
NNE	2.337E-08	7.039E-08	8.380E-08	7.208E-08	5.942E-08	4.942E-08	4.121E-08	3.476E-08	2.976E-08	2.584E-08	2.274E-08		
NE	5.035E-09	2.764E-08	3.693E-08	3.566E-08	3.301E-08	2.867E-08	2.442E-08	2.087E-08	1.804E-08	1.578E-08	1.397E-08		
ENE	4.193E-10	4.268E-09	9.383E-09	1.284E-08	1.566E-08	1.495E-08	1.330E-08	1.165E-08	1.021E-08	9.020E-09	8.038E-09		
E	8.190E-11	6.226E-09	1.375E-08	1.639E-08	1.773E-08	1.638E-08	1.441E-08	1.255E-08	1.097E-08	9.659E-09	8.586E-09		
ESE	5.617E-10	1.419E-08	3.080E-08	3.674E-08	3.753E-08	3.264E-08	2.743E-08	2.307E-08	1.962E-08	1.691E-08	1.477E-08		
SE	2.871E-09	2.294E-08	4.279E-08	5.008E-08	5.076E-08	4.390E-08	3.672E-08	3.076E-08	2.608E-08	2.241E-08	1.950E-08		
SSE	2.529E-08	6.492E-08	8.401E-08	8.317E-08	7.774E-08	6.699E-08	5.648E-08	4.775E-08	4.083E-08	3.620E-08	3.125E-08		

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES									
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000		
S	4.730E-08	3.177E-08	2.064E-08	1.185E-08	8.286E-09	6.251E-09	4.877E-09	3.958E-09	3.328E-09	2.852E-09	2.476E-09		
SSW	3.002E-08	2.228E-08	1.442E-08	8.239E-09	5.768E-09	4.300E-09	3.348E-09	2.713E-09	2.263E-09	1.929E-09	1.673E-09		
SW	2.123E-08	1.597E-08	1.049E-08	6.108E-09	4.340E-09	3.311E-09	2.654E-09	2.157E-09	1.804E-09	1.541E-09	1.339E-09		
WSW	2.394E-08	1.611E-08	1.156E-08	7.180E-09	4.863E-09	3.603E-09	2.824E-09	2.300E-09	1.927E-09	1.650E-09	1.436E-09		
W	2.283E-08	1.267E-08	9.280E-09	6.271E-09	4.749E-09	3.545E-09	2.781E-09	2.267E-09	1.981E-09	1.629E-09	1.419E-09		
WNW	4.251E-08	2.368E-08	1.599E-08	9.626E-09	6.600E-09	4.926E-09	3.888E-09	3.172E-09	2.651E-09	2.263E-09	1.965E-09		
NW	5.149E-08	2.842E-08	1.921E-08	1.153E-08	7.787E-09	5.755E-09	4.568E-09	3.725E-09	3.114E-09	2.660E-09	2.311E-09		
NNW	7.018E-08	3.993E-08	2.602E-08	1.503E-08	1.023E-08	7.602E-09	6.018E-09	4.941E-09	4.210E-09	3.624E-09	3.155E-09		
N	2.605E-08	1.645E-08	1.361E-08	1.077E-08	8.895E-09	7.272E-09	5.723E-09	4.663E-09	3.900E-09	3.333E-09	2.898E-09		
NNE	2.573E-08	3.973E-08	2.584E-08	1.491E-08	1.014E-08	7.537E-09	5.922E-09	4.833E-09	4.056E-09	3.477E-09	3.030E-09		
NE	1.614E-08	3.043E-08	1.996E-08	1.165E-08	7.981E-09	5.965E-09	4.786E-09	3.959E-09	3.351E-09	2.877E-09	2.511E-09		
ENE	9.047E-09	1.460E-08	9.679E-09	5.704E-09	3.927E-09	2.942E-09	2.418E-09	2.029E-09	1.705E-09	1.462E-09	1.275E-09		
E	9.542E-09	1.437E-08	9.521E-09	5.612E-09	3.865E-09	2.897E-09	2.290E-09	1.879E-09	1.634E-09	1.437E-09	1.254E-09		
ESE	1.534E-08	1.901E-08	1.266E-08	7.496E-09	5.173E-09	3.882E-09	3.071E-09	2.520E-09	2.124E-09	1.828E-09	1.598E-09		
SE	1.718E-08	1.068E-08	8.390E-09	6.167E-09	4.570E-09	3.630E-09	3.015E-09	2.578E-09	2.166E-09	1.857E-09	1.619E-09		
SSE	6.978E-08	4.000E-08	2.578E-08	1.468E-08	9.889E-09	7.296E-09	5.698E-09	4.627E-09	3.866E-09	3.301E-09	2.867E-09		

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

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	1.076E-07	8.311E-08	5.655E-08	4.471E-08	4.908E-08	3.028E-08	1.222E-08	6.244E-09	3.981E-09	2.854E-09
SSW	4.581E-08	4.543E-08	3.827E-08	3.862E-08	3.262E-08	2.050E-08	8.514E-09	4.311E-09	2.723E-09	1.933E-09
SW	5.669E-08	8.828E-08	5.570E-08	3.371E-08	2.367E-08	1.471E-08	6.297E-09	3.323E-09	2.164E-09	1.544E-09
WSW	6.183E-08	1.113E-07	6.819E-08	3.992E-08	2.733E-08	1.583E-08	7.123E-09	3.627E-09	2.308E-09	1.653E-09
W	1.411E-07	1.341E-07	7.052E-08	4.053E-08	2.705E-08	1.342E-08	6.263E-09	3.560E-09	2.274E-09	1.632E-09
WNW	1.711E-07	2.359E-07	1.298E-07	7.665E-08	5.061E-08	2.444E-08	9.694E-09	4.957E-09	3.178E-09	2.268E-09
NW	1.720E-07	3.049E-07	1.695E-07	9.466E-08	6.149E-08	2.946E-08	1.157E-08	5.822E-09	3.733E-09	2.665E-09
NNW	1.244E-07	1.648E-07	1.544E-07	1.214E-07	8.327E-08	4.047E-08	1.534E-08	7.669E-09	4.970E-09	3.624E-09
N	1.097E-07	7.828E-08	5.505E-08	3.932E-08	2.950E-08	1.732E-08	1.057E-08	7.085E-09	4.675E-09	3.340E-09
NNE	7.561E-08	5.779E-08	4.082E-08	2.969E-08	2.476E-08	3.044E-08	1.522E-08	7.585E-09	4.848E-09	3.483E-09
NE	3.430E-08	3.167E-08	2.414E-08	1.799E-08	1.531E-08	2.260E-08	1.187E-08	6.031E-09	3.964E-09	2.882E-09
ENE	9.784E-09	1.472E-08	1.308E-08	1.017E-08	8.703E-09	1.118E-08	5.797E-09	2.995E-09	2.017E-09	1.465E-09
E	1.325E-08	1.683E-08	1.419E-08	1.092E-08	9.258E-09	1.114E-08	5.704E-09	2.912E-09	1.903E-09	1.427E-09
ESE	2.975E-08	3.518E-08	2.707E-08	1.958E-08	1.562E-08	1.537E-08	7.611E-09	3.902E-09	2.527E-09	1.830E-09
SE	4.162E-08	4.756E-08	3.625E-08	2.602E-08	1.950E-08	1.111E-08	5.951E-09	3.634E-09	2.546E-09	1.861E-09
SSE	7.939E-08	7.417E-08	5.579E-08	5.095E-08	7.136E-08	4.029E-08	1.502E-08	7.348E-09	4.643E-09	3.308E-09

ERP ELEVATED STACK RELEASES - JAN-DEC 1992  
2.260 DAY DECAY, UNDEPLETED  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES										
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500			
S	3.079E-08	9.505E-08	1.191E-07	1.050E-07	8.579E-08	6.967E-08	5.683E-08	4.701E-08	3.954E-08	4.682E-08	5.237E-08			
SSW	8.221E-09	3.305E-08	4.867E-08	4.989E-08	4.764E-08	4.123E-08	3.474E-08	3.875E-08	4.074E-08	3.592E-08	3.201E-08			
SW	4.276E-09	2.544E-08	5.116E-08	7.627E-08	1.118E-07	7.600E-08	5.506E-08	4.197E-08	3.328E-08	2.721E-08	2.279E-08			
WSW	1.645E-09	2.011E-08	5.426E-08	8.814E-08	1.472E-07	9.522E-08	6.709E-08	5.025E-08	3.937E-08	3.191E-08	2.655E-08			
W	4.749E-09	7.963E-08	1.482E-07	1.660E-07	1.575E-07	9.960E-08	6.917E-08	5.130E-08	3.991E-08	3.217E-08	2.665E-08			
WNW	6.799E-09	5.577E-08	1.556E-07	2.398E-07	3.003E-07	1.841E-07	1.253E-07	9.600E-08	7.669E-08	6.082E-08	4.972E-08			
NW	2.535E-08	6.325E-08	1.399E-07	2.516E-07	4.164E-07	2.464E-07	1.643E-07	1.211E-07	9.393E-08	7.422E-08	6.051E-08			
NNW	6.718E-08	9.700E-08	1.230E-07	1.389E-07	1.744E-07	1.696E-07	1.569E-07	1.407E-07	1.270E-07	1.002E-07	8.160E-08			
N	5.581E-08	1.123E-07	1.209E-07	9.977E-08	7.927E-08	6.643E-08	5.580E-08	4.638E-08	3.919E-08	3.364E-08	2.929E-08			
NNE	2.337E-08	7.035E-08	8.372E-08	7.197E-08	5.926E-08	4.924E-08	4.101E-08	3.456E-08	2.955E-08	2.563E-08	2.253E-08			
NE	5.034E-09	2.762E-08	3.689E-08	3.560E-08	3.292E-08	2.857E-08	2.431E-08	2.075E-08	1.792E-08	1.565E-08	1.385E-08			
ENE	4.192E-10	4.266E-09	9.374E-09	1.282E-08	1.562E-08	1.489E-08	1.324E-08	1.158E-08	1.015E-08	8.951E-09	7.970E-09			
E	8.187E-11	6.221E-09	1.374E-08	1.636E-08	1.769E-08	1.632E-08	1.435E-08	1.248E-08	1.090E-08	9.586E-09	8.513E-09			
ESE	5.616E-10	1.418E-08	3.078E-08	3.669E-08	3.746E-08	3.255E-08	2.733E-08	2.297E-08	1.952E-08	1.681E-08	1.467E-08			
SE	2.870E-09	2.293E-08	4.275E-08	5.002E-08	5.066E-08	4.379E-08	3.660E-08	3.064E-08	2.596E-08	2.229E-08	1.939E-08			
SSE	2.529E-08	6.489E-08	8.394E-08	8.308E-08	7.760E-08	6.682E-08	5.629E-08	4.755E-08	4.062E-08	3.418E-08	2.962E-08			

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES										
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000			
S	4.689E-08	3.135E-08	2.028E-08	1.154E-08	7.995E-09	5.977E-09	4.623E-09	3.718E-09	3.099E-09	2.633E-09	2.265E-09			
SSW	2.976E-08	2.192E-08	1.411E-08	7.976E-09	5.523E-09	4.072E-09	3.137E-09	2.514E-09	2.075E-09	1.750E-09	1.501E-09			
SW	2.099E-08	1.569E-08	1.025E-08	5.894E-09	4.138E-09	3.120E-09	2.471E-09	1.985E-09	1.640E-09	1.385E-09	1.190E-09			
WSW	2.370E-08	1.587E-08	1.132E-08	6.960E-09	4.665E-09	3.421E-09	2.654E-09	2.140E-09	1.775E-09	1.504E-09	1.296E-09			
W	2.257E-08	1.246E-08	9.067E-09	6.051E-09	4.522E-09	3.334E-09	2.584E-09	2.081E-09	1.724E-09	1.459E-09	1.256E-09			
WNW	4.211E-08	2.334E-08	1.569E-08	9.356E-09	6.354E-09	4.698E-09	3.673E-09	2.969E-09	2.458E-09	2.079E-09	1.788E-09			
NW	5.112E-08	2.812E-08	1.893E-08	1.128E-08	7.557E-09	5.543E-09	4.365E-09	3.533E-09	2.930E-09	2.484E-09	2.142E-09			
NNW	6.960E-08	3.942E-08	2.557E-08	1.464E-08	9.878E-09	7.279E-09	5.711E-09	4.648E-09	3.924E-09	3.348E-09	2.889E-09			
N	2.587E-08	1.628E-08	1.342E-08	1.054E-08	8.643E-09	7.008E-09	5.474E-09	4.427E-09	3.675E-09	3.118E-09	2.691E-09			
NNE	2.547E-08	3.908E-08	2.528E-08	1.442E-08	9.706E-09	7.136E-09	5.546E-09	4.478E-09	3.718E-09	3.153E-09	2.719E-09			
NE	1.598E-08	2.992E-08	1.951E-08	1.125E-08	7.623E-09	5.633E-09	4.467E-09	3.653E-09	3.055E-09	2.593E-09	2.238E-09			
ENE	8.963E-09	1.441E-08	9.515E-09	5.561E-09	3.796E-09	2.821E-09	2.299E-09	1.914E-09	1.595E-09	1.357E-09	1.174E-09			
E	9.451E-09	1.415E-08	9.332E-09	5.444E-09	3.711E-09	2.753E-09	2.155E-09	1.750E-09	1.505E-09	1.309E-09	1.131E-09			
ESE	1.522E-08	1.878E-08	1.246E-08	7.319E-09	5.011E-09	3.730E-09	2.928E-09	2.384E-09	1.994E-09	1.702E-09	1.476E-09			
SE	1.707E-08	1.058E-08	8.278E-09	6.042E-09	4.446E-09	3.505E-09	2.889E-09	2.451E-09	2.044E-09	1.740E-09	1.506E-09			
SSE	6.917E-08	3.944E-08	2.529E-08	1.426E-08	9.513E-09	6.949E-09	5.373E-09	4.321E-09	3.575E-09	3.022E-09	2.599E-09			

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

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	1.075E-07	8.291E-08	5.633E-08	4.445E-08	4.870E-08	2.988E-08	1.191E-08	5.973E-09	3.741E-09	2.635E-09
SSW	4.574E-08	4.529E-08	3.807E-08	3.833E-08	3.231E-08	2.018E-08	8.249E-09	4.085E-09	2.524E-09	1.754E-09
SW	5.661E-08	8.799E-08	5.541E-08	3.345E-08	2.343E-08	1.445E-08	6.081E-09	3.132E-09	1.993E-09	1.389E-09
WSW	6.173E-08	1.110E-07	6.785E-08	3.964E-08	2.708E-08	1.559E-08	6.910E-09	3.446E-09	2.148E-09	1.507E-09
W	1.409E-07	1.336E-07	7.014E-08	4.021E-08	2.677E-08	1.320E-08	6.042E-09	3.351E-09	2.089E-09	1.462E-09
WNW	1.708E-07	2.352E-07	1.292E-07	7.616E-08	5.019E-08	2.411E-08	9.429E-09	4.730E-09	2.975E-09	2.083E-09
NW	1.718E-07	3.042E-07	1.689E-07	9.419E-08	6.109E-08	2.915E-08	1.132E-08	5.609E-09	3.541E-09	2.498E-09
NNW	1.243E-07	1.644E-07	1.538E-07	1.207E-07	8.267E-08	3.997E-08	1.495E-08	7.345E-09	4.676E-09	3.349E-09
N	1.096E-07	7.812E-08	5.486E-08	3.913E-08	2.931E-08	1.714E-08	1.034E-08	6.831E-09	4.440E-09	3.125E-09
NNE	7.553E-08	5.763E-08	4.062E-08	2.948E-08	2.454E-08	2.992E-08	1.474E-08	7.185E-09	4.494E-09	3.160E-09
NE	3.426E-08	3.158E-08	2.402E-08	1.787E-08	1.517E-08	2.220E-08	1.148E-08	5.697E-09	3.658E-09	2.599E-09
ENE	9.771E-09	1.467E-08	1.302E-08	1.010E-08	8.628E-09	1.102E-08	5.655E-09	2.872E-09	1.983E-09	1.360E-09
E	1.323E-08	1.679E-08	1.413E-08	1.085E-08	9.178E-09	1.096E-08	5.537E-09	2.769E-09	1.772E-09	1.301E-09
ESE	2.972E-08	3.511E-08	2.698E-08	1.948E-08	1.551E-08	1.518E-08	7.436E-09	3.751E-09	2.391E-09	1.705E-09
SE	4.158E-08	4.747E-08	3.613E-08	2.590E-08	1.939E-08	1.100E-08	5.829E-09	3.509E-09	2.421E-09	1.744E-09
SSE	7.933E-08	7.402E-08	5.560E-08	5.068E-08	7.081E-08	3.976E-08	1.460E-08	7.002E-09	4.337E-09	3.029E-09



ERP ELEVATED STACK RELEASES - JAN-DEC 1992  
 8,000 DAY DECAY, DEPLETED  
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
SECTOR	0-250	0-500	0-750	1,000	1,500	2,000	2,500	3,000	3,500	4,000
S	3.08E-08	9.42E-08	1.16E-07	1.02E-07	8.39E-08	6.79E-08	5.52E-08	4.55E-08	3.81E-08	3.20E-08
SSW	8.22E-09	3.27E-08	4.78E-08	4.91E-08	4.68E-08	4.04E-08	3.39E-08	2.78E-08	2.30E-08	1.91E-08
SW	4.27E-09	2.52E-08	5.04E-08	7.56E-08	1.10E-07	7.47E-08	5.39E-08	4.09E-08	3.20E-08	2.59E-08
WSW	1.64E-09	1.99E-08	5.34E-08	6.73E-08	1.45E-07	9.38E-08	6.59E-08	4.92E-08	3.85E-08	3.16E-08
W	4.75E-09	7.82E-08	1.45E-07	1.63E-07	1.55E-07	9.77E-08	6.72E-08	5.01E-08	3.82E-08	3.05E-08
WNW	6.80E-09	5.53E-08	1.54E-07	2.37E-07	2.96E-07	1.80E-07	1.22E-07	8.51E-08	6.29E-08	5.05E-08
NW	2.53E-08	5.97E-08	1.38E-07	2.49E-07	4.11E-07	2.42E-07	1.60E-07	1.18E-07	7.45E-08	5.84E-08
NNW	6.71E-08	9.61E-08	1.20E-07	1.37E-07	1.72E-07	1.67E-07	1.54E-07	1.38E-07	1.17E-07	9.79E-08
N	5.58E-08	1.14E-07	1.18E-07	9.76E-08	7.75E-08	6.48E-08	5.43E-08	4.50E-08	3.79E-08	3.20E-08
NNE	2.33E-08	6.97E-08	8.20E-08	7.04E-08	5.79E-08	4.80E-08	3.93E-08	3.55E-08	2.62E-08	2.82E-08
NE	5.03E-09	2.73E-08	3.62E-08	3.49E-08	2.36E-08	2.79E-08	2.37E-08	2.02E-08	1.40E-08	1.54E-08
E	4.19E-10	4.23E-09	9.26E-09	1.27E-08	1.54E-08	1.46E-08	1.30E-08	1.13E-08	9.70E-09	8.75E-09
ESE	8.18E-11	6.17E-10	1.35E-09	1.61E-09	1.74E-09	1.60E-09	1.40E-09	1.22E-09	1.04E-09	8.28E-09
SE	2.87E-09	2.27E-08	3.03E-08	3.62E-08	3.69E-08	3.19E-08	2.66E-08	2.53E-08	1.90E-08	1.41E-08
SSE	2.52E-08	6.43E-08	8.25E-08	8.18E-08	4.94E-08	4.29E-08	3.57E-08	2.97E-08	2.51E-08	1.86E-08
ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
BEARING	5,000	7,500	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000
S	4.54E-08	3.00E-08	1.88E-08	1.01E-08	4.54E-09	2.69E-09	1.46E-09	8.19E-09	4.55E-09	2.50E-09
SSW	2.89E-08	1.10E-08	1.32E-08	7.03E-09	4.56E-09	2.76E-09	1.45E-09	7.88E-09	4.19E-09	2.18E-09
SW	2.31E-08	1.52E-08	9.61E-09	5.21E-09	3.42E-09	2.44E-09	1.67E-09	1.19E-09	8.65E-10	5.35E-10
WSW	2.19E-08	1.52E-08	1.05E-08	6.21E-09	4.01E-09	2.86E-09	1.64E-09	1.10E-09	7.57E-10	4.82E-10
W	2.19E-08	1.21E-08	8.74E-09	5.55E-09	3.36E-09	2.82E-09	1.37E-09	1.68E-09	1.14E-09	7.13E-10
WNW	4.04E-08	2.62E-08	1.42E-08	7.98E-09	5.06E-09	3.56E-09	2.69E-09	2.12E-09	1.49E-09	1.20E-09
NW	6.77E-08	3.73E-08	1.71E-08	9.66E-09	4.16E-09	2.34E-09	1.31E-09	7.21E-09	4.75E-09	2.93E-09
NNW	2.48E-08	1.55E-08	2.34E-08	1.01E-08	7.83E-09	5.45E-09	4.03E-09	2.78E-09	1.71E-09	1.63E-09
N	2.46E-08	1.58E-08	2.86E-08	1.01E-08	8.20E-09	5.90E-09	4.67E-09	3.82E-09	2.68E-09	2.34E-09
NNE	1.55E-08	2.94E-08	1.86E-08	1.29E-08	8.27E-09	5.82E-09	4.35E-09	3.40E-09	2.47E-09	2.11E-09
NE	8.74E-09	1.41E-08	9.07E-09	4.97E-09	3.14E-09	2.19E-09	1.52E-09	1.04E-09	7.29E-10	5.11E-10
E	9.22E-09	1.39E-08	9.07E-09	4.68E-09	3.14E-09	2.19E-09	1.52E-09	1.04E-09	7.29E-10	5.11E-10
ESE	1.46E-08	1.82E-08	1.17E-08	6.51E-09	4.09E-09	2.50E-09	1.64E-09	1.26E-09	8.63E-10	6.35E-10
SE	1.63E-08	1.00E-08	7.83E-09	5.73E-09	4.22E-09	3.20E-09	2.18E-09	1.67E-09	1.22E-09	9.40E-10
SSE	6.76E-08	3.75E-08	2.35E-08	1.24E-08	7.80E-09	5.13E-09	3.10E-09	1.99E-09	1.21E-09	7.79E-10
CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT										
DIRECTION FROM SITE	5-1	1-2	2-3	3-4	SEGMENT BOUNDARIES IN MILES					
					4-5	5-10	10-20	20-30	30-40	40-50
S	1.05E-07	8.10E-08	5.47E-08	4.30E-08	4.72E-08	2.85E-08	1.04E-08	4.62E-09	7.22E-09	1.82E-09
SSW	4.56E-08	4.64E-08	3.72E-08	3.73E-08	3.16E-08	1.93E-08	7.31E-09	3.28E-09	1.25E-09	1.29E-09
SSW	5.69E-08	8.68E-08	6.42E-08	5.25E-08	2.23E-08	1.38E-08	5.59E-09	2.47E-09	1.40E-09	1.92E-09
WSW	1.08E-08	1.09E-07	6.67E-08	3.92E-08	2.64E-08	1.49E-08	6.20E-09	2.89E-09	1.17E-09	1.16E-09
W	1.93E-07	2.31E-07	1.26E-07	7.39E-08	4.83E-08	2.80E-08	5.54E-09	2.04E-09	1.49E-09	1.46E-09
WNW	1.71E-07	3.00E-07	1.65E-07	9.16E-08	5.89E-08	2.73E-08	9.78E-09	3.64E-09	2.35E-09	1.43E-09
NNW	1.26E-07	1.62E-07	1.51E-07	1.18E-07	8.04E-08	2.79E-08	1.29E-08	4.94E-09	2.42E-09	1.76E-09
N	1.07E-07	7.63E-08	5.34E-08	3.79E-08	2.86E-08	1.64E-08	1.29E-08	5.45E-09	3.60E-09	2.43E-09
NNE	3.32E-08	3.10E-08	2.95E-08	2.85E-08	2.33E-08	1.69E-08	1.35E-08	6.91E-09	4.27E-09	2.78E-09
ENE	9.62E-09	1.45E-08	1.27E-08	9.66E-09	8.45E-09	2.15E-08	1.04E-08	5.89E-09	3.29E-09	1.93E-09
E	1.34E-08	1.65E-08	1.38E-08	1.06E-08	8.94E-09	1.66E-08	9.86E-09	2.22E-09	1.17E-09	8.41E-09
ESE	2.94E-08	3.45E-08	2.63E-08	1.88E-08	1.49E-08	4.45E-08	6.39E-09	2.64E-09	1.18E-09	1.26E-09
SE	4.19E-08	4.67E-08	3.52E-08	2.50E-08	1.84E-08	1.04E-08	5.52E-09	3.45E-09	2.05E-09	1.41E-09
SSE	7.87E-08	7.27E-08	5.43E-08	4.93E-08	6.97E-08	3.79E-08	1.28E-08	5.58E-09	3.20E-09	2.12E-09

ERP ELEVATED STACK RELEASES - JAN-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE											
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	7.933E-09	6.339E-09	5.220E-09	3.508E-09	1.674E-09	1.018E-09	6.854E-10	4.911E-10	3.674E-10	2.941E-10	2.649E-10
SSW	2.602E-09	2.221E-09	2.042E-09	1.499E-09	7.684E-10	4.814E-10	3.290E-10	2.377E-10	2.183E-10	1.651E-10	1.293E-10
SW	1.821E-09	1.516E-09	1.341E-09	9.555E-10	8.066E-10	4.351E-10	2.687E-10	1.821E-10	1.315E-10	9.945E-11	7.787E-11
WSW	1.744E-09	1.418E-09	1.205E-09	1.262E-09	6.771E-10	3.634E-10	2.237E-10	1.513E-10	1.091E-10	8.247E-11	6.456E-11
W	2.014E-09	3.400E-09	2.398E-09	1.420E-09	6.175E-10	3.302E-10	2.030E-10	1.373E-10	9.907E-11	7.493E-11	5.872E-11
WNW	2.668E-09	2.255E-09	3.817E-09	2.849E-09	1.576E-09	8.052E-10	4.853E-10	3.302E-10	2.550E-10	2.015E-10	1.685E-10
NW	4.615E-09	3.804E-09	3.306E-09	4.360E-09	2.594E-09	1.295E-09	7.719E-10	5.196E-10	3.838E-10	3.049E-10	2.564E-10
NNW	8.591E-09	6.673E-09	5.204E-09	3.325E-09	2.362E-09	1.262E-09	7.790E-10	6.267E-10	4.657E-10	3.722E-10	3.148E-10
N	1.100E-08	8.450E-09	6.447E-09	4.029E-09	1.796E-09	1.059E-09	7.006E-10	4.974E-10	3.703E-10	2.854E-10	2.259E-10
NNE	6.502E-09	4.996E-09	3.813E-09	2.384E-09	1.063E-09	6.267E-10	4.147E-10	2.944E-10	2.192E-10	1.689E-10	1.337E-10
NE	2.300E-09	1.857E-09	1.558E-09	1.065E-09	5.154E-10	3.154E-10	2.130E-10	1.529E-10	1.144E-10	8.840E-11	6.999E-11
ENE	5.705E-10	5.278E-10	5.429E-10	4.291E-10	2.318E-10	1.481E-10	1.022E-10	7.423E-11	5.589E-11	4.328E-11	3.427E-11
E	7.096E-10	6.386E-10	6.336E-10	4.897E-10	2.695E-10	1.656E-10	1.140E-10	8.263E-11	6.218E-11	4.813E-11	3.811E-11
ESE	1.780E-09	1.630E-09	1.656E-09	1.299E-09	6.980E-10	4.452E-10	3.070E-10	2.228E-10	1.677E-10	1.299E-10	1.028E-10
SE	2.501E-09	2.337E-09	2.434E-09	1.938E-09	1.052E-09	6.734E-10	4.652E-10	3.379E-10	2.545E-10	1.971E-10	1.561E-10
SSE	6.991E-09	5.759E-09	5.000E-09	3.514E-09	1.741E-09	1.076E-09	7.304E-10	5.257E-10	3.941E-10	3.654E-10	3.705E-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	2.132E-10	1.704E-10	1.204E-10	7.206E-11	4.627E-11	3.067E-11	2.197E-11	1.649E-11	1.278E-11	1.018E-11	8.309E-12
SSW	1.048E-10	8.922E-11	6.374E-11	3.841E-11	2.302E-11	1.595E-11	1.143E-11	8.570E-12	6.733E-12	5.379E-12	4.390E-12
SW	6.299E-11	5.627E-11	4.059E-11	2.467E-11	1.584E-11	1.037E-11	7.189E-12	5.431E-12	4.223E-12	3.373E-12	2.753E-12
WSW	5.235E-11	5.468E-11	4.062E-11	2.428E-11	1.469E-11	9.851E-12	7.101E-12	5.132E-12	4.146E-12	3.312E-12	2.703E-12
W	4.733E-11	2.153E-11	3.900E-11	2.536E-11	1.435E-11	9.693E-12	6.945E-12	5.215E-12	4.055E-12	3.239E-12	2.644E-12
WNW	1.480E-10	9.385E-11	6.856E-11	4.206E-11	2.565E-11	1.674E-11	1.205E-11	9.048E-12	7.067E-12	5.646E-12	4.608E-12
NW	2.262E-10	1.456E-10	1.071E-10	6.469E-11	3.942E-11	2.645E-11	1.894E-11	1.423E-11	1.107E-11	8.843E-12	7.218E-12
NNW	2.787E-10	1.812E-10	1.340E-10	8.312E-11	5.375E-11	3.604E-11	2.416E-11	1.741E-11	1.340E-11	1.070E-11	8.737E-12
N	1.827E-10	8.747E-11	5.397E-11	2.923E-11	6.876E-11	4.064E-11	2.910E-11	2.185E-11	1.699E-11	1.357E-11	1.100E-11
NNE	1.081E-10	1.689E-10	1.072E-10	5.725E-11	3.526E-11	2.358E-11	1.681E-11	1.254E-11	9.701E-12	7.717E-12	6.276E-12
NE	5.652E-11	1.121E-10	7.176E-11	3.864E-11	2.384E-11	1.593E-11	1.103E-11	8.215E-12	6.401E-12	5.113E-12	4.173E-12
ENE	2.764E-11	5.471E-11	4.287E-11	2.760E-11	1.784E-11	1.181E-11	8.257E-12	4.982E-12	3.876E-12	3.099E-12	2.531E-12
E	3.074E-11	5.354E-11	4.142E-11	2.645E-11	1.708E-11	1.131E-11	7.927E-12	5.793E-12	4.399E-12	3.149E-12	2.561E-12
ESE	8.294E-11	9.853E-11	7.229E-11	4.443E-11	2.848E-11	1.895E-11	1.336E-11	9.836E-12	7.520E-12	5.929E-12	4.786E-12
SE	1.259E-10	8.981E-11	3.659E-11	1.943E-11	1.201E-11	8.392E-12	6.394E-12	1.522E-11	1.166E-11	9.211E-12	7.457E-12
SSE	3.190E-10	2.588E-10	1.608E-10	8.376E-11	5.116E-11	3.423E-11	2.444E-11	1.827E-11	1.416E-11	1.127E-11	9.178E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE											
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	4.708E-09	1.790E-09	6.965E-10	3.748E-10	2.544E-10	1.577E-10	7.133E-11	3.135E-11	1.664E-11	1.026E-11	
SSW	1.840E-09	8.032E-10	3.331E-10	2.036E-10	1.308E-10	8.135E-11	3.720E-11	1.603E-11	8.695E-12	5.414E-12	
SW	1.208E-09	6.746E-10	2.784E-10	1.338E-10	7.875E-11	5.080E-11	2.428E-11	1.056E-11	5.473E-12	3.395E-12	
WSW	1.278E-09	6.677E-10	2.320E-10	1.110E-10	6.535E-11	4.792E-11	2.365E-11	1.004E-11	5.386E-12	3.334E-12	
W	2.186E-09	6.681E-10	2.107E-10	1.008E-10	5.930E-11	3.502E-11	2.350E-11	9.836E-12	5.268E-12	3.260E-12	
WNW	3.040E-09	1.516E-09	5.085E-10	2.561E-10	1.707E-10	9.465E-11	4.066E-11	1.724E-11	9.151E-12	5.683E-12	
NW	3.885E-09	2.499E-09	8.104E-10	3.925E-10	2.596E-10	1.464E-10	6.289E-11	2.691E-11	1.437E-11	8.901E-12	
NNW	4.695E-09	2.087E-09	8.469E-10	4.761E-10	3.184E-10	1.819E-10	8.137E-11	3.601E-11	1.781E-11	1.077E-11	
N	5.818E-09	1.965E-09	7.149E-10	3.743E-10	2.275E-10	9.375E-11	5.229E-11	4.352E-11	2.207E-11	1.366E-11	
NNE	3.441E-09	1.162E-09	4.231E-10	2.215E-10	1.347E-10	1.280E-10	5.858E-11	2.399E-11	1.268E-11	7.771E-12	
NE	1.405E-09	5.486E-10	2.162E-10	1.155E-10	7.846E-11	8.182E-11	3.942E-11	1.608E-11	8.328E-12	5.147E-12	
ENE	4.890E-10	2.384E-10	1.033E-10	5.633E-11	3.448E-11	4.343E-11	2.666E-11	1.200E-11	5.496E-12	3.119E-12	
E	5.707E-10	2.692E-10	1.152E-10	6.267E-11	3.835E-11	4.309E-11	2.561E-11	1.150E-11	5.871E-12	3.302E-12	
ESE	1.492E-09	7.192E-10	3.102E-10	1.691E-10	1.035E-10	8.340E-11	4.353E-11	1.926E-11	9.961E-12	5.977E-12	
SE	2.192E-09	1.081E-09	4.698E-10	2.565E-10	1.570E-10	6.417E-11	1.995E-11	8.557E-12	1.134E-11	9.286E-12	
SSE	4.508E-09	1.840E-09	7.408E-10	4.208E-10	3.499E-10	2.286E-10	8.639E-11	3.483E-11	1.846E-11	1.135E-11	

ERP ELEVATED STACK RELEASES - JAN-DEC 1992  
CORRECTED FOR OPEN TERRAIN RECIRCULATION  
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q (PER SQ.METER)
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.80	1287.	1.164E-07	1.163E-07	1.140E-07	4.828E-09
A	SITE BOUNDARY	SSW	0.82	1327.	4.929E-08	4.922E-08	4.838E-08	1.877E-09
A	SITE BOUNDARY	SW	0.98	1569.	7.383E-08	7.370E-08	7.304E-08	9.963E-10
A	SITE BOUNDARY	WSW	0.93	1489.	7.748E-08	7.734E-08	7.655E-08	1.170E-09
A	SITE BOUNDARY	W	0.91	1468.	1.625E-07	1.622E-07	1.596E-07	1.654E-09
A	SITE BOUNDARY	WNW	0.94	1509.	2.221E-07	2.218E-07	2.198E-07	3.210E-09
A	SITE BOUNDARY	NW	0.81	1307.	1.651E-07	1.649E-07	1.631E-07	3.041E-09
A	SITE BOUNDARY	NNW	0.69	1106.	1.141E-07	1.140E-07	1.121E-07	5.484E-09
A	SITE BOUNDARY	N	0.67	1086.	1.194E-07	1.193E-07	1.172E-07	6.922E-09
A	SITE BOUNDARY	NNE	0.60	965.	7.760E-08	7.754E-08	7.643E-08	4.436E-09
A	SITE BOUNDARY	NE	0.62	1005.	3.265E-08	3.262E-08	3.214E-08	1.676E-09
A	SITE BOUNDARY	ENE	0.59	945.	5.737E-09	5.734E-09	5.667E-09	5.250E-10
A	SITE BOUNDARY	E	0.53	845.	7.007E-09	7.002E-09	6.936E-09	6.339E-10
A	SITE BOUNDARY	ESE	0.54	865.	1.661E-08	1.660E-08	1.643E-08	1.620E-09
A	SITE BOUNDARY	SE	0.65	1046.	3.425E-08	3.423E-08	3.377E-08	2.360E-09
A	SITE BOUNDARY	SSE	0.81	1307.	8.380E-08	8.373E-08	8.232E-08	4.597E-09
A	NEAR. RESIDENCE	SW	1.40	2253.	1.086E-07	1.083E-07	1.072E-07	9.308E-10
A	NEAR. RESIDENCE	WSW	1.30	2092.	1.288E-07	1.285E-07	1.273E-07	9.119E-10
A	NEAR. RESIDENCE	W	1.00	1609.	1.664E-07	1.660E-07	1.635E-07	1.420E-09
A	NEAR. RESIDENCE	WNW	1.60	2575.	2.704E-07	2.696E-07	2.656E-07	1.355E-09
A	NEAR. RESIDENCE	NW	0.90	1448.	2.041E-07	2.038E-07	2.020E-07	4.954E-09
A	NEAR. RESIDENCE	NNW	1.90	3058.	1.721E-07	1.717E-07	1.693E-07	1.413E-09
A	NEAR. RESIDENCE	N	3.00	4828.	4.657E-08	4.638E-08	4.503E-08	4.974E-10
A	NEAR. RESIDENCE	NNE	2.70	4345.	3.844E-08	3.823E-08	3.718E-08	3.592E-10
A	NEAR. RESIDENCE	ENE	1.70	2736.	1.561E-08	1.556E-08	1.538E-08	1.897E-10
A	NEAR. RESIDENCE	E	1.80	2897.	1.707E-08	1.702E-08	1.676E-08	1.931E-10
A	NEAR. RESIDENCE	ESE	2.40	3863.	2.841E-08	2.831E-08	2.766E-08	3.291E-10
A	NEAR. RESIDENCE	SE	2.20	3541.	4.092E-08	4.080E-08	3.995E-08	5.765E-10
A	NEAREST COW	S	10.50	16899.	1.930E-08	1.894E-08	1.753E-08	1.138E-10
A	NEAREST GARDEN	SW	1.40	2253.	1.086E-07	1.083E-07	1.072E-07	9.308E-10
A	NEAREST GARDEN	WSW	1.30	2092.	1.288E-07	1.285E-07	1.273E-07	9.119E-10
A	NEAREST GARDEN	WNW	2.40	3863.	1.350E-07	1.344E-07	1.312E-07	5.314E-10
A	NEAREST GARDEN	NW	2.70	4345.	1.449E-07	1.444E-07	1.411E-07	6.507E-10
A	NEAREST GARDEN	NNW	1.90	3058.	1.721E-07	1.717E-07	1.693E-07	1.413E-09
A	NEAREST GARDEN	N	3.00	4828.	4.657E-08	4.638E-08	4.503E-08	4.974E-10
A	NEAREST GARDEN	NNE	2.70	4345.	3.844E-08	3.823E-08	3.718E-08	3.592E-10
A	NEAREST GARDEN	ENE	1.70	2736.	1.561E-08	1.556E-08	1.538E-08	1.897E-10
A	NEAREST GARDEN	E	1.80	2897.	1.707E-08	1.702E-08	1.676E-08	1.931E-10
A	NEAREST GARDEN	ESE	2.40	3863.	2.841E-08	2.831E-08	2.766E-08	3.291E-10
A	NEAREST GARDEN	SE	2.20	3541.	4.092E-08	4.080E-08	3.995E-08	5.765E-10



## ATMOSPHERIC DIFFUSION MODEL

Onsite meteorological data from July 1 through December 31, 1992, 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:

$$(X/Q)_i = 2.032 \sum_{jk} \frac{f_{ijk}}{x_{ijk} z_{jk}} \exp \left[ \frac{-z_{jk}^2}{\sigma_{zk}^2} \right] \quad (\text{Eq. 1})$$

and

$$\sigma_{zk} = (\sigma_{zk}^2 + 0.5 D_z^2/\pi)^{1/2} \leq \bar{w}_3 \sigma_{zk} \quad (\text{Eq. 2})$$

where

- $i$  = index identifying direction sector;
- $j$  = index identifying wind speed class;
- $k$  = index identifying atmospheric stability class;
- $\frac{X}{Q}$  = average effluent concentration normalized by source strength at the specific downwind distance;
- $f$  = joint frequency distribution of wind direction, wind speed class, and atmospheric stability class;
- $x$  = distance from the release point to a receptor;
- $u$  = wind speed;
- $\Sigma_z$  = vertical plume spread with volumetric building wake correction for a release within the building wake cavity;
- $\sigma_z$  = 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  $\Sigma_{zk}$  given in Equations 1 and 2 is used for ground-level release ( $h = 0$ ) within the building wake cavity. For an elevated release, no volumetric building wake correction needs to be considered, i.e.,  $\Sigma_{zk} = \sigma_{zk}$ . For all building wake determinations, the reactor building was considered to be the dominating structure in the modification of air flows within the building complex.

Since the model does not directly consider the effects of spatial and temporal variation in airflow due to terrain, appropriate adjustments were made to the calculated  $X/Q$  values, using the default values of Regulatory Guide 1.111, Rev. 0.

APPENDIX C

DOSE CALCULATIONS

## CONTENTS

	<u>Page</u>
LIQUID EFFLUENT DOSE CALCULATIONS	C1
GASEOUS EFFLUENT DOSE CALCULATIONS	C6
DOSE CALCULATION MODELS	C23

## 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 LADTAP II computer program. 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 and 3, respectively, for the second semiannual period. Tables 2 and 4 present, respectively, summaries of maximum individual and population doses for the entire year of 1992.

Assumptions and data sources used for input to the LADTAP II code are described in a separate section of this appendix (see page C23).

Table 1. Doses to Maximum Individual at the Site Boundary, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, July-December 1992, Cooper Nuclear Station

Dose to Individual, mrem								
Period and Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>3rd Quarter</u>								
Eating Fish		2.55E-03	4.14E-03	2.87E-03	2.58E-08	1.37E-03	4.39E-04	1.27E-03
Drinking Water		1.72E-03	3.17E-03	3.11E-03	2.17E-07	7.91E-04	2.38E-04	1.54E-02
Shoreline	1.30E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04
Totals	1.30E-04	4.38E-03	7.42E-03	6.09E-03	1.11E-04	2.27E-03	7.88E-04	1.68E-02
<u>4th Quarter</u>								
Eating Fish		1.98E-03	3.21E-03	2.22E-03	1.81E-09	1.07E-03	3.43E-04	6.63E-04
Drinking Water		1.59E-03	2.94E-03	2.58E-03	1.26E-08	8.20E-04	2.49E-04	9.73E-03
Shoreline	8.99E-05	7.65E-05	7.65E-05	7.65E-05	7.65E-05	7.65E-05	7.65E-05	7.65E-05
Totals	8.99E-05	3.65E-03	6.23E-03	4.83E-03	7.65E-05	1.97E-03	6.69E-04	1.05E-02
Totals for 3rd & 4th Quarters	2.20E-04	8.03E-03	1.37E-02	1.10E-02	1.88E-04	4.24E-03	1.46E-03	2.73E-02

Calculated doses are based on the following periods of exposures:

Fishing : from April through November  
 Drinking water and shoreline : from January through December

Table 2. Summary of Doses to Maximum individual at the Site Boundary, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January - December 1992, Cooper Nuclear Station

Dose, mrem								
Period	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1st Quarter	3.28E-04	2.25E-03	5.66E-03	5.15E-03	2.79E-04	1.50E-03	5.96E-04	3.22E-02
2nd Quarter	1.25E-04	3.56E-03	6.46E-03	4.76E-03	3.10E-04	1.92E-03	5.91E-04	1.90E-02
3rd Quarter	1.30E-04	4.38E-03	7.42E-03	6.09E-03	1.11E-04	2.27E-03	7.88E-04	1.68E-02
4th Quarter	8.99E-05	3.65E-03	6.23E-03	4.88E-03	7.65E-05	1.97E-03	6.69E-04	1.05E-02
Totals For 1992	6.73E-04	1.38E-02	2.58E-02	2.09E-02	7.77E-04	7.66E-03	2.64E-03	7.85E-02

Table 3. Doses to Population Withing a 50-Mile Radius, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, July-December 1992, Cooper Nuclear Station

Dose to Population, manrem								
Period and Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
-----								
3rd Quarter								
Eating Fish		1.78 E-04	2.68 E-04	1.55 E-04	3.80 E-10	8.82 E-05	2.92 E-05	6.85 E-05
Drinking Water		3.07 E-03	4.87 E-03	4.42 E-03	1.71 E-07	1.21 E-03	3.83 E-04	1.79 E-02
Shoreline	6.91 E-03	5.88 E-03	5.88 E-03	5.88 E-03	5.88 E-03	5.88 E-03	5.88 E-03	5.88 E-03
Swimming		3.82 E-05	3.82 E-05	3.82 E-05	3.82 E-05	3.82 E-05	3.82 E-05	3.82 E-05
Boating		1.40 E-04	1.40 E-04	1.40 E-04	1.40 E-04	1.40 E-04	1.40 E-04	1.40 E-04
Totals	6.91 E-03	9.31 E-03	1.12 E-02	1.06 E-02	6.06 E-03	7.36 E-03	6.47 E-03	2.40 E-02
4th Quarter								
Eating Fish		1.39 E-04	2.08 E-04	1.19 E-04	8.02 E-11	6.90 E-05	2.28 E-05	3.56 E-05
Drinking Water		3.10 E-03	4.98 E-03	3.83 E-03	2.16 E-08	1.38 E-03	4.39 E-04	1.25 E-02
Shoreline	4.76 E-03	4.05 E-03	4.05 E-03	4.05 E-03	4.05 E-03	4.05 E-03	4.05 E-03	4.05 E-03
Boating		6.48 E-05	6.48 E-05	6.48 E-05	6.48 E-05	6.48 E-05	6.48 E-05	6.48 E-05
Totals	4.76 E-03	7.35 E-03	9.30 E-03	8.06 E-03	4.11 E-03	5.56 E-03	4.58 E-03	1.67 E-02
Totals for 3rd & 4th Quarters	1.17 E-02	1.67 E-02	2.05 E-02	1.87 E-02	1.02 E-02	1.29 E-02	1.11 E-02	4.07 E-02

Calculated doses are based on the following periods of exposures:

Fishing and Boating : from April through November  
 Drinking Water and Shoreline : from January through December  
 Swimming : from June through 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 4. Summary of Doses to Population Within a 50-Mile Radius, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January - December 1992, Cooper Nuclear Station

Dose, mrem								
Period	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1st Quarter	1.74E-02	1.95E-02	2.57E-02	2.45E-02	1.48E-02	1.72E-02	1.55E-02	6.40E-02
2nd Quarter	6.62E-03	8.95E-03	1.09E-02	9.88E-03	6.09E-03	7.06E-03	6.12E-03	2.56E-02
3rd Quarter	6.91E-03	9.31E-03	1.12E-02	1.06E-02	6.06E-03	7.36E-03	6.47E-03	2.40E-02
4th Quarter	4.76E-03	7.35E-03	9.30E-03	8.06E-03	4.11E-03	5.56E-03	4.58E-03	1.67E-02
Totals For 1992	3.57E-02	4.51E-02	5.71E-02	5.30E-02	3.11E-02	3.72E-02	3.27E-02	1.30E-01

## GASEOUS EFFLUENT DOSE CALCULATIONS

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 GASPAR computer code. Four sites were selected for individual dose calculations: the site boundary, the nearest residence, the nearest garden, and the nearest cow. 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 and the population are calculated as a function of age group and pathway for significant body organs.

Tables 5 and 6 present maximum individual doses for the third and fourth quarters; population doses for the same period are given in Tables 7 and 8. Individual and population doses for the second semiannual period are contained in Tables 9 and 10, respectively. Tables 11 and 12 present, respectively, individual and population doses for the entire year of 1992. In addition, 0 to 50 mile distributions of gamma and beta air doses are presented in Tables 13, 14, 15, and 16 for the third quarter, fourth quarter, second semiannual period, and the entire year of 1992, respectively.

Because of differences in the amount of valid meteorological data recovered, dose contributions from the third and fourth quarters of 1992 cannot be summed to provide semiannual doses.

Assumptions and data used for input to the GASPAR code are described in a separate section of this appendix (see page C23).

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 1992

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
SPECIAL LOCATION # 1 SITE BOUNDARY  
AT 0.67 MILES N

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.50E-04	1.50E-04	1.51E-04	1.51E-04	1.53E-04	8.89E-04	1.51E-04	3.68E-04
TEEN	1.51E-04	1.50E-04	1.52E-04	1.53E-04	1.55E-04	1.18E-03	1.51E-04	3.68E-04
CHILD	1.53E-04	1.50E-04	1.55E-04	1.55E-04	1.59E-04	2.11E-03	1.51E-04	3.68E-04
INFANT	1.55E-04	1.50E-04	1.60E-04	1.62E-04	1.64E-04	4.31E-03	1.51E-04	3.68E-04

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
SPECIAL LOCATION # 2 NEAR RESIDENCE  
AT 0.90 MILES NW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.37E-04	1.36E-04	1.37E-04	1.37E-04	1.38E-04	4.53E-04	1.38E-04	3.28E-04
TEEN	1.37E-04	1.36E-04	1.37E-04	1.38E-04	1.39E-04	5.77E-04	1.38E-04	3.28E-04
CHILD	1.37E-04	1.36E-04	1.39E-04	1.39E-04	1.40E-04	9.73E-04	1.38E-04	3.28E-04
INFANT	1.38E-04	1.36E-04	1.41E-04	1.41E-04	1.42E-04	1.91E-03	1.38E-04	3.28E-04

TABLE 5. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-SEPTEMBER 1992 (CONTINUED)

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
SPECIAL LOCATION # 3 NEAREST COW  
AT 10.50 MILES S

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	2.44E-06	2.44E-06	2.45E-06	2.45E-06	2.47E-06	9.43E-06	2.46E-06	5.02E-06
TEEN	2.45E-06	2.44E-06	2.45E-06	2.46E-06	2.49E-06	1.21E-05	2.46E-06	5.02E-06
CHILD	2.46E-06	2.44E-06	2.49E-06	2.49E-06	2.52E-06	2.06E-05	2.46E-06	5.02E-06
INFANT	2.48E-06	2.44E-06	2.53E-06	2.55E-06	2.57E-06	4.05E-05	2.46E-06	5.02E-06

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
SPECIAL LOCATION # 4 NEAREST GARDEN  
AT 1.90 MILES NNW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	9.41E-05	9.40E-05	9.42E-05	9.43E-05	9.46E-05	2.18E-04	9.50E-05	2.08E-04
TEEN	9.42E-05	9.40E-05	9.43E-05	9.45E-05	9.49E-05	2.66E-04	9.50E-05	2.08E-04
CHILD	9.45E-05	9.40E-05	9.49E-05	9.49E-05	9.55E-05	4.18E-04	9.50E-05	2.08E-04
INFANT	9.48E-05	9.40E-05	9.57E-05	9.60E-05	9.66E-05	7.76E-04	9.50E-05	2.08E-04

TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 1992

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
SPECIAL LOCATION # 1 SITE BOUNDARY  
AT 0.67 MILES N

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	7.23E-06	7.20E-06	7.23E-06	7.26E-06	7.31E-06	3.03E-05	7.29E-06	1.80E-05
TEEN	7.22E-06	7.21E-06	7.26E-06	7.29E-06	7.37E-06	3.94E-05	7.29E-06	1.80E-05
CHILD	7.29E-06	7.20E-06	7.37E-06	7.37E-06	7.49E-06	6.84E-05	7.29E-06	1.80E-05
INFANT	7.36E-06	7.20E-06	7.52E-06	7.58E-06	7.65E-06	1.37E-04	7.29E-06	1.80E-05

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
SPECIAL LOCATION # 2 NEAR RESIDENCE  
AT 0.90 MILES NW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.02E-05	1.02E-05	1.02E-05	1.03E-05	1.03E-05	2.99E-05	1.04E-05	2.44E-05
TEEN	1.03E-05	1.02E-05	1.03E-05	1.03E-05	1.04E-05	3.77E-05	1.04E-05	2.44E-05
CHILD	1.03E-05	1.02E-05	1.04E-05	1.04E-05	1.05E-05	6.23E-05	1.04E-05	2.44E-05
INFANT	1.04E-05	1.02E-05	1.05E-05	1.05E-05	1.06E-05	1.20E-04	1.04E-05	2.44E-05

TABLE 6. DOSES TO MAXIMUM INDIVIDUAL (MREM), OCTOBER-DECEMBER 1992

(CONTINUED)

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
SPECIAL LOCATION # 3 NEAREST COW  
AT 10.50 MILES S

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	2.56E-07	2.55E-07	2.56E-07	2.56E-07	2.57E-07	7.15E-07	2.58E-07	5.26E-07
TEEN	2.56E-07	2.56E-07	2.57E-07	2.57E-07	2.59E-07	8.93E-07	2.58E-07	5.26E-07
CHILD	2.57E-07	2.55E-07	2.59E-07	2.59E-07	2.61E-07	1.45E-06	2.58E-07	5.26E-07
INFANT	2.58E-07	2.55E-07	2.62E-07	2.63E-07	2.64E-07	2.77E-06	2.58E-07	5.26E-07

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
SPECIAL LOCATION # 4 NEAREST GARDEN  
AT 1.90 MILESNNW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	5.48E-06	5.47E-06	5.48E-06	5.48E-06	5.49E-06	9.94E-06	5.53E-06	1.20E-05
TEEN	5.48E-06	5.48E-06	5.49E-06	5.49E-06	5.51E-06	1.17E-05	5.53E-06	1.20E-05
CHILD	5.49E-06	5.47E-06	5.51E-06	5.51E-06	5.53E-06	1.71E-05	5.53E-06	1.20E-05
INFANT	5.50E-06	5.47E-06	5.53E-06	5.55E-06	5.56E-06	3.00E-05	5.53E-06	1.20E-05

C10

TABLE 7. DOSES TO POPULATION WITHIN 50 MILES, JULY-SEPTEMBER 1992

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
 ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.82E-05	6.82E-05	6.82E-05	6.82E-05	6.82E-05	6.82E-05	6.94E-05	1.70E-04
GROUND	3.37E-08	3.37E-08	3.37E-08	3.37E-08	3.37E-08	3.37E-08	3.37E-08	4.09E-08
INHAL	2.81E-08	7.15E-09	3.83E-08	4.94E-08	8.42E-08	1.63E-05	0.00E+00	0.00E+00
VEGET	2.87E-07	9.56E-08	4.11E-07	5.06E-07	8.54E-07	1.64E-04	0.00E+00	0.00E+00
COW MILK	3.72E-07	1.15E-07	5.49E-07	6.58E-07	1.11E-06	2.13E-04	0.00E+00	0.00E+00
MEAT	8.29E-09	3.24E-09	1.11E-08	1.46E-08	2.48E-08	4.74E-06	0.00E+00	0.00E+00
*TOTAL*	6.89E-05	6.85E-05	6.93E-05	6.95E-05	7.03E-05	4.66E-04	6.94E-05	1.70E-04

TABLE 8. DOSES TO POPULATION WITHIN 50 MILES, OCTOBER-DECEMBER 1992

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
 ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREH)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.13E-06	8.13E-06	8.13E-06	8.13E-06	8.13E-06	8.13E-06	8.27E-06	2.02E-05
GROUND	2.56E-09	2.56E-09	2.56E-09	2.56E-09	2.56E-09	2.56E-09	2.56E-09	3.11E-09
INHAL	2.47E-09	6.29E-10	3.37E-09	4.36E-09	7.40E-09	1.44E-06	0.00E+00	0.00E+00
VEGET	2.36E-08	7.94E-09	3.42E-08	4.20E-08	7.09E-08	1.36E-05	0.00E+00	0.00E+00
COW MILK	2.99E-08	9.26E-09	4.42E-08	5.30E-08	8.91E-08	1.71E-05	0.00E+00	0.00E+00
MEAT	6.69E-10	2.62E-10	8.94E-10	1.18E-09	2.00E-09	3.82E-07	0.00E+00	0.00E+00
*TOTAL*	8.19E-06	8.15E-06	8.22E-06	8.23E-06	8.30E-06	4.07E-05	8.28E-06	2.02E-05



TABLE 9. DOSES TO MAXIMUM INDIVIDUAL (MREM), JULY-DECEMBER 1992

COOPER NUCLEAR STATION JULY-DECEMBER 1992  
SPECIAL LOCATION # 1 SITE BOUNDARY  
AT 0.67 MILES N

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.21E-04	1.21E-04	1.21E-04	1.22E-04	1.23E-04	6.41E-04	1.21E-04	3.00E-04
TEEN	1.21E-04	1.21E-04	1.22E-04	1.23E-04	1.24E-04	8.43E-04	1.21E-04	3.00E-04
CHILD	1.22E-04	1.20E-04	1.24E-04	1.24E-04	1.27E-04	1.49E-03	1.21E-04	3.00E-04
INFANT	1.24E-04	1.20E-04	1.28E-04	1.29E-04	1.31E-04	3.04E-03	1.21E-04	3.00E-04

COOPER NUCLEAR STATION JULY-DECEMBER 1992  
SPECIAL LOCATION # 2 NEAR RESIDENCE  
AT 0.90 MILES NW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.04E-04	1.03E-04	1.04E-04	1.04E-04	1.05E-04	3.82E-04	1.04E-04	2.42E-04
TEEN	1.04E-04	1.03E-04	1.04E-04	1.04E-04	1.05E-04	4.91E-04	1.04E-04	2.42E-04
CHILD	1.04E-04	1.03E-04	1.05E-04	1.05E-04	1.07E-04	8.40E-04	1.04E-04	2.42E-04
INFANT	1.05E-04	1.03E-04	1.07E-04	1.08E-04	1.09E-04	1.67E-03	1.04E-04	2.42E-04

TABLE 9. DOSES TO MAXIMUM INDIVIDUAL (PREM), JULY-DECEMBER 1992

(CONTINUED)

COOPER NUCLEAR STATION JULY-DECEMBER 1992  
SPECIAL LOCATION # 3 NEAREST COW  
AT 10.50 MILES S

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	2.30E-06	2.30E-06	2.30E-06	2.31E-06	2.32E-06	8.59E-06	2.31E-06	4.72E-06
TEEN	2.31E-06	2.30E-06	2.31E-06	2.32E-06	2.34E-06	1.10E-05	2.31E-06	4.72E-06
CHILD	2.32E-06	2.30E-06	2.34E-06	2.34E-06	2.37E-06	1.87E-05	2.31E-06	4.72E-06
INFANT	2.34E-06	2.29E-06	2.38E-06	2.40E-06	2.41E-06	3.66E-05	2.31E-06	4.72E-06

COOPER NUCLEAR STATION JULY-DECEMBER 1992  
SPECIAL LOCATION # 4 NEAREST GARDEN  
AT 1.90 MILES NNW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	7.18E-05	7.17E-05	7.18E-05	7.19E-05	7.21E-05	1.62E-04	7.25E-05	1.57E-04
TEEN	7.18E-05	7.17E-05	7.19E-05	7.20E-05	7.24E-05	1.97E-04	7.25E-05	1.57E-04
CHILD	7.20E-05	7.17E-05	7.23E-05	7.23E-05	7.28E-05	3.08E-04	7.25E-05	1.57E-04
INFANT	7.23E-05	7.17E-05	7.29E-05	7.31E-05	7.34E-05	5.69E-04	7.25E-05	1.57E-04

TABLE 10. DOSES TO POPULATION WITHIN 50 MILES, JULY-DECEMBER 1992

COOPER NUCLEAR STATION JULY-DECEMBER 1992  
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.83E-05	6.83E-05	6.83E-05	6.83E-05	6.83E-05	6.83E-05	6.95E-05	1.70E-04
GROUND	3.24E-08	3.24E-08	3.24E-08	3.24E-08	3.24E-08	3.24E-08	3.24E-08	3.93E-08
INHAL	2.89E-08	7.36E-09	3.94E-08	5.11E-08	8.46E-08	1.68E-05	0.00E+00	0.00E+00
VEGET	2.87E-07	9.56E-08	4.12E-07	5.06E-07	8.55E-07	1.64E-04	0.00E+00	0.00E+00
COW MILK	3.67E-07	1.13E-07	5.41E-07	6.49E-07	1.09E-06	2.10E-04	0.00E+00	0.00E+00
MEAT	8.18E-09	3.20E-09	1.09E-08	1.44E-08	2.45E-08	4.68E-06	0.00E+00	0.00E+00
*TOTAL*	6.90E-05	6.86E-05	6.93E-05	6.96E-05	7.04E-05	4.64E-04	6.95E-05	1.70E-04

TABLE 11. DOSES TO MAXIMUM INDIVIDUAL (MREM), JANUARY-DECEMBER 1992

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
SPECIAL LOCATION # 1 SITE BOUNDARY  
AT 0.67 MILES N

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.71E-04	1.70E-04	1.71E-04	1.72E-04	1.74E-04	1.03E-03	1.71E-04	4.18E-04
TEEN	1.71E-04	1.70E-04	1.72E-04	1.73E-04	1.76E-04	1.36E-03	1.71E-04	4.18E-04
CHILD	1.73E-04	1.70E-04	1.76E-04	1.76E-04	1.80E-04	2.44E-03	1.71E-04	4.18E-04
INFANT	1.76E-04	1.70E-04	1.82E-04	1.84E-04	1.86E-04	4.99E-03	1.71E-04	4.18E-04

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
SPECIAL LOCATION # 2 NEAR RESIDENCE  
AT 0.90 MILES NW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	2.20E-04	2.20E-04	2.20E-04	2.21E-04	2.22E-04	8.37E-04	2.22E-04	5.18E-04
TEEN	2.21E-04	2.20E-04	2.21E-04	2.22E-04	2.24E-04	1.08E-03	2.22E-04	5.18E-04
CHILD	2.22E-04	2.20E-04	2.24E-04	2.24E-04	2.27E-04	1.85E-03	2.22E-04	5.18E-04
INFANT	2.24E-04	2.19E-04	2.28E-04	2.30E-04	2.31E-04	3.68E-03	2.22E-04	5.18E-04

TABLE 11. DOSES TO MAXIMUM INDIVIDUAL (HREM), JANUARY-DECEMBER 1992 (CONTINUED)

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
SPECIAL LOCATION # 3 NEAREST COW  
AT 10.50 MILES S

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	4.78E-06	4.76E-06	4.78E-06	4.80E-06	4.83E-06	1.94E-05	4.81E-06	9.83E-06
TEEN	4.79E-06	4.77E-06	4.80E-06	4.82E-06	4.87E-06	2.50E-05	4.81E-06	9.83E-06
CHILD	4.82E-06	4.76E-06	4.87E-06	4.87E-06	4.94E-06	4.29E-05	4.81E-06	9.83E-06
INFANT	4.86E-06	4.76E-06	4.96E-06	5.00E-06	5.04E-06	8.47E-05	4.81E-06	9.83E-06

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
SPECIAL LOCATION # 4 NEAREST GARDEN  
AT 1.90 MILES NNW

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
ADULT	1.40E-04	1.40E-04	1.40E-04	1.41E-04	1.41E-04	3.20E-04	1.42E-04	3.13E-04
TEEN	1.40E-04	1.40E-04	1.41E-04	1.41E-04	1.42E-04	3.90E-04	1.42E-04	3.13E-04
CHILD	1.41E-04	1.40E-04	1.41E-04	1.41E-04	1.42E-04	6.11E-04	1.42E-04	3.13E-04
INFANT	1.41E-04	1.40E-04	1.43E-04	1.43E-04	1.44E-04	1.13E-03	1.42E-04	3.13E-04

TABLE 12. DOSES TO POPULATION WITHIN 50 MILES, JANUARY-DECEMBER 1992

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
 ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.33E-04	3.28E-04
GROUND	6.94E-08	6.94E-08	6.94E-08	6.94E-08	6.94E-08	6.94E-08	6.94E-08	8.43E-08
INHAL	5.81E-08	1.48E-08	7.92E-08	1.03E-07	1.74E-07	3.38E-05	0.00E+00	0.00E+00
VEGET	6.32E-07	2.11E-07	9.07E-07	1.12E-06	1.88E-06	3.62E-04	0.00E+00	0.00E+00
COW MILK	8.13E-07	2.52E-07	1.20E-06	1.44E-06	2.42E-06	4.65E-04	0.00E+00	0.00E+00
MEAT	1.80E-08	7.05E-09	2.41E-08	3.17E-08	5.39E-08	1.03E-05	0.00E+00	0.00E+00
*TOTAL*	1.33E-04	1.32E-04	1.33E-04	1.34E-04	1.36E-04	1.00E-03	1.33E-04	3.28E-04

TABLE 13. GAMMA AND BETA AIR DOSES, JULY-SEPTEMBER 1992

COOPER NUCLEAR STATION JULY-SEPTEMBER 1992  
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES									
DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	2.392E-04	7.771E-05	3.515E-05	1.977E-05	1.264E-05	5.293E-06	2.335E-06	1.122E-06	5.667E-07	3.250E-07
NNE	8.900E-05	3.211E-05	1.474E-05	8.292E-06	5.426E-06	6.772E-06	1.759E-06	6.154E-07	2.864E-07	1.541E-07
NE	3.012E-05	1.458E-05	7.319E-06	4.214E-06	2.983E-06	3.886E-06	1.004E-06	3.458E-07	1.595E-07	8.458E-08
ENE	2.568E-06	3.697E-06	2.194E-06	1.370E-06	9.330E-07	1.599E-06	4.482E-07	1.688E-07	8.861E-08	4.866E-08
E	9.123E-06	9.334E-06	5.195E-06	3.198E-06	2.011E-06	1.862E-06	4.748E-07	1.693E-07	8.098E-08	4.488E-08
ESE	1.863E-05	1.153E-05	5.722E-06	3.151E-06	2.063E-06	2.255E-06	6.384E-07	2.374E-07	1.139E-07	6.261E-08
SE	2.342E-05	2.036E-05	9.477E-06	5.704E-06	3.574E-06	1.445E-06	5.692E-07	2.336E-07	1.155E-07	6.016E-08
SSE	5.564E-05	4.022E-05	2.082E-05	1.214E-05	1.783E-05	6.340E-06	1.515E-06	4.684E-07	1.939E-07	9.517E-08
S	8.978E-05	5.155E-05	2.675E-05	1.550E-05	1.743E-05	7.148E-06	1.810E-06	6.469E-07	2.966E-07	1.583E-07
SSW	2.453E-05	2.660E-05	1.405E-05	1.443E-05	1.040E-05	5.783E-06	1.478E-06	5.248E-07	2.354E-07	1.226E-07
SW	2.132E-05	4.601E-05	1.780E-05	9.403E-06	5.893E-06	3.887E-06	1.043E-06	3.917E-07	1.800E-07	9.327E-08
WSW	1.196E-05	5.572E-05	1.847E-05	9.063E-06	5.229E-06	2.542E-06	7.778E-07	2.492E-07	1.069E-07	5.441E-08
W	4.903E-05	6.689E-05	2.326E-05	1.112E-05	6.428E-06	2.299E-06	8.130E-07	3.104E-07	1.388E-07	7.255E-08
WNW	1.016E-04	1.692E-04	5.250E-05	2.676E-05	1.511E-05	5.451E-06	1.528E-06	5.531E-07	2.601E-07	1.390E-07
NW	1.442E-04	2.683E-04	8.284E-05	3.875E-05	2.060E-05	7.315E-06	2.091E-06	7.787E-07	3.890E-07	2.175E-07
NNW	1.956E-04	1.569E-04	1.049E-04	6.270E-05	3.465E-05	1.214E-05	3.121E-06	1.113E-06	5.332E-07	2.920E-07

## INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES									
DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	2.312E-04	6.816E-05	2.718E-05	1.437E-05	8.990E-06	3.830E-06	1.782E-06	8.824E-07	4.659E-07	2.856E-07
NNE	8.700E-05	2.518E-05	1.050E-05	5.939E-06	3.962E-06	5.126E-06	1.378E-06	5.189E-07	2.717E-07	1.689E-07
NE	2.947E-05	1.178E-05	5.279E-06	2.998E-06	2.140E-06	2.947E-06	7.894E-07	2.958E-07	1.565E-07	9.748E-08
ENE	2.492E-06	2.739E-06	1.559E-06	9.911E-07	6.879E-07	1.206E-06	3.498E-07	1.398E-07	8.164E-08	5.111E-08
E	8.667E-06	7.424E-06	3.765E-06	2.270E-06	1.447E-06	1.393E-06	3.686E-07	1.382E-07	7.189E-08	4.462E-08
ESE	1.772E-05	8.848E-06	4.074E-06	2.266E-06	1.514E-06	1.709E-06	5.005E-07	1.997E-07	1.075E-07	6.807E-08
SE	2.332E-05	1.664E-05	6.822E-06	4.048E-06	2.566E-06	1.083E-06	4.429E-07	1.957E-07	1.136E-07	7.087E-08
SSE	5.493E-05	3.308E-05	1.521E-05	8.618E-06	1.302E-05	4.862E-06	1.228E-06	4.471E-07	2.327E-07	1.455E-07
S	8.519E-05	4.052E-05	1.933E-05	1.100E-05	1.254E-05	5.381E-06	1.412E-06	5.386E-07	2.756E-07	1.692E-07
SSW	2.257E-05	2.048E-05	1.001E-05	1.032E-05	7.573E-06	4.392E-06	1.165E-06	4.521E-07	2.334E-07	1.439E-07
SW	1.987E-05	3.431E-05	1.265E-05	6.837E-06	4.370E-06	2.972E-06	8.328E-07	3.518E-07	1.920E-07	1.206E-07
WSW	1.098E-05	4.140E-05	1.313E-05	6.584E-06	3.896E-06	1.952E-06	6.295E-07	2.337E-07	1.230E-07	7.757E-08
W	4.621E-05	4.891E-05	1.651E-05	8.028E-06	4.744E-06	1.758E-06	6.457E-07	2.742E-07	1.437E-07	8.992E-08
WNW	9.722E-05	1.327E-04	3.767E-05	1.902E-05	1.090E-05	4.098E-06	1.194E-06	4.617E-07	2.433E-07	1.499E-07
NW	1.408E-04	2.245E-04	6.320E-05	2.786E-05	1.464E-05	5.394E-06	1.613E-06	6.232E-07	3.335E-07	2.050E-07
NNW	1.867E-04	1.308E-04	7.834E-05	4.450E-05	2.481E-05	9.096E-06	2.428E-06	9.183E-07	4.859E-07	3.040E-07

TABLE 14. GAMMA AND BETA AIR DOSES, OCTOBER-DECEMBER 1992

COOPER NUCLEAR STATION OCTOBER-DECEMBER 1992  
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

DIR	DISTANCE IN MILES									
	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	8.490E-06	6.326E-06	3.315E-06	1.913E-06	1.255E-06	5.369E-07	2.616E-07	1.402E-07	7.013E-08	3.959E-08
NNE	5.484E-06	4.380E-06	2.273E-06	1.319E-06	8.940E-07	1.405E-06	3.668E-07	1.282E-07	5.944E-08	3.160E-08
NE	2.200E-06	2.501E-06	1.431E-06	8.504E-07	5.624E-07	1.057E-06	2.762E-07	9.344E-08	4.304E-08	2.240E-08
ENE	2.051E-08	9.608E-07	7.065E-07	4.795E-07	3.630E-07	6.454E-07	1.779E-07	6.531E-08	3.373E-08	1.842E-08
E	4.869E-07	1.489E-06	9.760E-07	6.203E-07	4.057E-07	6.124E-07	1.678E-07	6.071E-08	2.862E-08	1.613E-08
ESE	1.570E-07	3.895E-06	2.344E-06	1.385E-06	9.087E-07	9.169E-07	2.460E-07	9.205E-08	4.457E-08	2.471E-08
SE	4.776E-07	6.366E-06	3.493E-06	2.004E-06	1.310E-06	5.351E-07	2.049E-07	8.723E-08	4.663E-08	2.622E-08
SSE	2.792E-06	8.359E-06	4.527E-06	2.699E-06	4.366E-06	1.487E-06	3.741E-07	1.292E-07	6.028E-08	3.241E-08
S	4.854E-06	4.688E-06	2.468E-06	1.427E-06	1.637E-06	7.435E-07	1.897E-07	7.196E-08	3.482E-08	1.945E-08
SSW	1.224E-06	3.151E-06	1.660E-06	1.400E-06	9.029E-07	4.209E-07	1.031E-07	3.560E-08	1.589E-08	8.276E-09
SW	1.184E-07	8.610E-06	2.517E-06	1.185E-06	6.541E-07	2.792E-07	6.550E-08	2.047E-08	8.353E-09	4.083E-09
WSW	8.180E-07	1.090E-05	3.648E-06	1.809E-06	1.083E-06	5.364E-07	1.696E-07	5.927E-08	2.757E-08	1.476E-08
W	1.911E-06	5.784E-06	2.158E-06	1.119E-06	6.606E-07	2.524E-07	9.139E-08	3.479E-08	1.585E-08	8.437E-09
WNW	3.183E-07	9.241E-06	3.141E-06	1.653E-06	9.467E-07	3.554E-07	1.003E-07	3.475E-08	1.595E-08	8.369E-09
NW	2.634E-07	2.786E-05	8.370E-06	3.875E-06	2.151E-06	7.355E-07	1.977E-07	6.798E-08	3.137E-08	1.668E-08
NNW	1.586E-06	8.076E-06	5.464E-06	3.927E-06	2.209E-06	8.139E-07	2.091E-07	7.151E-08	3.278E-08	1.738E-08

INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)  
DISTANCE IN MILES

DIR	DISTANCE IN MILES									
	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	8.531E-06	5.342E-06	2.470E-06	1.365E-06	8.929E-07	3.948E-07	2.012E-07	1.115E-07	5.906E-08	3.624E-08
NNE	5.278E-06	3.440E-06	1.635E-06	9.398E-07	6.453E-07	1.064E-06	2.883E-07	1.094E-07	5.774E-08	3.605E-08
NE	2.183E-06	1.886E-06	1.018E-06	6.121E-07	4.138E-07	8.086E-07	2.205E-07	8.397E-08	4.609E-08	2.926E-08
ENE	1.926E-08	7.090E-07	5.026E-07	3.475E-07	2.658E-07	4.878E-07	1.393E-07	5.473E-08	3.152E-08	1.973E-08
E	4.641E-07	1.235E-06	7.214E-07	4.412E-07	2.918E-07	4.620E-07	1.314E-07	5.118E-08	2.728E-08	1.816E-08
ESE	1.526E-07	3.252E-06	1.753E-06	9.877E-07	6.477E-07	6.833E-07	1.911E-07	7.517E-08	3.981E-08	2.481E-08
SE	4.761E-07	5.434E-06	2.620E-06	1.430E-06	9.321E-07	3.948E-07	1.581E-07	6.961E-08	3.950E-08	2.420E-08
SSE	2.804E-06	7.102E-06	3.344E-06	1.920E-06	3.130E-06	1.115E-06	2.908E-07	1.062E-07	5.445E-08	3.312E-08
S	4.973E-06	3.789E-06	1.794E-06	1.014E-06	1.175E-06	5.537E-07	1.469E-07	5.802E-08	3.009E-08	1.849E-08
SSW	1.247E-06	2.482E-06	1.183E-06	1.006E-06	6.626E-07	3.200E-07	8.140E-08	3.069E-08	1.567E-08	9.563E-09
SW	1.168E-07	6.871E-06	1.789E-06	8.551E-07	4.853E-07	2.149E-07	5.351E-08	1.989E-08	1.031E-08	6.371E-09
WSW	7.864E-07	2.628E-06	2.599E-06	1.296E-06	7.914E-07	4.063E-07	1.331E-07	5.020E-08	2.624E-08	1.637E-08
W	9.877E-07	4.312E-06	1.534E-06	8.066E-07	4.875E-07	1.927E-07	7.220E-08	3.007E-08	1.577E-08	9.862E-09
WNW	2.998E-07	6.791E-06	2.232E-06	1.195E-06	6.985E-07	2.711E-07	7.956E-08	3.048E-08	1.619E-08	1.007E-08
NW	2.782E-07	2.249E-05	6.093E-06	2.755E-06	1.548E-06	5.534E-07	1.545E-07	5.690E-08	2.951E-08	1.809E-08
NNW	1.221E-06	6.383E-06	3.912E-06	2.800E-06	1.602E-06	6.171E-07	1.648E-07	6.178E-08	3.281E-08	2.086E-08



TABLE 15. GAMMA AND BETA AIR DOSES, JULY-DECEMBER 1992

## COOPER NUCLEAR STATION JULY-DECEMBER 1992

## INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

## DISTANCE IN MILES

DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	1.701E-04	6.533E-05	3.276E-05	1.833E-05	1.186E-05	4.862E-06	2.305E-06	1.155E-06	5.793E-07	3.309E-07
NNE	7.536E-05	3.447E-05	1.677E-05	9.591E-06	6.222E-06	9.209E-06	2.375E-06	8.365E-07	3.872E-07	2.074E-07
NE	2.819E-05	1.757E-05	9.334E-06	5.490E-06	3.799E-06	6.158E-06	1.616E-06	5.468E-07	2.517E-07	1.316E-07
ENE	1.513E-06	5.570E-06	4.090E-06	2.634E-06	1.836E-06	3.305E-06	9.316E-07	3.437E-07	1.787E-07	9.725E-08
E	7.839E-06	1.164E-05	6.604E-06	3.979E-06	2.684E-06	3.335E-06	9.031E-07	3.278E-07	1.532E-07	8.651E-08
ESE	1.811E-05	2.122E-05	1.207E-05	6.968E-06	4.535E-06	4.724E-06	1.300E-06	4.832E-07	2.322E-07	1.289E-07
SE	1.218E-05	3.507E-05	1.904E-05	1.073E-05	7.031E-06	2.797E-06	1.099E-06	4.601E-07	2.381E-07	1.302E-07
SSE	4.108E-05	5.451E-05	2.898E-05	1.693E-05	2.604E-05	9.047E-06	2.223E-06	7.333E-07	3.216E-07	1.654E-07
S	6.369E-05	4.786E-05	2.399E-05	1.389E-05	1.583E-05	6.793E-06	1.726E-06	6.284E-07	2.940E-07	1.599E-07
SSW	1.808E-05	2.650E-05	1.385E-05	1.334E-05	9.110E-06	4.841E-06	1.211E-06	4.256E-07	1.897E-07	9.897E-08
SW	1.025E-05	5.321E-05	1.949E-05	9.650E-06	5.839E-06	3.227E-06	6.233E-07	2.926E-07	1.301E-07	6.570E-08
WSW	1.086E-05	6.730E-05	2.403E-05	1.188E-05	7.044E-06	3.425E-06	1.070E-06	3.596E-07	1.613E-07	8.385E-08
W	3.152E-05	5.931E-05	2.141E-05	1.043E-05	6.158E-06	2.235E-06	7.953E-07	3.049E-07	1.374E-07	7.227E-08
WNW	6.161E-05	1.364E-04	4.271E-05	2.112E-05	1.185E-05	4.269E-06	1.223E-06	4.368E-07	2.031E-07	1.077E-07
NW	7.310E-05	2.620E-04	7.024E-05	3.521E-05	1.933E-05	6.737E-06	1.924E-06	6.859E-07	3.310E-07	1.813E-07
NNW	1.095E-04	1.239E-04	7.699E-05	4.907E-05	2.750E-05	9.769E-06	2.521E-06	8.876E-07	4.166E-07	2.253E-07

## INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)

## DISTANCE IN MILES

DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	1.666E-04	5.589E-05	2.509E-05	1.320E-05	8.422E-06	3.553E-06	1.763E-06	9.129E-07	4.816E-07	2.960E-07
NNE	7.417E-05	2.698E-05	1.199E-05	6.847E-06	4.535E-06	6.966E-06	1.864E-06	7.093E-07	3.723E-07	2.323E-07
NE	2.818E-05	1.359E-05	6.643E-06	3.936E-06	2.764E-06	4.698E-06	1.282E-06	4.833E-07	2.620E-07	1.653E-07
ENE	1.473E-06	4.077E-06	2.903E-06	1.903E-06	1.354E-06	2.500E-06	7.281E-07	2.868E-07	1.660E-07	1.036E-07
E	7.646E-06	9.665E-06	4.828E-06	2.824E-06	1.928E-06	2.513E-06	7.050E-07	2.732E-07	1.434E-07	9.403E-08
ESE	1.877E-05	1.710E-05	8.818E-06	4.946E-06	3.256E-06	3.541E-06	1.011E-06	3.975E-07	2.108E-07	1.323E-07
SE	1.171E-05	2.915E-05	1.413E-05	7.622E-06	5.008E-06	2.078E-06	8.494E-07	3.719E-07	2.107E-07	1.295E-07
SSE	4.059E-05	4.552E-05	2.129E-05	1.202E-05	1.884E-05	6.865E-06	1.754E-06	6.378E-07	3.267E-07	2.012E-07
S	6.065E-05	3.840E-05	1.733E-05	9.859E-06	1.138E-05	5.090E-06	1.341E-06	5.161E-07	2.651E-07	1.628E-07
SSW	1.702E-05	2.058E-05	9.846E-06	9.553E-06	6.660E-06	3.674E-06	9.546E-07	3.665E-07	1.880E-07	1.156E-07
SW	9.142E-06	3.969E-05	1.384E-05	6.997E-06	4.320E-06	2.471E-06	6.618E-07	2.687E-07	1.445E-07	9.014E-08
WSW	1.036E-05	5.027E-05	1.706E-05	8.559E-06	5.188E-06	2.613E-06	8.499E-07	3.175E-07	1.666E-07	1.041E-07
W	3.000E-05	4.368E-05	1.519E-05	7.522E-06	4.533E-06	1.707E-06	6.302E-07	2.664E-07	1.395E-07	8.724E-08
WNW	6.003E-05	1.070E-04	3.063E-05	1.506E-05	8.614E-06	3.234E-06	9.597E-07	3.700E-07	1.951E-07	1.205E-07
NW	7.027E-05	2.176E-04	5.093E-05	2.503E-05	1.381E-05	5.024E-06	1.490E-06	5.580E-07	2.941E-07	1.806E-07
NNW	1.046E-04	1.038E-04	5.628E-05	3.984E-05	1.976E-05	7.352E-06	1.968E-06	7.419E-07	3.913E-07	2.460E-07

TABLE 16. GAMMA AND BETA AIR DOSES, JANUARY-DECEMBER 1992

COOPER NUCLEAR STATION JANUARY-DECEMBER 1992  
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)  
DISTANCE IN MILES

DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	2.309E-04	1.017E-04	5.401E-05	3.093E-05	2.022E-05	8.325E-06	3.676E-06	1.799E-06	8.778E-07	4.890E-07
NNE	1.705E-04	6.598E-05	3.225E-05	1.879E-05	1.228E-05	1.560E-05	3.952E-06	1.353E-06	6.085E-07	3.183E-07
NE	6.168E-05	3.637E-05	1.995E-05	1.179E-05	7.870E-06	1.180E-05	2.998E-06	1.024E-06	4.675E-07	2.419E-07
ENE	1.092E-05	1.796E-05	1.086E-05	7.163E-06	4.568E-06	6.487E-06	1.784E-06	6.623E-07	3.420E-07	1.892E-07
E	1.335E-05	2.196E-05	1.232E-05	7.341E-06	4.866E-06	5.846E-06	1.580E-06	5.546E-07	2.566E-07	1.403E-07
ESE	3.197E-05	5.223E-05	2.535E-05	1.493E-05	9.553E-06	8.796E-06	2.423E-06	9.080E-07	4.461E-07	2.485E-07
SE	5.979E-05	6.834E-05	3.623E-05	2.105E-05	1.400E-05	5.722E-06	2.164E-06	9.321E-07	4.976E-07	2.797E-07
SSE	1.667E-04	1.105E-04	5.476E-05	3.091E-05	4.858E-05	1.707E-05	4.249E-06	1.454E-06	6.800E-07	3.465E-07
S	2.109E-04	1.045E-04	4.971E-05	2.816E-05	3.152E-05	1.399E-05	3.617E-06	1.336E-06	6.216E-07	3.396E-07
SSW	7.853E-05	5.037E-05	2.640E-05	2.539E-05	1.740E-05	8.807E-06	2.226E-06	7.744E-07	3.422E-07	1.777E-07
SW	5.505E-05	1.249E-04	4.068E-05	2.006E-05	1.188E-05	6.047E-06	1.550E-06	5.480E-07	2.447E-07	1.248E-07
WSW	3.937E-05	1.632E-04	5.164E-05	2.503E-05	1.439E-05	6.650E-06	1.992E-06	6.795E-07	3.093E-07	1.626E-07
W	1.647E-04	1.590E-04	5.013E-05	2.413E-05	1.386E-05	4.941E-06	1.590E-06	5.678E-07	2.477E-07	1.259E-07
WNW	1.250E-04	3.138E-04	1.105E-04	5.121E-05	2.866E-05	9.971E-06	2.820E-06	1.005E-06	4.696E-07	2.502E-07
NW	1.388E-04	5.315E-04	1.701E-04	7.281E-05	4.067E-05	1.421E-05	3.904E-06	1.409E-06	6.893E-07	3.792E-07
NNW	2.419E-04	2.146E-04	1.580E-04	9.323E-05	5.090E-05	1.793E-05	4.609E-06	1.667E-06	7.946E-07	4.361E-07

INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)  
DISTANCE IN MILES

DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	2.214E-04	8.453E-05	4.051E-05	2.213E-05	1.440E-05	6.150E-06	2.849E-06	1.452E-06	7.609E-07	4.671E-07
NNE	1.691E-04	5.202E-05	2.307E-05	1.346E-05	8.982E-06	1.192E-05	3.151E-06	1.192E-06	6.251E-07	3.907E-07
NE	6.021E-05	2.859E-05	1.435E-05	8.415E-06	5.718E-06	9.036E-06	2.402E-06	9.170E-07	4.965E-07	3.129E-07
ENE	1.094E-05	1.434E-05	7.810E-06	5.097E-06	3.315E-06	4.887E-06	1.393E-06	5.456E-07	3.084E-07	1.917E-07
E	1.292E-05	1.804E-05	8.942E-06	5.233E-06	3.532E-06	4.453E-06	1.249E-06	4.781E-07	2.533E-07	1.657E-07
ESE	3.127E-05	4.474E-05	1.877E-05	1.065E-05	6.826E-06	6.588E-06	1.887E-06	7.414E-07	3.950E-07	2.458E-07
SE	6.006E-05	5.786E-05	2.738E-05	1.511E-05	9.965E-06	4.190E-06	1.673E-06	7.472E-07	4.278E-07	2.641E-07
SSE	1.670E-04	9.535E-05	4.115E-05	2.204E-05	3.501E-05	1.293E-05	3.347E-06	1.238E-06	6.384E-07	3.925E-07
S	2.056E-04	8.527E-05	3.624E-05	2.003E-05	2.272E-05	1.055E-05	2.832E-06	1.115E-06	5.765E-07	3.591E-07
SSW	7.761E-05	3.896E-05	1.883E-05	1.822E-05	1.273E-05	6.731E-06	1.770E-06	6.815E-07	3.512E-07	2.173E-07
SW	5.339E-05	9.864E-05	2.896E-05	1.445E-05	8.749E-06	4.642E-06	1.245E-06	4.976E-07	2.655E-07	1.652E-07
WSW	3.732E-05	1.285E-04	3.685E-05	1.792E-05	1.053E-05	5.057E-06	1.578E-06	5.887E-07	3.076E-07	1.910E-07
W	1.581E-04	1.209E-04	3.567E-05	1.738E-05	1.021E-05	3.782E-06	1.277E-06	5.224E-07	2.743E-07	1.718E-07
WNW	1.221E-04	2.416E-04	8.071E-05	3.652E-05	2.078E-05	7.565E-06	2.218E-06	8.498E-07	4.467E-07	2.753E-07
NW	1.363E-04	4.411E-04	1.306E-04	5.200E-05	2.899E-05	1.052E-05	3.027E-06	1.139E-06	6.009E-07	3.669E-07
NNW	2.412E-04	1.757E-04	1.201E-04	6.636E-05	3.653E-05	1.348E-05	3.607E-06	1.382E-06	7.299E-07	4.585E-07

## DOSE CALCULATION MODELS

To evaluate the radiological consequences of the routine release of liquid and gaseous effluents from the Cooper Nuclear Station, two computer codes were used: LADTAP II for liquid doses and GASPAR for gaseous doses. 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 calculation, 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 17. 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/m<sup>3</sup>)
- 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 17. Values of Parameters used to Make Dose Estimates Resulting from Liquid Discharges at Cooper Nuclear Station July-December 1992

Parameter	Values Assigned	
	Individual	Population
Cooling flow rate (cfs) *	1390.0; 1089.8	1390.0; 1089.8
Dilution factor	1	29.05; 26.46
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 **

\* Third and Fourth quarter station data for 1992, 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.

## References

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