



**GULF STATES UTILITIES COMPANY**

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Gentlemen:

River Bend Station - Unit 1  
Docket No. 50-458

Enclosed is the semi-annual Radioactive Effluent Release Report for the period of July 1 to December 31, 1989. This report is submitted in accordance with Technical Specification 6.9.1.8 of Appendix A to River Bend Station (RBS) License Number NPF-47.

Information unavailable for this report will be provided in a future addendum.

Sincerely,

*W. H. Odell*  
W. H. Odell  
Manager-River Bend Oversight  
River Bend Nuclear Group

WHO/LAE/DWL/DWC/JCM/pg  
Enclosure

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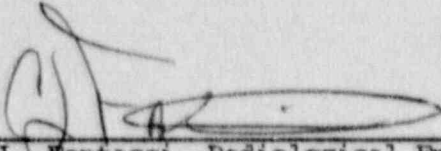
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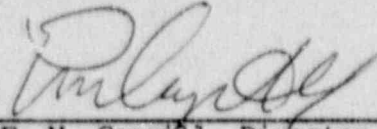
RIVER BEND STATION - UNIT 1  
SEMIANNUAL RADIOACTIVE  
EFFLUENT RELEASE REPORT

REPORT PERIOD: JULY 1, 1989 THROUGH DECEMBER 31, 1989

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**SEMIANNUAL RADIOACTIVE EFFLUENT  
RELEASE REPORT**

FACILITY: River Bend Station, Unit 1  
LICENSEE: Gulf States Utilities  
REPORT PERIOD: July 1, 1989 to December 31, 1989

I. INTRODUCTION

This Semiannual Radioactive Effluent Release Report for the period of July 1, 1989 through December 31, 1989, is submitted in accordance with Technical Specification 6.9.1.8 of Appendix A to River Bend Station (RBS) License Number NPF-47.



## II. SUPPLEMENTAL INFORMATION

### A. Regulatory Limits

#### 1. 10CFR20 Limits

##### a. Fission and Activation Gases

In accordance with Technical Specification 3.11.2.1, the dose rate due to noble gases released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY shall be limited to less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin:

$DR_{TB}$  = Dose rate to the total body in mrem/yr

$$= 3.15 \times 10^7 \sum_{i=1}^n K_i (X/Q) \dot{Q}_i \leq 500 \text{ mrem/yr}$$

and

$DR_{\text{skin}}$  = Dose rate to the skin in mrem/yr

$$= 3.15 \times 10^7 \sum_{i=1}^n (L_i + 1.1M_i)(X/Q) \dot{Q}_i \leq 3000 \text{ mrem/yr}$$

(above terms defined in RBS ODCM).

##### b. Radioiodines and Particulates

In accordance with Technical Specification 3.11.2.1, the dose rate due to iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY shall be limited to less than or equal to 1500 mrem/yr to any organ:

$DR_{I\&8DP\tau}$  = Dose rate to the organ  $\tau$  for the age group of interest from iodines, tritium, and 8 day particulates via the inhalation pathway in mrem/yr

$$= \sum_{i=1}^n P_i (X/Q)_D \dot{Q}_i \leq 1500 \text{ mrem/yr}$$

(above terms defined in RBS ODCM)

c. Liquid Effluents

In accordance with Technical Specification 3.11.1.1, the concentration of radioactive material released in liquid effluents to UNRESTRICTED AREAS shall be limited to the concentrations specified in 10CFR20, Appendix B, Table II, Column 2 for radionuclides other than dissolved and entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to  $2 \times 10^{-4}$  microcuries/ml total activity.

2. 10CFR50, Appendix I Limits

a. Fission and Activation Gases

In accordance with Technical Specification 3.11.2.2, the air dose due to noble gases released in gaseous effluents to areas at or beyond the SITE BOUNDARY shall be limited to:

$D_{\text{Gamma-Air}}$  = The gamma air dose from radioactive noble gases in mrad

$$= \sum_{i=1}^n M_i (\overline{X/Q}) Q_i \leq 5 \text{ mrad/qtr} \\ \leq 10 \text{ mrad/yr}$$

$D_{\text{Beta-Air}}$  = Beta air dose from radioactive noble gases in mrad

$$= \sum_{i=1}^n N_i (\overline{X/Q}) Q_i \leq 10 \text{ mrad/qtr} \\ \leq 20 \text{ mrad/yr}$$

(above terms defined in RBS ODCM)

b. Radioiodines and Particulates

In accordance with Technical Specification 3.11.2.3, the dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents releases to areas at and beyond the SITE BOUNDARY shall be limited to:

$D_{\text{I\&8DP}\tau}$  = Dose in mrem to the organ ( $\tau$ ) of a specified age group from radioiodines, tritium, and 8 day particulates via the pathway of interest

$$= 3.17 \times 10^{-8} \sum_{i=1}^n R_{i\tau} \overline{(X/Q)_D} Q_i$$

and/or

$$= 3.17 \times 10^{-8} \sum_{i=1}^n R_{i\tau} \overline{(D/Q)} Q_i$$

and

$D_{\tau}$  = Dose in mrem to the organ ( $\tau$ ) of a specified age group from radioiodines, tritium, and 8 day particulates from all pathways

$$= \sum_{z=1}^n D_{I\&DP\tau} \leq 7.5 \text{ mrem/qtr}$$

$$\leq 15 \text{ mrem/yr}$$

(above terms defined RBS ODCM)

c. Liquid Effluents

In accordance with Technical Specification 3.11.1.2, the dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to UNRESTRICTED AREAS shall be limited to:

$D_{TOTAL\tau}$  = Total dose commitment to the organ ( $\tau$ ) due to all releases during the desired time interval in mrem

where:  $D_{TOTAL\tau} = \sum_{i=1}^n (D_{\tau a})_i$

and  $D_{\tau a} = \sum_{i=1}^n D_{i\tau} = \sum_{i=1}^n \frac{A_{i\tau} \Delta t_1 Q_{i1}}{(DF)_1 D_w}$



|                 |        |              |
|-----------------|--------|--------------|
| and $D_{TOTAL}$ | $\leq$ | 1.5 mrem/qtr |
| Total Body      |        |              |
|                 | $\leq$ | 3 mrem/yr    |
| $D_{TOTAL}$     | $\leq$ | 5 mrem/qtr   |
| ANY ORGAN       |        |              |
|                 | $\leq$ | 10 mrem/yr   |

(above terms defined in RBS ODCM)

### 3. 40CFR190 Limits

In accordance with Technical Specification 3.11.4, the annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC, due to releases of radioactivity and to radiation from uranium fuel cycle sources, shall be limited to:

$\leq$  25 mrem to the total body or any organ (except the thyroid)

$\leq$  75 mrem to the thyroid

### 4. Miscellaneous Limits

#### a. Ventilation Exhaust Treatment System

In accordance with Technical Specification 3.11.2.5, the VENTILATION EXHAUST TREATMENT SYSTEM shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses, due to gaseous effluent releases to areas at and beyond the SITE BOUNDARY would exceed 0.3 mrem to any organ in a 31 day period.

#### b. Liquid Radwaste Treatment System

In accordance with Technical Specification 3.11.1.3, the liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses, due to the liquid effluent, to UNRESTRICTED AREAS would exceed 0.06 mrem to the total body or 0.2 mrem to any organ in a 31 day period.



## B. Maximum Permissible Concentrations

### 1. Gaseous Releases

The RBS Radiological Effluents Technical Specifications (RETS) for gaseous releases are based on the dose rate restrictions of 10CFR20, rather than the Maximum Permissible Concentrations (MPC) listed in 10CFR20 Appendix B, Table II, Column 1.

### 2. Liquid Releases

The Maximum Permissible Concentration of radioactive materials in liquid effluents is limited by 10CFR20, Appendix B, Table II, Column 2. The MPC chosen is the most conservative value (i.e., the lowest) of either the soluble or insoluble MPC for each radionuclide.

## C. Average Energy

| Period             | E-Bar (Mev/dis) |
|--------------------|-----------------|
| 1/1/89 - 7/13/89   | 7.63E-01        |
| 7/13/89 - 12/31/89 | 9.61E-01        |

## D. Measurements and Approximations of Total Radioactivity

### 1. Gaseous Effluents

#### a. Fission and Activation Gases

Periodic grab samples are obtained from the Main Plant Exhaust Duct, Fuel Building Exhaust Vent and Radwaste Building Exhaust Vent. These samples are analyzed utilizing high resolution germanium detectors coupled to computerized pulse height analyzers. The sampling and analysis frequencies are described in Table 1. Sampling and analysis of these effluent streams provide noble gas radionuclide relative abundances which can then be applied to the noble gas gross activity and gross activity release rate to obtain nuclide specific activities and release rates. The noble gas gross activity released within a specific time period is determined by integrating the stack monitor release rate over the considered time period. If no activity was detected between stack grab samples and a significant increase in hourly averages were recorded, the nuclide relative abundances of the last sample which indicated the presence of activity was utilized to obtain nuclide specific activities.

b. Particulates and Iodines

Particulates and iodines are continuously sampled from each of the three release points utilizing a particulate filter and charcoal cartridge in line with a sample pump (stack monitor pump). These filters and charcoal cartridges are removed and analyzed in accordance with the frequencies specified in Table 1. Analysis is performed to identify and quantify radionuclides utilizing high resolution germanium detectors coupled to computerized pulse height analyzers. Given the nuclide specific activity concentrations, process flow rate, and time which the sample covered; the nuclide specific activity released to the environment can be obtained. Due to the continuous sampling process, it is assumed that the radioactive material is released to the environment at a constant rate within the sampling period. Sr-89 and Sr-90 are quantitatively analyzed quarterly by an outside vendor. Gross alpha analysis is performed using a zinc sulfide scintillation counter.

c. Tritium

Tritium grab samples are obtained from the three release points at the specified frequencies listed in Table 1 utilizing an ice bath condensation collection method. The collected sample is then analyzed utilizing a Liquid Scintillation Counter. Given the tritium concentration, process flow rate, and time period for which the sample is obtained, the tritium activity released to the environment can be determined. Due to the frequency of sampling, it is assumed that the tritium is released to the environment at a constant rate within the time period for which the sample is obtained.

2. Liquid Effluents

Representative grab samples are obtained from the appropriate sample recovery tank and analyzed prior to release of the tank in accordance with the frequencies listed in Table 2. Analysis for gamma emitting nuclides (including dissolved and entrained noble gases) is performed utilizing a high resolution germanium detector coupled to a computerized pulse height analyzer. Tritium concentration is determined utilizing a Liquid Scintillation Counter. Sr-89, Sr-90 and Fe-55 are quantitatively analyzed quarterly by an outside vendor. Gross alpha analysis is performed using a zinc sulfide scintillation counter.

Given the nuclide specific activity concentration and total volume of the tank that was released, the activity of each nuclide released to the environment can be determined.



## E. Batch Releases

### 1. Liquid

#### 3rd Quarter 1989

|   |                                |
|---|--------------------------------|
| a. Number of batch releases   | : 133                          |
| b. Total time period for batch releases   | : 976.08 hr                    |
| c. Maximum time period for batch releases   | : 12.92 hr                     |
| d. Average time period for batch releases   | : 7.52 hr                      |
| e. Minimum time period for a batch release  | : 0.02 hr                      |
| f. Average stream flow during periods of<br>release of effluent into a flowing stream | : 442,000 ft <sup>3</sup> /sec |

#### 4th Quarter 1989

|   |                                |
|---|--------------------------------|
| a. Number of batch releases   | : 99                           |
| b. Total time period for batch releases   | : 714.47 hr                    |
| c. Maximum time period for batch releases   | : 8.20 hr                      |
| d. Average time period for batch releases   | : 7.30 hr                      |
| e. Minimum time period for a batch release  | : 5.97 hr                      |
| f. Average stream flow during periods of<br>release of effluent into a flowing stream | : 295,000 ft <sup>3</sup> /sec |

## F. Abnormal Releases

No abnormal Liquid or Gaseous releases occurred during the reporting period of July 1, 1989 through December 31, 1989.

## G. Estimate of Total Error

### 1. Liquid

The maximum error associated with sample collection, laboratory analysis, and discharge volume are collectively estimated to be:

|                                     |           |
|-------------------------------------|-----------|
| Fission and Activation Products     | : + 14.2% |
| Tritium                             | : + 14.2% |
| Dissolved and Entrained Noble Gases | : + 14.2% |
| Gross Alpha Radioactivity           | : + 14.2% |

## 2. Gaseous

The maximum errors (not including sample line loss) associated with sample flow, process flow, sample collection, monitor accuracy and laboratory analysis are collectively estimated to be:

|                                |         |
|--------------------------------|---------|
| Fission and Activation Gases : | + 37.0% |
| Iodines :                      | + 18.6% |
| Particulates :                 | + 18.6% |
| Tritium :                      | + 18.2% |

## 3. Determination of Total Error

The total error (i.e., collective error due to sample collection, laboratory analysis, sample flow, process flow, monitor accuracy, etc.) is calculated using the following equation:

$$E_T = \sqrt{(E_1)^2 + (E_2)^2 + \dots (E_n)^2}$$

where:

$E_T$  = total error

$E_1, E_2 \dots E_n$  = individual errors due to sample collection, laboratory analysis, sample flow, process flow, monitor accuracy, etc.



### III. GASEOUS EFFLUENTS SUMMARY INFORMATION

Refer to Tables 3, 4 and 5 for Summation of All Releases and Nuclides Released, respectively. It should be noted that an entry of "0.00E+00" Ci or uCi/sec in this section does not indicate the absence of a radionuclide; but, rather, indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 1.

### IV. LIQUID EFFLUENTS SUMMARY INFORMATION

Refer to Table 6 for Summation of All Releases and Nuclides Released. It should be noted that an entry of "0.00E+00" Ci or uCi/ml in this section does not indicate the absence of a radionuclide; but, rather, indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 2.

### V. SOLID WASTE

Refer to Table 7

### VI. RADIOLOGICAL IMPACT ON MAN

Doses to the maximally exposed individual offsite and populations were calculated using measured effluent and meteorological data. These doses can be found in Tables 8 through 12. Third Quarter gaseous Sr-89 and Sr-90 values were below the Lower Limit of Detection (LLD). Fourth Quarter Sr-89 and Sr-90 values were based on Third Quarter composite results. Fourth Quarter values will be provided in the Addendum to the Semiannual Radiological Effluents Release Reports.

In addition, doses were calculated for a maximally - exposed member of the public inside the site boundary. Parameters and Assumptions utilized to make this determination can be found in Table 13. The results of the calculations can be found in Table 14. The maximally exposed member of the public on site was the private driver who delivers an employee to work and returns later that day to pick him/her up. It should be noted that liquid effluent pathway dose was not considered since these individuals would not engage in activities that would allow exposure to the pathways.

## VII. METEOROLOGICAL DATA

See Tables 15 and 16 for cumulative joint frequency distributions for continuous releases and meteorological data for batch release, respectively.

## VIII. RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

The minimum number of channels required to be OPERABLE as described in Table 3.3.7.10-1 of Technical Specification 3.3.7.10 were, if inoperable at any time in the period July 1, 1989 through December 31, 1989, restored to operable status within the required time. Reporting of these inoperable channels in this report is, therefore, not required.

## IX. RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

The minimum number of channels required to be OPERABLE as described in Table 3.3.7.11-1 of Technical Specification 3.3.7.11 were, if inoperable at any time in the period July 1, 1989 through December 31, 1989, restored to operable status within the required time. Reporting of the inoperable channels in this report is, therefore, not required.

## X. LIQUID HOLD UP TANKS

The maximum quantity of radioactive material, excluding tritium and dissolved or entrained noble gases, contained in any unprotected outdoor tank during the period of July 1, 1989 through December 31, 1989 was less than the 10 Curie limit as required by Technical Specification 3.11.1.4.

## XI. RADIOLOGICAL ENVIRONMENTAL MONITORING

There were no changes made to the RBS Radiological Environmental Monitoring Program during the last half of 1989.

## XII. LAND USE CENSUS

The Land Use Census did not identify any location(s) that would yield a calculated dose or dose commitment greater than the values calculated in Technical Specification 4.11.2.3.

## XIII. OFFSITE DOSE CALCULATION MANUAL (ODCM)

There were no changes made to the ODCM during the last half of 1989

XIV. MAJOR CHANGES TO RADIOACTIVE LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS

During the reporting period of July 1, 1989 thru December 31, 1989 there were no major changes to the radioactive liquid, gaseous or solid waste treatment systems to be acceptable in accordance with 10CFR50.59.

XV. PROCESS CONTROL PROGRAM (PCP)

During the period July 1, 1989 to December 31, 1989 there were no changes to the process control program.



# INDUCTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

| Gaseous Release Type                             | Sampling Frequency | Minimum Analysis Frequency        | Type of Activity Analysis                | Lower Limit of Detection (LLD) (uCi/ml)    |
|--|--------------------|-----------------------------------|--|--|
| A. Main Plant Exhaust Duct                       | M<br>Grab Sample   | M                                 | Principal Gamma Emitters<br>H-3          | $1 \times 10^{-4}$<br>$1 \times 10^{-6}$   |
| B. Fuel Building Ventilation Exhaust Duct        | M<br>Grab Sample   | M                                 | Principal Gamma Emitters<br>H-3          | $1 \times 10^{-4}$<br>$1 \times 10^{-6}$   |
| C. Radwaste Building Ventilation Exhaust Duct    | M<br>Grab Sample   | M                                 | Principal Gamma Emitters                 | $1 \times 10^{-4}$                         |
| D. All Release Types as listed in A, B, C above. | Continuous         | W<br>Charcoal Sample              | I-131<br>I-133                           | $1 \times 10^{-12}$<br>$1 \times 10^{-10}$ |
|  | Continuous         | W<br>Particulate Sample           | Principal Gamma Emitters (I-131, Others) | $1 \times 10^{-11}$                        |
|  | Continuous         | M<br>Composite Particulate Sample | Gross Alpha                              | $1 \times 10^{-11}$                        |
|  | Continuous         | Q<br>Composite Particulate Sample | SR-89, SR-90                             | $1 \times 10^{-11}$                        |
|  |                    |                                   |  |  |

W = At least once per 7 days  
 M = At least once per 31 days  
 Q = At least once per 92 days



**TABLE 2**  
**RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM**

| Liquid Release Type   | Sampling Frequency | Minimum Analysis Frequency | Type of Activity Analysis                      | Lower Limit of Detection (LLD) (uCi/ml)  |
|---|--------------------|----------------------------|--|--|
| A.. Batch Waste Release (Liquid Radwaste Recovery Sample Tanks) | P                  | P                          | Principal Gamma Emitters; except for Ce-144    | $5 \times 10^{-7}$<br>$5 \times 10^{-6}$ |
|   |                    |                            | I-131  | $1 \times 10^{-6}$                       |
|   | P                  | M                          | Dissolved and Entrained Gases (Gamma Emitters) | $1 \times 10^{-5}$                       |
|   | P                  | M                          | H-3  | $1 \times 10^{-5}$                       |
|   |                    |                            | Gross Alpha                                    | $1 \times 10^{-7}$                       |
|   | P                  | Q                          | Sr-89, Sr-90                                   | $5 \times 10^{-8}$                       |
|   |                    |                            | Fe-55  | $1 \times 10^{-6}$                       |

P = Prior to each radioactive release  
M = At least once per 31 days  
Q = At least once per 92 days

TABLE 3

Effluent and Waste Disposal Semi-Annual Report 1989 Year  
Gaseous Effluents - Summation of All Releases 3/4 Quarters

|  | Unit | Quarter<br>3 | Quarter<br>4 | Est.<br>Total<br>Error, % |
|--|------|--------------|--------------|---------------------------|
|--|------|--------------|--------------|---------------------------|

## A. Noble Gases

|  |         |          |          |          |
|--|---------|----------|----------|----------|
| 1. Total release                                   | Ci      | 0.00E+00 | 0.00E+00 | 3.70E+01 |
| 2. Average release rate<br>for period              | uCi/sec | 0.00E+00 | 0.00E+00 |          |
| 3. Percent of technical<br>specification limit (1) | %       | 0.00E+00 | 0.00E+00 |          |

## B. Iodines

|  |                     |          |          |          |
|--|---------------------|----------|----------|----------|
| 1. Total I-131 and I-133   | I-131<br>Ci         | 8.95E-05 | 9.85E-05 | 1.86E+01 |
|  | I-133<br>Ci         | 1.67E-03 | 1.72E-03 | 1.86E+01 |
| 2. Average release rate<br>for period  | I-131<br>uCi<br>sec | 1.14E-05 | 1.25E-05 |          |
|  | I-133               | 2.12E-04 | 2.18E-04 |          |
| 3. I-131 + I-133 contribu-<br>tion percent of techni-<br>cal specification limit | %                   | 5.37E+00 | 5.83E+00 |          |

## C. Particulates

|   |         |          |          |          |
|---|---------|----------|----------|----------|
| 1. Particulates with half-<br>lives of > 8 days | Ci      | 6.65E-06 | (2)      | 1.86E+01 |
| 2. Average release rate<br>for period           | uCi/sec | 8.44E-07 | (2)      |          |
| 3. Percent of technical<br>specification limit  | %       | 1.43E-01 | (2)      |          |
| 4. Gross alpha<br>radioactivity                 | Ci      | 0.00E+00 | 0.00E+00 |          |

|  | Unit | Quarter<br>3 | Quarter<br>4 | Est.<br>Total<br>Error, % |
|--|------|--------------|--------------|---------------------------|
|--|------|--------------|--------------|---------------------------|

D. Tritium

|  |         |          |          |          |
|--|---------|----------|----------|----------|
| 1. Total release                               | Ci      | 1.33E+00 | 3.49E+00 | 1.82E+01 |
| 2. Average release rate<br>for period          | uCi/sec | 1.68E-01 | 4.43E-01 |          |
| 3. Percent of technical<br>specification limit | %       | 6.25E-03 | 1.67E-02 |          |

- (1) Gamma airdose limit of 5 mrads/qtr (T.S.3.11.2.2.a).
- (2) Not available for submission at this time, supplemental report to follow.



TABLE 4

Effluent and Waste Disposal Semi-Annual Report      1989 Year  
 Gaseous Effluents - Conditionally Elevated Releases      3/4 Quarters

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

## 1. Fission Gases

|                  |    |          |          |     |     |
|------------------|----|----------|----------|-----|-----|
| Argon-41         | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-85m      | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-85       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-87       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-88       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-133m       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-133        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-135m       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-135        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-137        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-138        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| unidentified     | Ci | N/A      | N/A      | N/A | N/A |
| Total for period | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |

## 2. Gaseous Iodines

|            |    |          |          |     |     |
|------------|----|----------|----------|-----|-----|
| Iodine-131 | Ci | 8.95E-05 | 9.83E-05 | N/A | N/A |
| Iodine-132 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-133 | Ci | 1.67E-03 | 1.72E-03 | N/A | N/A |
| Iodine-134 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-135 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Total      | Ci | 1.76E-03 | 1.82E-03 | N/A | N/A |

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

### 3. Particulates

|                      |    |          |          |     |     |
|----------------------|----|----------|----------|-----|-----|
| Strontium-89         | Ci | 4.83E-06 | (1)      | N/A | N/A |
| Strontium-90         | Ci | 0.00E+00 | (1)      | N/A | N/A |
| Cesium-134           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cesium-137           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Barium-lanthanum-140 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cobalt-60            | Ci | 1.82E-06 | 4.62E-06 | N/A | N/A |
| Chromium-51          | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Zirconium-niobium-95 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Zinc-65              | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iron-59              | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Manganese-54         | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-131           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cerium-141           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cerium-144           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cobalt-58            | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Silver-110m          | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Molybdenum-99        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| unidentified         | Ci | N/A      | N/A      | N/A | N/A |
| Total for period     | Ci | 6.65E-06 | (1)      | N/A | N/A |

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

4.0 Tritium

|            |    |          |          |     |     |
|------------|----|----------|----------|-----|-----|
| Hydrogen-3 | Ci | 1.27E+00 | 3.38E+00 | N/A | N/A |
|------------|----|----------|----------|-----|-----|

(1) Not available for submission at this time, supplemental report to follow.

Main Plant Exhaust Duct is considered a conditionally elevated release point.



TABLE 5

Effluent and Waste Disposal Semi-Annual Report 1989 Year  
Gaseous Effluents - Ground Level Releases 3/4 Quarters

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

## 1. Fission Gases

|                  |    |          |          |     |     |
|------------------|----|----------|----------|-----|-----|
| Argon-41         | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-85m      | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-85       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-87       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Krypton-88       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-133m       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-133        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-135m       | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-135        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-137        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Xenon-138        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| unidentified     | Ci | N/A      | N/A      | N/A | N/A |
| Total for period | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |

## 2. Gaseous Iodines

|            |    |          |          |     |     |
|------------|----|----------|----------|-----|-----|
| Iodine-131 | Ci | 0.00E+00 | 1.94E-07 | N/A | N/A |
| Iodine-132 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-133 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-134 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-135 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Total      | Ci | 0.00E+00 | 1.94E-07 | N/A | N/A |

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

### 3. Particulates

|                      |    |          |          |     |     |
|----------------------|----|----------|----------|-----|-----|
| Strontium-89         | Ci | 0.00E+00 | (1)      | N/A | N/A |
| Strontium-90         | Ci | 0.00E+00 | (1)      | N/A | N/A |
| Cesium-134           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cesium-137           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Barium-lanthanum-140 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cobalt-60            | Ci | 0.00E+00 | 4.97E-07 | N/A | N/A |
| Chromium-51          | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Zirconium-niobium-95 | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Zinc-65              | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iron-59              | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Manganese-54         | Ci | 0.00E+00 | 3.02E-07 | N/A | N/A |
| Iodine-131           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-132           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Iodine-133           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cerium-141           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cerium-144           | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Cobalt-58            | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Silver-110m          | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| Molybdenum-99        | Ci | 0.00E+00 | 0.00E+00 | N/A | N/A |
| unidentified         | Ci | N/A      | N/A      | N/A | N/A |
| Total for period     | Ci | 0.00E+00 | (1)      | N/A | N/A |

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |

#### 4.0 Tritium

|            |    |          |          |     |     |
|------------|----|----------|----------|-----|-----|
| Hydrogen-3 | Ci | 5.90E-02 | 1.11E-01 | N/A | N/A |
|------------|----|----------|----------|-----|-----|

(1) Not available for submission at this time, supplemental report to follow.

Fuel Building Exhaust Vent and Radwaste Building Exhaust Vent are considered ground level release points.



TABLE 6

Effluent and Waste Disposal Semi-Annual Report 1989 Year  
Liquid Effluents - Summation of All Releases

|  | Unit | Quarter<br>3 | Quarter<br>4 | Est.<br>Total<br>Error, % |
|--|------|--------------|--------------|---------------------------|
|--|------|--------------|--------------|---------------------------|

## A. Fission and activation products

|  |        |          |          |          |
|--|--------|----------|----------|----------|
| 1. Total release (not including tritium, gases, alpha) | Ci     | 1.96E-01 | 1.89E-01 | 1.42E+01 |
| 2. Average diluted concentration during period         | uCi/ml | 1.64E-07 | 1.52E-07 |          |
| 3. Percent of applicable limit (1)                     | %      | 1.57E+01 | 1.51E+01 |          |

## B. Tritium

|  |        |          |          |          |
|--|--------|----------|----------|----------|
| 1. Total release                               | Ci     | 5.63E+00 | 6.65E+00 | 1.42E+01 |
| 2. Average diluted concentration during period | uCi/ml | 4.71E-06 | 5.36E-06 |          |
| 3. Percent of applicable limit (2)             | %      | 1.57E-01 | 1.79E-01 |          |

## C. Dissolved and entrained gases

|  |        |          |          |          |
|--|--------|----------|----------|----------|
| 1. Total release                               | Ci     | 2.55E-03 | 2.82E-03 | 1.42E+01 |
| 2. Average diluted concentration during period | uCi/ml | 2.14E-09 | 2.27E-09 |          |
| 3. Percent of applicable limit (3)             | %      | 1.07E-03 | 1.14E-03 |          |

|  | Unit | Quarter<br>3 | Quarter<br>4 | Est.<br>Total<br>Error, % |
|--|------|--------------|--------------|---------------------------|
|--|------|--------------|--------------|---------------------------|

D. Gross alpha radioactivity

|                  |    |          |          |          |
|------------------|----|----------|----------|----------|
| 1. Total release | Ci | 0.00E+00 | 0.00E+00 | 1.42E+01 |
|------------------|----|----------|----------|----------|

|  |        |          |          |          |
|--|--------|----------|----------|----------|
| E. Volume of waste released<br>(prior to dilution) | liters | 7.69E+06 | 5.74E+06 | 8.73E-01 |
| F. Volume of dilution water<br>used during period  | liters | 1.20E+09 | 1.24E+09 | 5.70E-01 |

- (1) One quarter of 5 Ci annual limit (1.25 Ci) for liquid releases except for tritium and dissolved or entrained noble gases from 10CFR50 Appendix I.
- (2) 10CFR20, Appendix B, Table II, Column 2 MPC limit of 3.00E-03 uCi/ml.
- (3) Technical Specification 3.11.1.1 limit of 2.0E-04 uCi/ml for dissolved or entrained noble gases in liquid effluents.

**Effluent and Waste Disposal Semi-Annual Report 1989 Year**  
**G. Liquid Effluents 3/4 Quarters**

| Nuclides Released    | Unit | Continuous Mode |           | Batch Mode |           |
|----------------------|------|-----------------|-----------|------------|-----------|
|                      |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |
| Hydrogen-3           | Ci   | N/A             | N/A       | 5.63E+00   | 6.65E+00  |
| Arsenic-76           | Ci   | N/A             | N/A       | 2.40E-04   | 8.81E-04  |
| Strontium-89         | Ci   | N/A             | N/A       | 0.00E+00   | (1)       |
| Strontium-90         | Ci   | N/A             | N/A       | 0.00E+00   | (1)       |
| Strontium-92         | Ci   | N/A             | N/A       | 1.74E-07   | 1.08E-04  |
| Cesium-134           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Cesium-137           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Iodine-131           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Iodine-132           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Iodine-133           | Ci   | N/A             | N/A       | 0.00E+00   | 7.84E-06  |
| Iodine-134           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Iodine-135           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Sodium-24            | Ci   | N/A             | N/A       | 0.00E+00   | 4.37E-04  |
| Cobalt-58            | Ci   | N/A             | N/A       | 3.29E-03   | 3.71E-03  |
| Cobalt-60            | Ci   | N/A             | N/A       | 3.78E-02   | 2.78E-02  |
| Iron-55              | Ci   | N/A             | N/A       | 7.12E-03   | (1)       |
| Iron-59              | Ci   | N/A             | N/A       | 1.89E-03   | 2.23E-03  |
| Zinc-65              | Ci   | N/A             | N/A       | 1.18E-03   | 1.03E-03  |
| Manganese-54         | Ci   | N/A             | N/A       | 1.77E-02   | 9.56E-03  |
| Manganese-56         | Ci   | N/A             | N/A       | 0.00E+00   | 2.81E-05  |
| Chromium-51          | Ci   | N/A             | N/A       | 1.25E-01   | 1.39E-01  |
| Zirconium-Niobium-95 | Ci   | N/A             | N/A       | 6.07E-05   | 2.63E-04  |
| Molybdenum-99        | Ci   | N/A             | N/A       | 6.72E-05   | 3.73E-04  |
| Technetium-99m       | Ci   | N/A             | N/A       | 8.58E-05   | 4.45E-04  |
| Copper - 64          | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Tin - 113            | Ci   | N/A             | N/A       | 5.36E-05   | 1.41E-05  |



G. Liquid Effluents 3/4 Quarters (cont.)

| Nuclides Released    | Unit | Continuous Mode |           | Batch Mode |           |
|----------------------|------|-----------------|-----------|------------|-----------|
|                      |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |
| Barium-lanthanum-140 | Ci   | N/A             | N/A       | 2.02E-07   | 2.39E-04  |
| Cerium-141           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Cerium-144           | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Antimony-122         | Ci   | N/A             | N/A       | 6.00E-05   | 4.67E-05  |
| Antimony-124         | Ci   | N/A             | N/A       | 6.81E-04   | 7.39E-04  |
| Rhodium - 105        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Bromine - 82         | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Neptunium - 239      | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Yttrium - 91m        | Ci   | N/A             | N/A       | 1.70E-05   | 4.12E-06  |
| Silver - 110m        | Ci   | N/A             | N/A       | 3.08E-04   | 2.18E-04  |
| Tungsten - 187       | Ci   | N/A             | N/A       | 3.38E-04   | 7.35E-04  |
| Niobium - 97         | Ci   | N/A             | N/A       | 4.22E-04   | 3.79E-04  |
| Total for period     | Ci   | N/A             | N/A       | 5.83E+00   | (1)       |

## H. Dissolved and Entrained Gases

| Nuclides Released | Unit | Continuous Mode |           | Batch Mode |           |
|-------------------|------|-----------------|-----------|------------|-----------|
|                   |      | Quarter 3       | Quarter 4 | Quarter 3  | Quarter 4 |
| Argon 41          | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Krypton-85m       | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Krypton-85        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Krypton-87        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Krypton-88        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Xenon-133m        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Xenon-133         | Ci   | N/A             | N/A       | 9.94E-04   | 1.08E-03  |
| Xenon-135m        | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Xenon-135         | Ci   | N/A             | N/A       | 1.56E-03   | 1.74E-03  |
| Xenon-137         | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| Xenon-138         | Ci   | N/A             | N/A       | 0.00E+00   | 0.00E+00  |
| unidentified      | Ci   | N/A             | N/A       | N/A        | N/A       |
| Total for period  | Ci   | N/A             | N/A       | 2.55E-03   | 2.82E-03  |

(1) Not available at this time, supplemental report to follow.

TABLE 7

Effluent and Waste Disposal Semiannual Report 1989 YearSolid Waste and Irradiated Fuel Shipments  
Reporting Period 07/01/89 to 12/31/89 Qtr 3/4

## A. Solid Waste Shipped for Burial or Disposal (Not irradiated fuel)

| 1. Type of waste  | Unit                 | 6-month<br>Period    | Waste<br>Class | Est. Total<br>Error, % |
|---|----------------------|----------------------|----------------|------------------------|
| a. Spent resins, filter sludges<br>evaporator bottoms, etc. | m <sup>3</sup><br>Ci | 1.48E+02<br>5.41E+02 | A-U/A-S        | 3.50E+01               |
| b. Dry compressible waste,<br>contaminated equip, etc.      | m <sup>3</sup><br>Ci | 4.61E+01<br>2.74E+00 | A-U            | 3.50E+01               |
| c. Irradiated components,<br>control rods, etc.             | m <sup>3</sup><br>Ci | 0.00E+00<br>0.00E+00 | N/A            | 0.00E+00               |
| d. Other (None)   | m <sup>3</sup><br>Ci | 0.00E+00<br>0.00E+00 | N/A            | 0.00E+00               |



| TYPE OF WASTE                                      | Spent Resins, filter sludges, evaporator bottoms, etc. |             | Dry compressible waste, contaminated equip, etc. |             | Irradiated Components control rods, etc. | Other (None) |
|--|--|-------------|--|-------------|--|--------------|
| Principle Radionuclides (Identify and % Abundance) | ISOTOPE  | % ABUNDANCE | ISOTOPE  | % ABUNDANCE | N/A                                      | N/A          |
|  | Sc-46  | 1.33E-05    | Cr-51  | 5.00E-02    |  |              |
|  | Cr-51  | 1.16        | Mn-54  | 7.16        |  |              |
|  | Mn-54  | 11.46       | Co-58  | 5.00E-01    |  |              |
|  | Co-57  | 7.65E-03    | Co-60  | 29.93       |  |              |
|  | Co-58  | 1.83        | Pu-241   | 6.00E-02    |  |              |
|  | Fe-59  | 5.37E-02    | Zn-65  | 2.32        |  |              |
|  | Co-60  | 30.62       | C-14   | 8.40E-01    |  |              |
|  | Zn-65  | 1.93        | Fe-55  | 58.58       |  |              |
|  | Nb-95  | 5.02E-03    | Ni-63  | 5.50E-01    |  |              |
|  | Zr-95  | 2.06E-03    |  |             |  |              |
|  | Mo-99  | 9.35E-06    |  |             |  |              |
|  | Sb-124   | 2.60E-02    |  |             |  |              |
|  | H-3  | 1.07E-02    |  |             |  |              |
|  | C-14   | 7.17E-02    |  |             |  |              |
|  | Fe-55  | 52.24       |  |             |  |              |
|  | Ni-63  | 5.07E-01    |  |             |  |              |
|  | Pu-239   | 5.02E-04    |  |             |  |              |
|  | Pu-238   | 6.85E-04    |  |             |  |              |
|  | Pu-241   | 1.78E-02    |  |             |  |              |
|  | Am-241   | 3.11E-04    |  |             |  |              |
|  | Cm-242   | 3.95E-04    |  |             |  |              |
|  | Cm-244   | 3.76E-04    |  |             |  |              |
|  | Ag-110m  | 5.33E-02    |  |             |  |              |
|  | Na-24  | 3.34E-11    |  |             |  |              |

| TYPE OF WASTE   | Spent Resins, filter sludges, evaporator bottoms, etc. | Dry compressible waste, contaminated equip, etc. | Irradiated Components control rods, etc. | Other (None) |
|---|--|--|--|--------------|
| Above Determined by:<br>A. measurement<br>B. estimation<br>C. measurement and correlation | C  | C  | N/A                                      | N/A          |
| TYPE OF CONTAINER   | Strong, Tight Liners                                   | Strong, Tight Drums                              | N/A                                      | N/A          |
| SOLIDIFICATION AGENT OR ABSORBANT   | Cement   | N/A  | N/A                                      | N/A          |

### 3. SOLID WASTE DISPOSITION

Number of Shipments  
30

Mode of Transportation  
Truck, Exclusive Use

Destination  
CNSI, Barnwell,  
South Carolina

### B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments  
0

Mode of Transportation  
N/A

Destination  
N/A

Table 8  
Maximum Individual Doses Due To  
Gaseous Releases  
1989

|                      | <u>Critical<br/>Sector</u> | <u>Critical<br/>Distance</u> | <u>Critical<br/>Age Group</u> | <u>Whole Body<br/>Dose (mrem)</u>      | <u>Skin Dose*<br/>(mrem)</u>           |
|----------------------|----------------------------|------------------------------|-------------------------------|--|--|
| 1st Quarter:         | NW                         | 960 m                        | Child                         | $7.2 \times 10^{-4}$                   | $5.8 \times 10^{-4}$                   |
| 2nd Quarter:         | <u>NW</u>                  | <u>960 m</u>                 | <u>Child</u>                  | <u><math>5.3 \times 10^{-4}</math></u> | <u><math>1.5 \times 10^{-4}</math></u> |
| Semiannual<br>Total: | NW                         | 960 m                        | Child                         | $1.3 \times 10^{-3}$                   | $7.3 \times 10^{-4}$                   |
| 3rd Quarter:         | NW                         | 960 m                        | Child                         | $5.9 \times 10^{-4}$                   | $1.9 \times 10^{-5}$                   |
| 4th Quarter:         | <u>NW</u>                  | <u>960 m</u>                 | <u>Child</u>                  | <u><math>3.1 \times 10^{-3}</math></u> | <u><math>9.7 \times 10^{-5}</math></u> |
| Semiannual<br>Total: | NW                         | 960 m                        | Child                         | $3.7 \times 10^{-3}$                   | $1.2 \times 10^{-4}$                   |

\* All age group equally



Table 9  
Maximum Individual Doses (Gaseous) - Doses Due  
To Gaseous Releases  
1989

Significant Organ Dose (mrem)

|                      | <u>Critical<br/>Sector</u> | <u>Critical<br/>Distance</u> | <u>Critical<br/>Age Group</u> | <u>Critical<br/>Organ</u> | <u>Critical<br/>Dose</u>               |
|----------------------|----------------------------|------------------------------|-------------------------------|---------------------------|--|
| 1st Quarter:         | NW                         | 960 m                        | Child                         | Thyroid                   | $2.8 \times 10^{-3}$                   |
| 2nd Quarter:         | <u>NW</u>                  | <u>960 m</u>                 | <u>Teen</u>                   | <u>Thyroid</u>            | <u><math>7.0 \times 10^{-3}</math></u> |
| Semiannual<br>Total: | NW                         | 960 m                        |                               | Thyroid                   | $9.8 \times 10^{-3}$                   |
| 3rd Quarter:         | NW                         | 960 m                        | Child                         | Thyroid                   | $2.3 \times 10^{-3}$                   |
| 4th Quarter:         | <u>NNW</u>                 | <u>1300 m</u>                | <u>Infant</u>                 | <u>Thyroid</u>            | <u><math>8.3 \times 10^{-3}</math></u> |
| Semiannual<br>Total: |                            |                              |                               | Thyroid                   | $2.8 \times 10^{-3}$                   |

Table 10  
Maximum Individual Doses (Liquid)  
1989

Critical Receptor: Edge of Initial Mixing Zone

| Whole Body Dose<br>(mrem) |                 |                      | Significant Organ Dose<br>(mrem) |                   |                  |
|---------------------------|-----------------|----------------------|----------------------------------|-------------------|------------------|
|                           | Critical<br>Age | Critical<br>Dose     | Critical<br>Age                  | Critical<br>Organ | Critical<br>Dose |
| 1st Quarter:              | Teen            | $2.8 \times 10^{-1}$ | Adult                            | GI Tract          | 2.2              |
| 2nd Quarter:              | Teen            | $3.0 \times 10^{-1}$ | Adult                            | GI Tract          | 3.2              |
| Semiannual<br>Total:      | Teen            | $5.8 \times 10^{-1}$ | Adult                            | GI Tract          | 5.4              |
| 3rd Quarter:              | Teen            | $1.8 \times 10^{-1}$ | Adult                            | GI Tract          | 2.2              |
| 4th Quarter:              | Teen            | $1.1 \times 10^{-1}$ | Adult                            | GI Tract          | 1.2              |
| Semiannual<br>Total:      | Teen            | $2.9 \times 10^{-1}$ | Adult                            | GI Tract          | 3.4              |

TABLE 11

**SEMIANNUAL POPULATION DOSE (GASEOUS)**  
**RELEASED OCCURRING 01/01/89 Through 06/30/89**

| <u>Pathway</u>                                   | <u>Whole Body Dose<br/>(man-rem)</u> | <u>Thyroid Dose<br/>(man-rem)</u> |
|--|--------------------------------------|-----------------------------------|
| Submersion in Noble Gases                        |                                      |                                   |
| 1st Quarter                                      | $1.5 \times 10^{-4}$                 | $1.5 \times 10^{-4}$              |
| 2nd Quarter                                      | N/A                                  | N/A                               |
| Contaminated Ground                              |                                      |                                   |
| 1st Quarter                                      | $2.0 \times 10^{-4}$                 | $2.0 \times 10^{-4}$              |
| 2nd Quarter                                      | $3.3 \times 10^{-5}$                 | $3.3 \times 10^{-5}$              |
| Inhalation                                       |                                      |                                   |
| 1st Quarter                                      | $1.9 \times 10^{-4}$                 | $1.1 \times 10^{-3}$              |
| 2nd Quarter                                      | $1.3 \times 10^{-4}$                 | $1.3 \times 10^{-4}$              |
| Vegetation Consumption                           |                                      |                                   |
| 1st Quarter                                      | $1.5 \times 10^{-4}$                 | $1.4 \times 10^{-4}$              |
| 2nd Quarter                                      | $1.1 \times 10^{-4}$                 | $1.1 \times 10^{-4}$              |
| Cow Milk Consumption                             |                                      |                                   |
| 1st Quarter                                      | $3.1 \times 10^{-5}$                 | $1.0 \times 10^{-3}$              |
| 2nd Quarter                                      | $1.4 \times 10^{-5}$                 | $1.4 \times 10^{-5}$              |
| Beef Consumption                                 |                                      |                                   |
| 1st Quarter                                      | $3.1 \times 10^{-5}$                 | $2.2 \times 10^{-4}$              |
| 2nd Quarter                                      | $1.7 \times 10^{-5}$                 | $1.7 \times 10^{-5}$              |
| Total:   | $1.1 \times 10^{-3}$                 | $3.1 \times 10^{-3}$              |
| Average Dose to Individuals in Population (mrem) |                                      |                                   |
| 1st Quarter                                      | $6.4 \times 10^{-7}$                 | $2.6 \times 10^{-6}$              |
| 2nd Quarter                                      | $2.6 \times 10^{-7}$                 | $2.6 \times 10^{-7}$              |
| Total:   | $9.0 \times 10^{-7}$                 | $2.9 \times 10^{-6}$              |



TABLE 11

SEMIANNUAL POPULATION DOSE (GASEOUS)  
RELEASED OCCURRING 07/01/89 Through 12/31/89

| <u>Pathway</u>                                   | <u>Whole Body Dose<br/>(man-rem)</u> | <u>Thyroid Dose<br/>(man-rem)</u> |
|--|--------------------------------------|-----------------------------------|
| Submersion in Noble Gases                        |                                      |                                   |
| 3rd Quarter                                      | N/A                                  | N/A                               |
| 4th Quarter                                      | N/A                                  | N/A                               |
| Contaminated Ground                              |                                      |                                   |
| 3rd Quarter                                      | $1.7 \times 10^{-5}$                 | $1.7 \times 10^{-5}$              |
| 4th Quarter                                      | $5.1 \times 10^{-5}$                 | $5.1 \times 10^{-5}$              |
| Inhalation                                       |                                      |                                   |
| 3rd Quarter                                      | $5.3 \times 10^{-4}$                 | $1.9 \times 10^{-3}$              |
| 4th Quarter                                      | $1.5 \times 10^{-3}$                 | $3.2 \times 10^{-3}$              |
| Vegetation Consumption                           |                                      |                                   |
| 3rd Quarter                                      | $3.6 \times 10^{-4}$                 | $1.4 \times 10^{-3}$              |
| 4th Quarter                                      | $1.0 \times 10^{-3}$                 | $2.2 \times 10^{-3}$              |
| Cow Milk Consumption                             |                                      |                                   |
| 3rd Quarter                                      | $8.0 \times 10^{-5}$                 | $1.2 \times 10^{-3}$              |
| 4th Quarter                                      | $2.1 \times 10^{-4}$                 | $1.2 \times 10^{-3}$              |
| Beef Consumption                                 |                                      |                                   |
| 3rd Quarter                                      | $7.8 \times 10^{-5}$                 | $2.2 \times 10^{-4}$              |
| 4th Quarter                                      | $2.1 \times 10^{-4}$                 | $3.2 \times 10^{-4}$              |
| Total:   | $2.6 \times 10^{-3}$                 | $1.2 \times 10^{-2}$              |
| Average Dose to Individuals in Population (mrem) |                                      |                                   |
| 3rd Quarter                                      | $9.5 \times 10^{-7}$                 | $4.1 \times 10^{-6}$              |
| 4th Quarter                                      | $1.3 \times 10^{-6}$                 | $6.0 \times 10^{-6}$              |
| Total:   | $2.3 \times 10^{-6}$                 | $1.0 \times 10^{-5}$              |

Table 12

**SEMIANNUAL POPULATION DOSES (LIQUID)  
RELEASES OCCURRING 01/01/89 THROUGH 06/30/89**

| <u>Pathway</u>                                   | <u>Total Body<br/>(man-rem)</u> | <u>Thyroid<br/>(man-rem)</u> | <u>Skin<br/>(man-rem)</u> |
|--|---------------------------------|------------------------------|---------------------------|
| Swimming   |                                 |                              |                           |
| 1st Quarter                                      | $4.1 \times 10^{-5}$            | $4.1 \times 10^{-5}$         | $4.8 \times 10^{-5}$      |
| 2nd Quarter                                      | $3.9 \times 10^{-5}$            | $3.9 \times 10^{-5}$         | $4.7 \times 10^{-5}$      |
| Boating  |                                 |                              |                           |
| 1st Quarter                                      | $8.1 \times 10^{-5}$            | $8.1 \times 10^{-5}$         | $9.6 \times 10^{-5}$      |
| 2nd Quarter                                      | $7.8 \times 10^{-5}$            | $7.8 \times 10^{-5}$         | $9.2 \times 10^{-5}$      |
| Potable Water                                    |                                 |                              |                           |
| 1st Quarter                                      | $2.5 \times 10^{-4}$            | $6.0 \times 10^{-5}$         | NA                        |
| 2nd Quarter                                      | $2.9 \times 10^{-4}$            | $9.8 \times 10^{-5}$         | NA                        |
| Sport Fish                                       |                                 |                              |                           |
| 1st Quarter                                      | $4.3 \times 10^{-3}$            | $1.3 \times 10^{-5}$         | NA                        |
| 2nd Quarter                                      | $4.0 \times 10^{-3}$            | $1.1 \times 10^{-5}$         | NA                        |
| Commercial Fish                                  |                                 |                              |                           |
| 1st Quarter                                      | $1.3 \times 10^{-5}$            | $3.5 \times 10^{-8}$         | NA                        |
| 2nd Quarter                                      | $1.2 \times 10^{-5}$            | $3.3 \times 10^{-8}$         | NA                        |
| Shoreline Rec.                                   |                                 |                              |                           |
| 1st Quarter                                      | $7.3 \times 10^{-3}$            | $7.3 \times 10^{-3}$         | NA                        |
| 2nd Quarter                                      | $8.2 \times 10^{-3}$            | $8.2 \times 10^{-3}$         | NA                        |
| Total:   | $2.5 \times 10^{-2}$            | $1.6 \times 10^{-2}$         | $2.8 \times 10^{-4}$      |
| Average Dose to Individuals in Population (mrem) |                                 |                              |                           |
| 1st Quarter                                      | $1.0 \times 10^{-5}$            | $6.4 \times 10^{-6}$         | $1.2 \times 10^{-7}$      |
| 2nd Quarter                                      | $1.1 \times 10^{-5}$            | $7.2 \times 10^{-6}$         | $1.2 \times 10^{-7}$      |
| Total:   | $2.1 \times 10^{-5}$            | $1.4 \times 10^{-5}$         | $2.4 \times 10^{-7}$      |

Table 12

SEMIANNUAL POPULATION DOSES (LIQUID)  
RELEASES OCCURRING 07/01/89 THROUGH 12/31/89

| <u>Pathway</u>                                   | <u>Total Body<br/>(man-rem)</u> | <u>Thyroid<br/>(man-rem)</u> | <u>Skin<br/>(man-rem)</u> |
|--|---------------------------------|------------------------------|---------------------------|
| Swimming   |                                 |                              |                           |
| 3rd Quarter                                      | $2.4 \times 10^{-5}$            | $2.4 \times 10^{-5}$         | $2.9 \times 10^{-5}$      |
| 4th Quarter                                      | $1.8 \times 10^{-5}$            | $1.8 \times 10^{-5}$         | $2.1 \times 10^{-5}$      |
| Boating  |                                 |                              |                           |
| 3rd Quarter                                      | $4.8 \times 10^{-5}$            | $4.8 \times 10^{-5}$         | $5.7 \times 10^{-5}$      |
| 4th Quarter                                      | $3.5 \times 10^{-5}$            | $3.5 \times 10^{-5}$         | $4.2 \times 10^{-5}$      |
| Potable Water                                    |                                 |                              |                           |
| 3rd Quarter                                      | $3.6 \times 10^{-4}$            | $2.5 \times 10^{-4}$         | NA                        |
| 4th Quarter                                      | $3.2 \times 10^{-4}$            | $2.4 \times 10^{-4}$         | NA                        |
| Sport Fish                                       |                                 |                              |                           |
| 3rd Quarter                                      | $1.8 \times 10^{-3}$            | $2.9 \times 10^{-5}$         | NA                        |
| 4th Quarter                                      | $1.4 \times 10^{-3}$            | $2.8 \times 10^{-5}$         | NA                        |
| Commercial Fish                                  |                                 |                              |                           |
| 3rd Quarter                                      | $5.4 \times 10^{-6}$            | $8.4 \times 10^{-8}$         | NA                        |
| 4th Quarter                                      | $4.1 \times 10^{-6}$            | $8.1 \times 10^{-8}$         | NA                        |
| Shoreline Rec.                                   |                                 |                              |                           |
| 3rd Quarter                                      | $4.9 \times 10^{-3}$            | $4.9 \times 10^{-3}$         | NA                        |
| 4th Quarter                                      | $3.5 \times 10^{-3}$            | $3.5 \times 10^{-3}$         | NA                        |
| Total:   | $1.2 \times 10^{-2}$            | $9.1 \times 10^{-3}$         | $1.5 \times 10^{-4}$      |
| Average Dose to Individuals in Population (mrem) |                                 |                              |                           |
| 3rd Quarter                                      | $6.1 \times 10^{-6}$            | $4.5 \times 10^{-6}$         | $7.4 \times 10^{-8}$      |
| 4th Quarter                                      | $4.5 \times 10^{-6}$            | $3.3 \times 10^{-6}$         | $5.4 \times 10^{-8}$      |
| Total:   | $1.1 \times 10^{-5}$            | $7.8 \times 10^{-6}$         | $1.3 \times 10^{-7}$      |



TABLE 13

**ASSUMPTIONS/PARAMETERS FOR DOSES TO  
MEMBER OF THE PUBLIC INSIDE SITE BOUNDARY**

| MEMBER OF<br>THE PUBLIC                    | LOCATION   | DISTANCE (1)<br>(m) | SECTOR | DURATION<br>(hr/year) |
|--|--|---------------------|--------|-----------------------|
| Private Drivers                            | North Parking<br>Lot                                 | 275                 | N      | 125(4)                |
| Visitors to<br>Energy Center               | Training Center                                      | 1771                | N      | 1.5                   |
| Employee (2)<br>Candidate                  | Personnel Office<br>(across from<br>Training Center) | 1771                | N      | 2                     |
| Employee (2)<br>Candidate                  | Services<br>Building                                 | 115(3)              | ENE    | 5                     |
| People Entering<br>Site Without<br>Consent | Alligator Bayou                                      | 2500                | SW     | 40                    |
| Casual Drivers                             | Main Admin.<br>Building                              | 500                 | WNW    | 76(5)                 |
| Tour Group in<br>Bus                       | North Parking<br>Lot                                 | 275                 | N      | 1                     |

- (1) Approximate distance from Main Plant Vent Exhaust to LOCATION.
- (2) The employee candidate is expected to spend 2 hours in the Personnel Office for initial interviews and 5 hours in the Services Building for interviews with prospective supervisors/co-workers.
- (3) Midpoint of building.
- (4) Individual assumed to be on site 0.25 hr in the morning and 0.25 hr in the evening, 5 days per week, 50 weeks per year (0.5 hr/day x 5 days/week x 50 weeks/year = 125 hours).
- (5) Individual assumed to be on site 0.5 hr per day.
- (6) Liquid pathways dose is not considered due to nature of activities that individuals are engaged in.

**TABLE 14**  
**DOSES TO MEMBERS OF THE PUBLIC ON SITE**  
**FROM GASEOUS RELEASES 1989**

| Member of the Public | Receptor Location               | Quarter  | Critical Age Group | Critical Organ | Critical Organ Dose (mrem)             | Whole Body Dose (mrem)                 | Skin Dose (mrem)                       |
|----------------------|---------------------------------|----------|--------------------|----------------|--|--|--|
| Private Drivers      | North Parking<br>Lot at 275 m N | 1st qtr. | Teen               | Thyroid        | $9.7 \times 10^{-5}$                   | $6.0 \times 10^{-5}$                   | $7.2 \times 10^{-5}$                   |
|                      |                                 | 2nd qtr. | <u>Teen</u>        | <u>Lung</u>    | <u><math>3.7 \times 10^{-5}</math></u> | <u><math>3.4 \times 10^{-5}</math></u> | <u><math>2.9 \times 10^{-5}</math></u> |
|                      |                                 |          | Teen               |                | $1.3 \times 10^{-4}$                   | $9.4 \times 10^{-5}$                   | $1.0 \times 10^{-4}$                   |
|                      |                                 | 3rd qtr. | Teen               | Thyroid        | $2.9 \times 10^{-5}$                   | $1.1 \times 10^{-5}$                   | $1.3 \times 10^{-6}$                   |
|                      |                                 | 4th qtr. | <u>Teen</u>        | <u>Thyroid</u> | <u><math>1.4 \times 10^{-4}</math></u> | <u><math>7.2 \times 10^{-5}</math></u> | <u><math>9.0 \times 10^{-6}</math></u> |
|                      |                                 |          | Teen               | Thyroid        | $1.7 \times 10^{-4}$                   | $8.3 \times 10^{-5}$                   | $1.0 \times 10^{-5}$                   |
|                      |                                 |          |                    |                |  |  |  |
| Semiannual Total:    |                                 |          |                    |                |  |  |  |
| Employee Candidate   | Services Bldg.<br>115 m ENE     | 1st qtr. | Teen               | Thyroid        | $6.6 \times 10^{-6}$                   | $2.7 \times 10^{-6}$                   | $3.4 \times 10^{-6}$                   |
|                      |                                 | 2nd qtr. | <u>Teen</u>        | <u>Lung</u>    | <u><math>1.1 \times 10^{-6}</math></u> | <u><math>9.0 \times 10^{-7}</math></u> | <u><math>5.3 \times 10^{-7}</math></u> |
|                      |                                 |          | Teen               |                | $7.7 \times 10^{-6}$                   | $3.6 \times 10^{-6}$                   | $3.9 \times 10^{-6}$                   |
|                      |                                 | 3rd qtr. | Teen               | Thyroid        | $5.4 \times 10^{-6}$                   | $2.0 \times 10^{-6}$                   | $7.8 \times 10^{-8}$                   |
|                      |                                 | 4th qtr. | <u>Teen</u>        | <u>Thyroid</u> | <u><math>1.3 \times 10^{-5}</math></u> | <u><math>6.0 \times 10^{-6}</math></u> | <u><math>3.3 \times 10^{-7}</math></u> |
|                      |                                 |          | Teen               | Thyroid        | $1.8 \times 10^{-5}$                   | $8.0 \times 10^{-6}$                   | $4.1 \times 10^{-7}$                   |
|                      |                                 |          |                    |                |  |  |  |
| Semiannual Total:    |                                 |          |                    |                |  |  |  |

TABLE 14  
DOSES TO MEMBERS OF THE PUBLIC ON SITE  
FROM GASEOUS RELEASES 1989

| Member of the Public                 | Receptor Location            | Quarter  | Critical Age Group | Critical Organ | Critical Organ Dose (mrem) | Whole Body Dose (mrem) | Skin Dose (mrem)     |
|--------------------------------------|------------------------------|----------|--------------------|----------------|----------------------------|------------------------|----------------------|
| People Entering Site without Consent | Alligator Bayou at 2500 m SW | 1st qtr. | Teen               | Thyroid        | $7.8 \times 10^{-7}$       | $4.4 \times 10^{-7}$   | $5.5 \times 10^{-7}$ |
|                                      |                              | 2nd qtr. | <u>Teen</u>        | <u>Lung</u>    | $8.3 \times 10^{-8}$       | $7.4 \times 10^{-8}$   | $3.2 \times 10^{-8}$ |
|                                      |                              |          | Teen               |                | $8.6 \times 10^{-7}$       | $5.1 \times 10^{-7}$   | $5.8 \times 10^{-7}$ |
|                                      |                              | 3rd qtr. | Teen               | Thyroid        | $8.3 \times 10^{-7}$       | $2.2 \times 10^{-7}$   | $2.5 \times 10^{-8}$ |
|                                      |                              | 4th qtr. | <u>Teen</u>        | <u>Thyroid</u> | $9.2 \times 10^{-7}$       | $4.3 \times 10^{-7}$   | $6.0 \times 10^{-8}$ |
|                                      |                              |          | Teen               | Thyroid        | $1.8 \times 10^{-6}$       | $6.5 \times 10^{-7}$   | $8.5 \times 10^{-8}$ |
|                                      |                              |          |                    |                |                            |                        |                      |
| Semiannual Total:                    |                              |          |                    |                |                            |                        |                      |
| Casual Visitor                       | Main Admin at 500 m WNW      | 1st qtr. | Teen               | Thyroid        | $2.8 \times 10^{-5}$       | $1.5 \times 10^{-5}$   | $1.8 \times 10^{-5}$ |
|                                      |                              | 2nd qtr. | <u>Teen</u>        | <u>Lung</u>    | $7.9 \times 10^{-6}$       | $6.9 \times 10^{-6}$   | $2.3 \times 10^{-6}$ |
|                                      |                              |          | Teen               |                | $3.6 \times 10^{-5}$       | $2.2 \times 10^{-5}$   | $2.0 \times 10^{-5}$ |
|                                      |                              | 3rd qtr. | Teen               | Thyroid        | $1.1 \times 10^{-5}$       | $4.0 \times 10^{-6}$   | $4.6 \times 10^{-7}$ |
|                                      |                              | 4th qtr. | <u>Teen</u>        | <u>Thyroid</u> | $5.1 \times 10^{-5}$       | $2.5 \times 10^{-5}$   | $2.4 \times 10^{-6}$ |
|                                      |                              |          | Teen               | Thyroid        | $6.2 \times 10^{-5}$       | $2.9 \times 10^{-5}$   | $2.9 \times 10^{-6}$ |
|                                      |                              |          |                    |                |                            |                        |                      |
| Semiannual Total:                    |                              |          |                    |                |                            |                        |                      |



Table 15  
Meteorological Data  
Joint Frequency Tables  
1989

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 1           | 0           | 0           | 1           | 9           | 37          | 21          | 0           | 0            | 0             | 0             | 69          |
| NNE         | 1           | 0           | 4           | 20          | 25          | 82          | 33          | 0           | 0            | 0             | 0             | 165         |
| NE          | 2           | 1           | 4           | 16          | 39          | 52          | 11          | 0           | 0            | 0             | 0             | 125         |
| ENE         | 12          | 12          | 16          | 20          | 12          | 40          | 21          | 0           | 0            | 0             | 0             | 133         |
| E           | 15          | 16          | 10          | 20          | 21          | 15          | 1           | 0           | 0            | 0             | 0             | 98          |
| ESE         | 6           | 8           | 15          | 41          | 33          | 31          | 11          | 0           | 0            | 0             | 0             | 145         |
| SE          | 4           | 5           | 19          | 43          | 60          | 76          | 22          | 0           | 0            | 0             | 0             | 229         |
| SSE         | 4           | 9           | 3           | 25          | 24          | 34          | 55          | 11          | 0            | 0             | 0             | 165         |
| S           | 5           | 3           | 3           | 25          | 32          | 103         | 86          | 18          | 2            | 0             | 0             | 277         |
| SSW         | 5           | 4           | 3           | 10          | 18          | 55          | 74          | 15          | 0            | 0             | 0             | 184         |
| SW          | 4           | 2           | 5           | 13          | 10          | 24          | 23          | 0           | 0            | 0             | 0             | 81          |
| WSW         | 4           | 4           | 6           | 7           | 13          | 19          | 11          | 0           | 0            | 0             | 0             | 64          |
| W           | 2           | 5           | 6           | 11          | 11          | 15          | 6           | 0           | 0            | 0             | 0             | 56          |
| WNW         | 1           | 4           | 7           | 11          | 13          | 14          | 34          | 0           | 0            | 0             | 0             | 84          |
| NW          | 1           | 4           | 2           | 10          | 10          | 18          | 28          | 0           | 0            | 0             | 0             | 73          |
| NNW         | 0           | 0           | 0           | 3           | 16          | 60          | 47          | 10          | 0            | 0             | 0             | 136         |
| TOTAL       | 67          | 77          | 103         | 276         | 346         | 675         | 484         | 54          | 2            | 0             | 0             | 2084        |

NUMBER OF CALMS: 6  
NUMBER OF INVALID HOURS: 70  
NUMBER OF VALID HOURS: 2090  
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 0           | 8           | 0           | 0            | 0             | 0             | 0   | 8    |
| NE          | 0           | 0           | 0           | 0           | 0           | 4           | 2           | 0           | 0            | 0             | 0             | 0   | 6    |
| ENE         | 0           | 0           | 0           | 0           | 1           | 4           | 3           | 0           | 0            | 0             | 0             | 0   | 8    |
| E           | 0           | 0           | 0           | 0           | 1           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| ESE         | 0           | 0           | 0           | 0           | 2           | 8           | 1           | 0           | 0            | 0             | 0             | 0   | 11   |
| SE          | 0           | 0           | 0           | 0           | 0           | 6           | 2           | 0           | 0            | 0             | 0             | 0   | 8    |
| SSE         | 0           | 0           | 0           | 0           | 1           | 0           | 1           | 1           | 0            | 0             | 0             | 0   | 3    |
| S           | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 2    |
| SSW         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0            | 0             | 0             | 0   | 1    |
| SW          | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 1    |
| WSW         | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0           | 0            | 0             | 0             | 0   | 3    |
| W           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| WNW         | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 2    |
| NW          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 0           | 6           | 0           | 0            | 0             | 0             | 0   | 6    |
| TOTAL       | 0           | 0           | 0           | 0           | 5           | 27          | 29          | 2           | 0            | 0             | 0             | 0   | 63   |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 63  
TOTAL HOURS FOR THE PERIOD: 63



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE      | 0           | 0           | 0           | 0           | 1           | 3           | 4           | 0           | 0            | 0             | 0             | 0   | 8    |
| NE       | 0           | 0           | 0           | 0           | 2           | 9           | 1           | 0           | 0            | 0             | 0             | 0   | 12   |
| ENE      | 0           | 0           | 0           | 0           | 1           | 3           | 2           | 0           | 0            | 0             | 0             | 0   | 6    |
| E        | 0           | 0           | 0           | 1           | 2           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| ESE      | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| SE       | 0           | 0           | 0           | 0           | 4           | 9           | 0           | 0           | 0            | 0             | 0             | 0   | 13   |
| SSE      | 0           | 0           | 0           | 1           | 1           | 1           | 5           | 7           | 0            | 0             | 0             | 0   | 15   |
| S        | 0           | 0           | 0           | 1           | 0           | 5           | 6           | 3           | 0            | 0             | 0             | 0   | 15   |
| SSW      | 0           | 0           | 0           | 0           | 0           | 4           | 10          | 4           | 0            | 0             | 0             | 0   | 18   |
| SW       | 0           | 0           | 0           | 0           | 0           | 1           | 5           | 0           | 0            | 0             | 0             | 0   | 6    |
| WSW      | 0           | 0           | 0           | 0           | 1           | 3           | 2           | 0           | 0            | 0             | 0             | 0   | 6    |
| W        | 0           | 0           | 0           | 0           | 2           | 4           | 3           | 0           | 0            | 0             | 0             | 0   | 9    |
| WNW      | 0           | 0           | 0           | 0           | 0           | 0           | 8           | 0           | 0            | 0             | 0             | 0   | 8    |
| NW       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNW      | 0           | 0           | 0           | 0           | 0           | 1           | 5           | 6           | 0            | 0             | 0             | 0   | 12   |
| TOTAL    | 0           | 0           | 0           | 3           | 15          | 45          | 52          | 20          | 0            | 0             | 0             | 0   | 135  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 135  
TOTAL HOURS FOR THE PERIOD: 135

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0           | 0            | 0             | 0             | 3           |
| NNE         | 0           | 0           | 0           | 0           | 0           | 4           | 3           | 0           | 0            | 0             | 0             | 7           |
| NE          | 0           | 0           | 0           | 1           | 1           | 7           | 0           | 0           | 0            | 0             | 0             | 9           |
| ENE         | 0           | 0           | 0           | 1           | 0           | 1           | 0           | 0           | 0            | 0             | 0             | 2           |
| E           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 1           |
| ESE         | 0           | 0           | 0           | 0           | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 2           |
| SE          | 0           | 0           | 0           | 0           | 1           | 1           | 4           | 0           | 0            | 0             | 0             | 6           |
| SSE         | 0           | 0           | 0           | 1           | 2           | 6           | 5           | 1           | 0            | 0             | 0             | 15          |
| S           | 0           | 0           | 0           | 0           | 0           | 3           | 13          | 5           | 0            | 0             | 0             | 21          |
| SSW         | 0           | 0           | 0           | 0           | 0           | 5           | 4           | 1           | 0            | 0             | 0             | 10          |
| SW          | 0           | 0           | 0           | 0           | 0           | 5           | 4           | 0           | 0            | 0             | 0             | 9           |
| WSW         | 0           | 0           | 0           | 0           | 2           | 4           | 1           | 0           | 0            | 0             | 0             | 7           |
| W           | 0           | 0           | 0           | 0           | 0           | 4           | 1           | 0           | 0            | 0             | 0             | 5           |
| WNW         | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 2           |
| NW          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0           |
| NNW         | 0           | 0           | 0           | 0           | 0           | 2           | 1           | 1           | 0            | 0             | 0             | 4           |
| TOTAL       | 0           | 0           | 0           | 3           | 9           | 44          | 39          | 8           | 0            | 0             | 0             | 103         |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 103  
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 1           | 5           | 31          | 18          | 0           | 0            | 0             | 0             | 55          |
| NNE         | 0           | 0           | 0           | 7           | 18          | 60          | 16          | 0           | 0            | 0             | 0             | 101         |
| NE          | 0           | 0           | 1           | 3           | 26          | 29          | 7           | 0           | 0            | 0             | 0             | 66          |
| ENE         | 0           | 0           | 1           | 6           | 6           | 29          | 15          | 0           | 0            | 0             | 0             | 57          |
| E           | 0           | 1           | 2           | 12          | 11          | 10          | 1           | 0           | 0            | 0             | 0             | 37          |
| ESE         | 0           | 1           | 4           | 18          | 19          | 18          | 8           | 0           | 0            | 0             | 0             | 68          |
| SE          | 0           | 0           | 1           | 15          | 24          | 40          | 13          | 0           | 0            | 0             | 0             | 93          |
| SSE         | 0           | 0           | 1           | 5           | 6           | 17          | 40          | 2           | 0            | 0             | 0             | 71          |
| S           | 0           | 0           | 1           | 7           | 13          | 60          | 60          | 10          | 2            | 0             | 0             | 153         |
| SSW         | 0           | 0           | 0           | 4           | 7           | 30          | 58          | 9           | 0            | 0             | 0             | 108         |
| SW          | 0           | 0           | 0           | 0           | 7           | 14          | 13          | 0           | 0            | 0             | 0             | 34          |
| WSW         | 0           | 0           | 1           | 6           | 9           | 11          | 6           | 0           | 0            | 0             | 0             | 33          |
| W           | 0           | 0           | 1           | 4           | 8           | 7           | 2           | 0           | 0            | 0             | 0             | 22          |
| WNW         | 0           | 0           | 2           | 5           | 11          | 11          | 24          | 0           | 0            | 0             | 0             | 53          |
| NW          | 0           | 0           | 0           | 6           | 7           | 14          | 27          | 0           | 0            | 0             | 0             | 54          |
| NNW         | 0           | 0           | 0           | 3           | 8           | 49          | 34          | 3           | 0            | 0             | 0             | 97          |
| TOTAL       | 0           | 2           | 15          | 102         | 185         | 430         | 342         | 24          | 2            | 0             | 0             | 1102        |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 1102  
TOTAL HOURS FOR THE PERIOD: 1102



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 0           | 4           | 5           | 0           | 0           | 0            | 0             | 0             | 9           |
| NNE         | 0           | 0           | 3           | 12          | 6           | 15          | 0           | 0           | 0            | 0             | 0             | 36          |
| NE          | 0           | 0           | 1           | 9           | 8           | 3           | 0           | 0           | 0            | 0             | 0             | 21          |
| ENE         | 0           | 0           | 6           | 11          | 4           | 3           | 1           | 0           | 0            | 0             | 0             | 25          |
| E           | 0           | 0           | 4           | 6           | 6           | 1           | 0           | 0           | 0            | 0             | 0             | 17          |
| ESE         | 0           | 1           | 4           | 20          | 9           | 4           | 2           | 0           | 0            | 0             | 0             | 40          |
| SE          | 0           | 2           | 8           | 23          | 30          | 20          | 3           | 0           | 0            | 0             | 0             | 86          |
| SSE         | 0           | 3           | 2           | 16          | 14          | 10          | 4           | 0           | 0            | 0             | 0             | 49          |
| S           | 1           | 2           | 2           | 15          | 19          | 35          | 5           | 0           | 0            | 0             | 0             | 79          |
| SSW         | 1           | 0           | 1           | 5           | 11          | 16          | 2           | 0           | 0            | 0             | 0             | 36          |
| SW          | 1           | 0           | 1           | 11          | 2           | 4           | 0           | 0           | 0            | 0             | 0             | 19          |
| WSW         | 0           | 3           | 1           | 1           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 6           |
| W           | 0           | 1           | 3           | 5           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 10          |
| WNW         | 1           | 0           | 2           | 6           | 2           | 1           | 0           | 0           | 0            | 0             | 0             | 12          |
| NW          | 0           | 1           | 1           | 4           | 3           | 4           | 1           | 0           | 0            | 0             | 0             | 14          |
| NNW         | 0           | 0           | 0           | 0           | 8           | 8           | 1           | 0           | 0            | 0             | 0             | 17          |
| TOTAL       | 4           | 13          | 39          | 144         | 128         | 129         | 19          | 0           | 0            | 0             | 0             | 476         |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 476  
TOTAL HOURS FOR THE PERIOD: 476

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 1/ 1/89 0100 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE      | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NE       | 0           | 0           | 1           | 3           | 2           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 7    |
| ENE      | 2           | 1           | 6           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 11   |
| E        | 6           | 4           | 3           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 14   |
| ESE      | 1           | 2           | 7           | 3           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 13   |
| SE       | 0           | 1           | 8           | 5           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 14   |
| SSE      | 1           | 2           | 0           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| S        | 2           | 1           | 0           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| SSW      | 2           | 3           | 1           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 7    |
| SW       | 2           | 1           | 4           | 2           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 10   |
| WSW      | 0           | 1           | 3           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| W        | 0           | 1           | 2           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| WNW      | 0           | 1           | 2           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 3    |
| NW       | 0           | 1           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| NNW      | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| TOTAL    | 17          | 19          | 38          | 23          | 3           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 101  |

NUMBER OF CALMS: 2  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 103  
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNE         | 1           | 0           | 1           | 0           | 0           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 4    |
| NE          | 2           | 1           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| ENE         | 10          | 11          | 3           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 24   |
| E           | 9           | 11          | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 21   |
| ESE         | 5           | 4           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 9    |
| SE          | 4           | 2           | 2           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 9    |
| SSE         | 3           | 4           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 7    |
| S           | 2           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| SSW         | 2           | 1           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| SW          | 1           | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| WSW         | 4           | 0           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| W           | 2           | 3           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| WNW         | 0           | 3           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| NW          | 1           | 2           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 3    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| TOTAL       | 46          | 43          | 11          | 1           | 1           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 104  |

NUMBER OF CALMS: 4  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 108  
TOTAL HOURS FOR THE PERIOD: 108



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|----------|
| N        | 2           | 1           | 1           | 0           | 4           | 30          | 68          | 11          | 0            | 0             | 0             | 117      |
| NNE      | 0           | 0           | 0           | 4           | 6           | 49          | 107         | 15          | 0            | 0             | 0             | 181      |
| NE       | 0           | 0           | 0           | 4           | 5           | 40          | 90          | 14          | 0            | 0             | 0             | 153      |
| ENE      | 0           | 0           | 0           | 4           | 8           | 26          | 74          | 14          | 0            | 0             | 0             | 126      |
| E        | 0           | 0           | 0           | 4           | 10          | 27          | 29          | 1           | 0            | 0             | 0             | 71       |
| ESE      | 0           | 0           | 3           | 5           | 7           | 29          | 127         | 20          | 3            | 0             | 0             | 194      |
| SE       | 1           | 2           | 0           | 5           | 8           | 28          | 96          | 18          | 0            | 0             | 0             | 158      |
| SSE      | 0           | 0           | 2           | 1           | 4           | 24          | 65          | 29          | 6            | 0             | 0             | 131      |
| S        | 0           | 2           | 0           | 6           | 9           | 60          | 121         | 41          | 7            | 0             | 0             | 246      |
| SSW      | 0           | 1           | 1           | 3           | 3           | 33          | 127         | 33          | 10           | 0             | 0             | 211      |
| SW       | 0           | 1           | 0           | 2           | 7           | 27          | 49          | 13          | 0            | 0             | 0             | 99       |
| WSW      | 0           | 1           | 0           | 2           | 1           | 33          | 26          | 4           | 0            | 0             | 0             | 67       |
| W        | 0           | 0           | 4           | 2           | 13          | 30          | 20          | 6           | 1            | 0             | 0             | 76       |
| WNW      | 0           | 0           | 1           | 2           | 7           | 19          | 30          | 12          | 0            | 0             | 0             | 71       |
| NW       | 0           | 0           | 0           | 3           | 8           | 15          | 34          | 13          | 1            | 0             | 0             | 74       |
| NNW      | 0           | 0           | 0           | 0           | 4           | 13          | 62          | 23          | 8            | 0             | 0             | 110      |
| TOTAL    | 3           | 8           | 12          | 47          | 104         | 483         | 1125        | 267         | 36           | 0             | 0             | 2085     |

NUMBER OF CALMS: 5  
NUMBER OF INVALID HOURS: 70  
NUMBER OF VALID HOURS: 2090  
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N        | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 1           | 0            | 0             | 0             | 3           |
| NNE      | 0           | 0           | 0           | 0           | 0           | 1           | 5           | 3           | 0            | 0             | 0             | 9           |
| NE       | 0           | 0           | 0           | 0           | 0           | 0           | 5           | 2           | 0            | 0             | 0             | 7           |
| ENE      | 0           | 0           | 0           | 0           | 0           | 1           | 6           | 0           | 0            | 0             | 0             | 7           |
| E        | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 1           | 0            | 0             | 0             | 3           |
| ESE      | 0           | 0           | 0           | 0           | 0           | 2           | 11          | 0           | 0            | 0             | 0             | 13          |
| SE       | 0           | 0           | 0           | 0           | 0           | 1           | 5           | 0           | 0            | 0             | 0             | 6           |
| SSE      | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 1            | 0             | 0             | 2           |
| S        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0           |
| SSW      | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1            | 0             | 0             | 1           |
| SW       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 0            | 0             | 0             | 2           |
| WSW      | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 1           |
| W        | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 2           |
| WNW      | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 1           |
| NW       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0           |
| NNW      | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 6           | 0            | 0             | 0             | 6           |
| TOTAL    | 0           | 0           | 0           | 0           | 0           | 8           | 38          | 15          | 2            | 0             | 0             | 63          |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 63  
TOTAL HOURS FOR THE PERIOD: 63

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 0           | 0           | 0           | 0           | 0           | 0           | 4           | 2           | 0            | 0             | 0             | 0   | 6    |
| NNE      | 0           | 0           | 0           | 0           | 0           | 2           | 3           | 1           | 0            | 0             | 0             | 0   | 6    |
| NE       | 0           | 0           | 0           | 0           | 0           | 10          | 5           | 0           | 0            | 0             | 0             | 0   | 15   |
| ENE      | 0           | 0           | 0           | 0           | 0           | 2           | 5           | 0           | 0            | 0             | 0             | 0   | 7    |
| E        | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| ESE      | 0           | 0           | 0           | 0           | 0           | 3           | 6           | 0           | 0            | 0             | 0             | 0   | 9    |
| SE       | 0           | 0           | 0           | 0           | 0           | 3           | 2           | 0           | 0            | 0             | 0             | 0   | 5    |
| SSE      | 0           | 0           | 0           | 0           | 0           | 2           | 4           | 5           | 4            | 0             | 0             | 0   | 15   |
| S        | 0           | 0           | 0           | 1           | 0           | 1           | 9           | 2           | 2            | 0             | 0             | 0   | 15   |
| SSW      | 0           | 0           | 0           | 1           | 0           | 1           | 11          | 4           | 3            | 0             | 0             | 0   | 20   |
| SW       | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0            | 0             | 0             | 0   | 3    |
| WSW      | 0           | 0           | 0           | 0           | 0           | 2           | 3           | 0           | 0            | 0             | 0             | 0   | 5    |
| W        | 0           | 0           | 0           | 0           | 1           | 2           | 8           | 0           | 0            | 0             | 0             | 0   | 11   |
| WNW      | 0           | 0           | 0           | 0           | 0           | 0           | 5           | 1           | 0            | 0             | 0             | 0   | 6    |
| NW       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1            | 0             | 0             | 0   | 1    |
| NNW      | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 2           | 5            | 0             | 0             | 0   | 9    |
| TOTAL    | 0           | 0           | 0           | 2           | 2           | 29          | 68          | 19          | 15           | 0             | 0             | 0   | 135  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 135  
TOTAL HOURS FOR THE PERIOD: 135



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 1/ 1/89 01:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 1           | 0            | 0             | 0             | 0   | 3    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 2           | 5           | 0           | 0            | 0             | 0             | 0   | 7    |
| NE          | 0           | 0           | 0           | 1           | 0           | 2           | 5           | 0           | 0            | 0             | 0             | 0   | 8    |
| ENE         | 0           | 0           | 0           | 0           | 1           | 0           | 3           | 0           | 0            | 0             | 0             | 0   | 4    |
| E           | 0           | 0           | 0           | 0           | 0           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 4    |
| ESE         | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| SE          | 0           | 0           | 0           | 0           | 1           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 5    |
| SSE         | 0           | 0           | 0           | 0           | 0           | 0           | 6           | 3           | 1            | 0             | 0             | 0   | 10   |
| S           | 0           | 0           | 0           | 1           | 0           | 3           | 7           | 10          | 0            | 0             | 0             | 0   | 21   |
| SSW         | 0           | 0           | 0           | 0           | 0           | 4           | 4           | 3           | 1            | 0             | 0             | 0   | 12   |
| SW          | 0           | 0           | 0           | 0           | 0           | 5           | 1           | 3           | 0            | 0             | 0             | 0   | 9    |
| WSW         | 0           | 0           | 0           | 0           | 0           | 3           | 2           | 1           | 0            | 0             | 0             | 0   | 6    |
| W           | 0           | 0           | 0           | 0           | 0           | 3           | 2           | 1           | 0            | 0             | 0             | 0   | 6    |
| WNW         | 0           | 0           | 0           | 0           | 0           | 0           | 3           | 1           | 0            | 0             | 0             | 0   | 4    |
| NW          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 1            | 0             | 0             | 0   | 3    |
| TOTAL       | 0           | 0           | 0           | 2           | 3           | 28          | 44          | 23          | 3            | 0             | 0             | 0   | 103  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 103  
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 2           | 1           | 1           | 0           | 3           | 28          | 47          | 7           | 0            | 0             | 0             | 89          |
| NNE         | 0           | 0           | 0           | 2           | 3           | 22          | 65          | 9           | 0            | 0             | 0             | 101         |
| NE          | 0           | 0           | 0           | 2           | 4           | 14          | 49          | 11          | 0            | 0             | 0             | 80          |
| ENE         | 0           | 0           | 0           | 2           | 4           | 14          | 43          | 10          | 0            | 0             | 0             | 73          |
| E           | 0           | 0           | 0           | 1           | 2           | 7           | 14          | 0           | 0            | 0             | 0             | 24          |
| ESE         | 0           | 0           | 2           | 5           | 2           | 15          | 59          | 11          | 1            | 0             | 0             | 95          |
| SE          | 0           | 0           | 0           | 3           | 1           | 11          | 34          | 13          | 0            | 0             | 0             | 62          |
| SSE         | 0           | 0           | 0           | 1           | 4           | 6           | 37          | 20          | 0            | 0             | 0             | 68          |
| S           | 0           | 0           | 0           | 3           | 8           | 25          | 48          | 28          | 5            | 0             | 0             | 117         |
| SSW         | 0           | 0           | 0           | 0           | 2           | 14          | 62          | 24          | 5            | 0             | 0             | 107         |
| SW          | 0           | 0           | 0           | 1           | 0           | 6           | 31          | 6           | 0            | 0             | 0             | 44          |
| WSW         | 0           | 0           | 0           | 2           | 1           | 14          | 16          | 3           | 0            | 0             | 0             | 36          |
| W           | 0           | 0           | 0           | 1           | 6           | 13          | 5           | 5           | 1            | 0             | 0             | 31          |
| WNW         | 0           | 0           | 0           | 2           | 6           | 12          | 18          | 10          | 0            | 0             | 0             | 48          |
| NW          | 0           | 0           | 0           | 1           | 7           | 4           | 24          | 12          | 0            | 0             | 0             | 48          |
| NNW         | 0           | 0           | 0           | 0           | 2           | 10          | 47          | 15          | 2            | 0             | 0             | 76          |
| TOTAL       | 2           | 1           | 3           | 26          | 55          | 215         | 599         | 184         | 14           | 0             | 0             | 1099        |

NUMBER OF CALMS: 3  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 1102  
TOTAL HOURS FOR THE PERIOD: 1102

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 0           | 0           | 0           | 0           | 0           | 1           | 14          | 0           | 0            | 0             | 0             | 0   | 15   |
| NNE      | 0           | 0           | 0           | 2           | 1           | 15          | 26          | 0           | 0            | 0             | 0             | 0   | 44   |
| NE       | 0           | 0           | 0           | 0           | 1           | 7           | 18          | 0           | 0            | 0             | 0             | 0   | 26   |
| ENE      | 0           | 0           | 0           | 0           | 2           | 7           | 9           | 2           | 0            | 0             | 0             | 0   | 20   |
| E        | 0           | 0           | 0           | 0           | 3           | 10          | 9           | 0           | 0            | 0             | 0             | 0   | 22   |
| ESE      | 0           | 0           | 0           | 0           | 0           | 3           | 37          | 9           | 2            | 0             | 0             | 0   | 51   |
| SE       | 0           | 0           | 0           | 1           | 3           | 7           | 42          | 5           | 0            | 0             | 0             | 0   | 58   |
| SSE      | 0           | 0           | 0           | 0           | 0           | 10          | 12          | 1           | 0            | 0             | 0             | 0   | 23   |
| S        | 0           | 0           | 0           | 1           | 1           | 25          | 55          | 1           | 0            | 0             | 0             | 0   | 83   |
| SSW      | 0           | 1           | 0           | 0           | 1           | 9           | 49          | 2           | 0            | 0             | 0             | 0   | 62   |
| SW       | 0           | 0           | 0           | 0           | 2           | 7           | 13          | 0           | 0            | 0             | 0             | 0   | 22   |
| WSW      | 0           | 0           | 0           | 0           | 0           | 4           | 3           | 0           | 0            | 0             | 0             | 0   | 7    |
| W        | 0           | 0           | 0           | 0           | 1           | 6           | 2           | 0           | 0            | 0             | 0             | 0   | 9    |
| WNW      | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0           | 0            | 0             | 0             | 0   | 3    |
| NW       | 0           | 0           | 0           | 1           | 0           | 5           | 10          | 1           | 0            | 0             | 0             | 0   | 17   |
| NNW      | 0           | 0           | 0           | 0           | 0           | 1           | 11          | 0           | 0            | 0             | 0             | 0   | 12   |
| TOTAL    | 0           | 1           | 0           | 5           | 15          | 118         | 312         | 21          | 2            | 0             | 0             | 0   | 474  |

NUMBER OF CALMS: 2  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 476  
TOTAL HOURS FOR THE PERIOD: 476



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0           |
| NNE         | 0           | 0           | 0           | 0           | 1           | 2           | 2           | 0           | 0            | 0             | 0             | 5           |
| NE          | 0           | 0           | 0           | 0           | 0           | 4           | 8           | 1           | 0            | 0             | 0             | 13          |
| ENE         | 0           | 0           | 0           | 0           | 0           | 1           | 7           | 2           | 0            | 0             | 0             | 10          |
| E           | 0           | 0           | 0           | 1           | 2           | 3           | 2           | 0           | 0            | 0             | 0             | 8           |
| ESE         | 0           | 0           | 1           | 0           | 2           | 4           | 9           | 0           | 0            | 0             | 0             | 16          |
| SE          | 0           | 0           | 0           | 0           | 1           | 1           | 5           | 0           | 0            | 0             | 0             | 7           |
| SSE         | 0           | 0           | 2           | 0           | 0           | 2           | 5           | 0           | 0            | 0             | 0             | 9           |
| S           | 0           | 0           | 0           | 0           | 0           | 3           | 2           | 0           | 0            | 0             | 0             | 5           |
| SSW         | 0           | 0           | 0           | 1           | 0           | 3           | 1           | 0           | 0            | 0             | 0             | 5           |
| SW          | 0           | 0           | 0           | 0           | 1           | 5           | 2           | 0           | 0            | 0             | 0             | 8           |
| WSW         | 0           | 0           | 0           | 0           | 0           | 6           | 1           | 0           | 0            | 0             | 0             | 7           |
| W           | 0           | 0           | 0           | 0           | 2           | 1           | 0           | 0           | 0            | 0             | 0             | 3           |
| WNW         | 0           | 0           | 0           | 0           | 0           | 3           | 0           | 0           | 0            | 0             | 0             | 3           |
| NW          | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 0           | 0            | 0             | 0             | 2           |
| NNW         | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 2           |
| TOTAL       | 0           | 0           | 3           | 2           | 9           | 41          | 45          | 3           | 0            | 0             | 0             | 103         |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 103  
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 1/ 1/89 0:00 TO 3/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE      | 0           | 0           | 0           | 0           | 1           | 5           | 1           | 2           | 0            | 0             | 0             | 0   | 9    |
| NE       | 0           | 0           | 0           | 1           | 0           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| ENE      | 0           | 0           | 0           | 2           | 1           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 5    |
| E        | 0           | 0           | 0           | 2           | 2           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 8    |
| ESE      | 0           | 0           | 0           | 0           | 2           | 2           | 5           | 0           | 0            | 0             | 0             | 0   | 9    |
| SE       | 1           | 2           | 0           | 1           | 2           | 3           | 6           | 0           | 0            | 0             | 0             | 0   | 15   |
| SSE      | 0           | 0           | 0           | 0           | 0           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 4    |
| S        | 0           | 2           | 0           | 0           | 0           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| SSW      | 0           | 0           | 1           | 1           | 0           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| SW       | 0           | 1           | 0           | 1           | 4           | 4           | 1           | 0           | 0            | 0             | 0             | 0   | 11   |
| WSW      | 0           | 1           | 0           | 0           | 0           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| W        | 0           | 0           | 4           | 1           | 3           | 4           | 2           | 0           | 0            | 0             | 0             | 0   | 14   |
| WNW      | 0           | 0           | 1           | 0           | 1           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 6    |
| NW       | 0           | 0           | 0           | 1           | 1           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| NNW      | 0           | 0           | 0           | 0           | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| TOTAL    | 1           | 6           | 6           | 10          | 20          | 44          | 19          | 2           | 0            | 0             | 0             | 0   | 108  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 108  
TOTAL HOURS FOR THE PERIOD: 108

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 6           | 6           | 10          | 2           | 0           | 0            | 0             | 0             | 24          |
| NNE         | 4           | 5           | 7           | 24          | 13          | 24          | 11          | 0           | 0            | 0             | 0             | 88          |
| NE          | 19          | 15          | 8           | 14          | 7           | 28          | 7           | 0           | 0            | 0             | 0             | 98          |
| ENE         | 27          | 24          | 24          | 35          | 23          | 11          | 7           | 0           | 0            | 0             | 0             | 151         |
| E           | 25          | 41          | 37          | 32          | 31          | 13          | 0           | 0           | 0            | 0             | 0             | 179         |
| ESE         | 13          | 34          | 36          | 57          | 37          | 18          | 4           | 0           | 0            | 0             | 0             | 199         |
| SE          | 7           | 14          | 39          | 67          | 66          | 55          | 5           | 0           | 0            | 0             | 0             | 253         |
| SSE         | 8           | 5           | 11          | 30          | 38          | 72          | 30          | 2           | 0            | 0             | 0             | 196         |
| S           | 10          | 11          | 9           | 26          | 44          | 125         | 97          | 11          | 0            | 0             | 0             | 333         |
| SSW         | 7           | 3           | 5           | 21          | 40          | 50          | 78          | 2           | 0            | 0             | 0             | 206         |
| SW          | 5           | 3           | 7           | 19          | 16          | 21          | 25          | 0           | 0            | 0             | 0             | 96          |
| WSW         | 6           | 4           | 2           | 7           | 15          | 14          | 4           | 0           | 0            | 0             | 0             | 52          |
| W           | 5           | 4           | 3           | 13          | 13          | 16          | 2           | 0           | 0            | 0             | 0             | 56          |
| WNW         | 7           | 3           | 5           | 18          | 16          | 13          | 4           | 0           | 0            | 0             | 0             | 66          |
| NW          | 7           | 9           | 4           | 10          | 11          | 18          | 17          | 0           | 0            | 0             | 0             | 76          |
| NNW         | 1           | 3           | 7           | 7           | 8           | 19          | 18          | 0           | 0            | 0             | 0             | 63          |
| TOTAL       | 151         | 178         | 204         | 386         | 384         | 507         | 311         | 15          | 0            | 0             | 0             | 2136        |

NUMBER OF CALMS: 40  
NUMBER OF INVALID HOURS: 8  
NUMBER OF VALID HOURS: 2176  
TOTAL HOURS FOR THE PERIOD: 2184



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 4/ 1/89 0100 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| NE    | 0    | 0    | 0    | 0    | 0    | 6    | 3    | 0    | 0    | 0     | 0     | 0   | 9    |
| ENE   | 0    | 0    | 0    | 1    | 6    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| E     | 0    | 0    | 0    | 0    | 5    | 10   | 0    | 0    | 0    | 0     | 0     | 0   | 15   |
| ESE   | 0    | 0    | 0    | 1    | 8    | 7    | 0    | 0    | 0    | 0     | 0     | 0   | 16   |
| SE    | 0    | 0    | 0    | 0    | 3    | 17   | 1    | 0    | 0    | 0     | 0     | 0   | 21   |
| SSE   | 0    | 0    | 0    | 0    | 1    | 12   | 3    | 0    | 0    | 0     | 0     | 0   | 16   |
| S     | 0    | 0    | 0    | 0    | 2    | 5    | 13   | 0    | 0    | 0     | 0     | 0   | 20   |
| SSW   | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| SW    | 0    | 0    | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | 2    |
| W     | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| NW    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| TOTAL | 0    | 0    | 0    | 2    | 27   | 66   | 27   | 0    | 0    | 0     | 0     | 0   | 122  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 122  
TOTAL HOURS FOR THE PERIOD: 122

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .20-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 3    |
| NE          | 0           | 0           | 0           | 0           | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| ENE         | 0           | 0           | 0           | 2           | 4           | 2           | 3           | 0           | 0            | 0             | 0             | 0   | 11   |
| E           | 0           | 0           | 0           | 1           | 6           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 8    |
| ESE         | 0           | 0           | 0           | 1           | 8           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 13   |
| SE          | 0           | 0           | 0           | 1           | 13          | 8           | 1           | 0           | 0            | 0             | 0             | 0   | 23   |
| SSE         | 0           | 0           | 0           | 0           | 2           | 13          | 3           | 2           | 0            | 0             | 0             | 0   | 20   |
| S           | 0           | 0           | 0           | 0           | 1           | 17          | 26          | 4           | 0            | 0             | 0             | 0   | 48   |
| SSW         | 0           | 0           | 0           | 0           | 4           | 8           | 27          | 2           | 0            | 0             | 0             | 0   | 41   |
| SW          | 0           | 0           | 0           | 0           | 1           | 5           | 7           | 0           | 0            | 0             | 0             | 0   | 13   |
| WSW         | 0           | 0           | 0           | 0           | 1           | 5           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| W           | 0           | 0           | 0           | 1           | 3           | 8           | 1           | 0           | 0            | 0             | 0             | 0   | 13   |
| WNW         | 0           | 0           | 0           | 1           | 3           | 5           | 3           | 0           | 0            | 0             | 0             | 0   | 12   |
| NW          | 0           | 0           | 0           | 0           | 2           | 7           | 13          | 0           | 0            | 0             | 0             | 0   | 22   |
| NNW         | 0           | 0           | 0           | 0           | 0           | 9           | 8           | 0           | 0            | 0             | 0             | 0   | 17   |
| TOTAL       | 0           | 0           | 0           | 7           | 50          | 94          | 94          | 8           | 0            | 0             | 0             | 0   | 253  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 253  
TOTAL HOURS FOR THE PERIOD: 253

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 2    |
| NE          | 0           | 0           | 0           | 1           | 2           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| ENE         | 0           | 0           | 0           | 2           | 4           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 7    |
| E           | 0           | 0           | 0           | 2           | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| ESE         | 0           | 0           | 0           | 2           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 3    |
| SE          | 0           | 0           | 0           | 0           | 7           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 11   |
| SSE         | 0           | 0           | 0           | 0           | 2           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 6    |
| S           | 0           | 0           | 0           | 0           | 2           | 12          | 9           | 5           | 0            | 0             | 0             | 0   | 28   |
| SSW         | 0           | 0           | 0           | 0           | 5           | 9           | 14          | 0           | 0            | 0             | 0             | 0   | 28   |
| SW          | 0           | 0           | 0           | 1           | 0           | 3           | 6           | 0           | 0            | 0             | 0             | 0   | 10   |
| WSW         | 0           | 0           | 0           | 0           | 1           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| W           | 0           | 0           | 0           | 1           | 3           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| WNW         | 0           | 0           | 0           | 2           | 2           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 10   |
| NW          | 0           | 0           | 0           | 2           | 1           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 9    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 2           | 6           | 0           | 0            | 0             | 0             | 0   | 8    |
| TOTAL       | 0           | 0           | 0           | 13          | 32          | 51          | 40          | 5           | 0            | 0             | 0             | 0   | 141  |

NUMBER OF CALMS: 0  
 NUMBER OF INVALID HOURS: 0  
 NUMBER OF VALID HOURS: 141  
 TOTAL HOURS FOR THE PERIOD: 141



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 4/ 1/89 0100 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 1           | 7           | 1           | 0           | 0            | 0             | 0             | 0   | 9    |
| NNE         | 0           | 1           | 2           | 2           | 1           | 11          | 10          | 0           | 0            | 0             | 0             | 0   | 27   |
| NE          | 0           | 2           | 1           | 3           | 2           | 20          | 4           | 0           | 0            | 0             | 0             | 0   | 32   |
| ENE         | 1           | 1           | 4           | 16          | 8           | 4           | 4           | 0           | 0            | 0             | 0             | 0   | 38   |
| E           | 0           | 1           | 11          | 15          | 14          | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 43   |
| ESE         | 0           | 1           | 9           | 36          | 17          | 6           | 2           | 0           | 0            | 0             | 0             | 0   | 71   |
| SE          | 0           | 1           | 8           | 36          | 25          | 20          | 1           | 0           | 0            | 0             | 0             | 0   | 91   |
| SSE         | 0           | 0           | 2           | 8           | 21          | 31          | 20          | 0           | 0            | 0             | 0             | 0   | 82   |
| S           | 0           | 3           | 2           | 6           | 14          | 67          | 46          | 2           | 0            | 0             | 0             | 0   | 140  |
| SSW         | 0           | 1           | 0           | 6           | 16          | 27          | 36          | 0           | 0            | 0             | 0             | 0   | 86   |
| SW          | 0           | 1           | 1           | 7           | 12          | 11          | 10          | 0           | 0            | 0             | 0             | 0   | 42   |
| WSW         | 0           | 0           | 0           | 4           | 6           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 16   |
| W           | 0           | 0           | 0           | 9           | 6           | 4           | 1           | 0           | 0            | 0             | 0             | 0   | 20   |
| WNW         | 0           | 2           | 2           | 9           | 8           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 23   |
| NW          | 0           | 0           | 1           | 4           | 7           | 6           | 2           | 0           | 0            | 0             | 0             | 0   | 20   |
| NNW         | 0           | 0           | 2           | 1           | 3           | 7           | 3           | 0           | 0            | 0             | 0             | 0   | 16   |
| TOTAL       | 1           | 14          | 45          | 162         | 161         | 230         | 141         | 2           | 0            | 0             | 0             | 0   | 756  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 756  
TOTAL HOURS FOR THE PERIOD: 756

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 3           | 5           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 10   |
| NNE         | 2           | 2           | 2           | 8           | 10          | 6           | 0           | 0           | 0            | 0             | 0             | 0   | 30   |
| NE          | 3           | 7           | 1           | 5           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 17   |
| ENE         | 1           | 7           | 14          | 11          | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 35   |
| E           | 2           | 25          | 24          | 14          | 4           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 69   |
| ESE         | 3           | 25          | 23          | 16          | 3           | 3           | 0           | 0           | 0            | 0             | 0             | 0   | 73   |
| SE          | 2           | 12          | 28          | 25          | 18          | 7           | 1           | 0           | 0            | 0             | 0             | 0   | 93   |
| SSE         | 0           | 4           | 8           | 21          | 11          | 13          | 3           | 0           | 0            | 0             | 0             | 0   | 60   |
| S           | 2           | 4           | 3           | 20          | 25          | 24          | 3           | 0           | 0            | 0             | 0             | 0   | 81   |
| SSW         | 0           | 1           | 3           | 15          | 15          | 5           | 0           | 0           | 0            | 0             | 0             | 0   | 39   |
| SW          | 2           | 0           | 4           | 10          | 1           | 2           | 1           | 0           | 0            | 0             | 0             | 0   | 20   |
| WSW         | 1           | 3           | 2           | 3           | 7           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 18   |
| W           | 1           | 3           | 2           | 2           | 0           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 10   |
| WNW         | 0           | 1           | 2           | 4           | 3           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 10   |
| NW          | 2           | 1           | 0           | 1           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| NNW         | 0           | 0           | 1           | 4           | 4           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 9    |
| TOTAL       | 21          | 95          | 117         | 162         | 109         | 66          | 9           | 0           | 0            | 0             | 0             | 0   | 579  |

NUMBER OF CALMS: 2  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 581  
TOTAL HOURS FOR THE PERIOD: 581

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 2           |
| NNE         | 1           | 2           | 1           | 12          | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 18          |
| NE          | 3           | 3           | 4           | 5           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 15          |
| ENE         | 7           | 9           | 6           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 24          |
| E           | 11          | 9           | 2           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 22          |
| ESE         | 6           | 6           | 2           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 15          |
| SE          | 3           | 0           | 2           | 4           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 9           |
| SSE         | 3           | 0           | 1           | 1           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 6           |
| S           | 5           | 3           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 9           |
| SSW         | 5           | 1           | 2           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 8           |
| SW          | 1           | 1           | 2           | 1           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 6           |
| WSW         | 5           | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 6           |
| W           | 1           | 0           | 1           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 2           |
| WNW         | 3           | 0           | 1           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 6           |
| NW          | 0           | 4           | 3           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 9           |
| NNW         | 1           | 0           | 1           | 2           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 5           |
| TOTAL       | 55          | 39          | 29          | 34          | 5           | 0           | 0           | 0           | 0            | 0             | 0             | 162         |

NUMBER OF CALMS: 9  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 171  
TOTAL HOURS FOR THE PERIOD: 171



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE         | 1           | 0           | 2           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| NE          | 13          | 3           | 2           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 18   |
| ENE         | 18          | 7           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 26   |
| E           | 12          | 6           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 18   |
| ESE         | 4           | 2           | 2           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 8    |
| SE          | 2           | 1           | 1           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| SSE         | 5           | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| S           | 3           | 1           | 3           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 7    |
| SSW         | 2           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 2    |
| SW          | 2           | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 3    |
| WSW         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| W           | 3           | 1           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| WNW         | 4           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| NW          | 5           | 4           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 10   |
| NNW         | 0           | 3           | 3           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| TOTAL       | 74          | 30          | 13          | 6           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 123  |

NUMBER OF CALMS: 29  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 152  
TOTAL HOURS FOR THE PERIOD: 152

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 6           | 27          | 2           | 0            | 0             | 0             | 0   | 35   |
| NNE         | 0           | 0           | 0           | 3           | 2           | 23          | 47          | 4           | 0            | 0             | 0             | 0   | 79   |
| NE          | 0           | 0           | 0           | 2           | 13          | 29          | 56          | 12          | 3            | 0             | 0             | 0   | 115  |
| ENE         | 0           | 3           | 1           | 8           | 17          | 60          | 61          | 4           | 0            | 0             | 0             | 0   | 154  |
| E           | 0           | 0           | 0           | 13          | 24          | 55          | 62          | 2           | 0            | 0             | 0             | 0   | 156  |
| ESE         | 0           | 1           | 1           | 7           | 16          | 117         | 116         | 20          | 0            | 0             | 0             | 0   | 278  |
| SE          | 0           | 0           | 1           | 9           | 19          | 89          | 89          | 21          | 1            | 0             | 0             | 0   | 229  |
| SSE         | 0           | 0           | 3           | 5           | 15          | 47          | 73          | 10          | 2            | 0             | 0             | 0   | 155  |
| S           | 0           | 0           | 3           | 9           | 15          | 76          | 176         | 25          | 3            | 0             | 0             | 0   | 307  |
| SSW         | 0           | 0           | 1           | 4           | 12          | 59          | 132         | 31          | 0            | 0             | 0             | 0   | 239  |
| SW          | 0           | 1           | 4           | 8           | 8           | 31          | 40          | 19          | 0            | 0             | 0             | 0   | 111  |
| WSW         | 0           | 0           | 0           | 2           | 6           | 14          | 34          | 2           | 0            | 0             | 0             | 0   | 58   |
| W           | 0           | 1           | 3           | 4           | 9           | 31          | 13          | 1           | 0            | 0             | 0             | 0   | 62   |
| WNW         | 0           | 0           | 0           | 6           | 11          | 24          | 16          | 3           | 0            | 0             | 0             | 0   | 60   |
| NW          | 0           | 0           | 2           | 6           | 5           | 26          | 25          | 2           | 0            | 0             | 0             | 0   | 66   |
| NNW         | 0           | 0           | 0           | 3           | 6           | 15          | 43          | 5           | 0            | 0             | 0             | 0   | 72   |
| TOTAL       | 0           | 6           | 19          | 89          | 178         | 702         | 1010        | 163         | 9            | 0             | 0             | 0   | 2176 |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 8  
NUMBER OF VALID HOURS: 2176  
TOTAL HOURS FOR THE PERIOD: 2184

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0           | 0            | 0             | 0             | 0   | 3    |
| NE          | 0           | 0           | 0           | 0           | 0           | 1           | 6           | 2           | 0            | 0             | 0             | 0   | 9    |
| ENE         | 0           | 0           | 0           | 0           | 0           | 2           | 8           | 0           | 0            | 0             | 0             | 0   | 10   |
| E           | 0           | 0           | 0           | 0           | 0           | 4           | 13          | 2           | 0            | 0             | 0             | 0   | 19   |
| ESE         | 0           | 0           | 0           | 0           | 0           | 7           | 19          | 0           | 0            | 0             | 0             | 0   | 26   |
| SE          | 0           | 0           | 0           | 0           | 0           | 3           | 11          | 2           | 0            | 0             | 0             | 0   | 16   |
| SSE         | 0           | 0           | 0           | 0           | 0           | 2           | 9           | 0           | 0            | 0             | 0             | 0   | 11   |
| S           | 0           | 0           | 0           | 0           | 1           | 3           | 14          | 0           | 0            | 0             | 0             | 0   | 18   |
| SSW         | 0           | 0           | 0           | 0           | 1           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 3    |
| SW          | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 2    |
| WSW         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| W           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| WNW         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NW          | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 2           | 0            | 0             | 0             | 0   | 3    |
| TOTAL       | 0           | 0           | 0           | 0           | 2           | 25          | 87          | 8           | 0            | 0             | 0             | 0   | 122  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 122  
TOTAL HOURS FOR THE PERIOD: 122



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 4           | 0           | 0            | 0             | 0             | 0   | 4    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 2    |
| NE          | 0           | 0           | 0           | 0           | 1           | 2           | 1           | 0           | 0            | 0             | 0             | 0   | 4    |
| ENE         | 0           | 0           | 0           | 0           | 2           | 6           | 3           | 0           | 0            | 0             | 0             | 0   | 11   |
| E           | 0           | 0           | 0           | 0           | 1           | 3           | 3           | 0           | 0            | 0             | 0             | 0   | 7    |
| ESE         | 0           | 0           | 0           | 1           | 1           | 11          | 4           | 2           | 0            | 0             | 0             | 0   | 19   |
| SE          | 0           | 0           | 0           | 0           | 1           | 10          | 8           | 2           | 0            | 0             | 0             | 0   | 21   |
| SSE         | 0           | 0           | 0           | 0           | 0           | 2           | 8           | 1           | 2            | 0             | 0             | 0   | 13   |
| S           | 0           | 0           | 0           | 0           | 0           | 7           | 27          | 5           | 0            | 0             | 0             | 0   | 39   |
| SSW         | 0           | 0           | 0           | 0           | 2           | 6           | 30          | 9           | 0            | 0             | 0             | 0   | 47   |
| SW          | 0           | 0           | 0           | 0           | 0           | 4           | 7           | 5           | 0            | 0             | 0             | 0   | 16   |
| WSW         | 0           | 0           | 0           | 0           | 0           | 3           | 4           | 0           | 0            | 0             | 0             | 0   | 7    |
| W           | 0           | 0           | 0           | 0           | 1           | 5           | 5           | 0           | 0            | 0             | 0             | 0   | 11   |
| WNW         | 0           | 0           | 0           | 1           | 1           | 5           | 4           | 2           | 0            | 0             | 0             | 0   | 13   |
| NW          | 0           | 0           | 0           | 0           | 0           | 5           | 15          | 2           | 0            | 0             | 0             | 0   | 22   |
| NNW         | 0           | 0           | 0           | 0           | 0           | 2           | 14          | 1           | 0            | 0             | 0             | 0   | 17   |
| TOTAL       | 0           | 0           | 0           | 2           | 10          | 71          | 139         | 29          | 2            | 0             | 0             | 0   | 253  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 253  
TOTAL HOURS FOR THE PERIOD: 253

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 0    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 0            | 0             | 0             | 0   | 2    |
| NE          | 0           | 0           | 0           | 0           | 1           | 1           | 2           | 1           | 0            | 0             | 0             | 0   | 5    |
| ENE         | 0           | 0           | 0           | 0           | 0           | 5           | 2           | 0           | 0            | 0             | 0             | 0   | 7    |
| E           | 0           | 0           | 0           | 2           | 2           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 6    |
| ESE         | 0           | 0           | 0           | 0           | 1           | 1           | 3           | 1           | 0            | 0             | 0             | 0   | 6    |
| SE          | 0           | 0           | 0           | 0           | 0           | 3           | 3           | 1           | 0            | 0             | 0             | 0   | 7    |
| SSE         | 0           | 0           | 0           | 0           | 0           | 2           | 3           | 0           | 0            | 0             | 0             | 0   | 5    |
| S           | 0           | 0           | 0           | 0           | 0           | 8           | 7           | 4           | 2            | 0             | 0             | 0   | 21   |
| SSW         | 0           | 0           | 0           | 0           | 1           | 11          | 14          | 5           | 0            | 0             | 0             | 0   | 31   |
| SW          | 0           | 0           | 0           | 0           | 0           | 2           | 6           | 3           | 0            | 0             | 0             | 0   | 11   |
| WSW         | 0           | 0           | 0           | 0           | 1           | 1           | 2           | 0           | 0            | 0             | 0             | 0   | 4    |
| W           | 0           | 0           | 0           | 1           | 1           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 8    |
| WNW         | 0           | 0           | 0           | 1           | 2           | 5           | 4           | 0           | 0            | 0             | 0             | 0   | 12   |
| NW          | 0           | 0           | 0           | 0           | 2           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 8    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 1           | 5           | 2           | 0            | 0             | 0             | 0   | 8    |
| TOTAL       | 0           | 0           | 0           | 4           | 11          | 51          | 56          | 17          | 2            | 0             | 0             | 0   | 141  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 141  
TOTAL HOURS FOR THE PERIOD: 141

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 4/ 1/89 01:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 7           | 2           | 0            | 0             | 0             | 0   | 10   |
| NNE         | 0           | 0           | 0           | 1           | 1           | 3           | 12          | 4           | 0            | 0             | 0             | 0   | 21   |
| NE          | 0           | 0           | 0           | 1           | 2           | 3           | 17          | 9           | 3            | 0             | 0             | 0   | 35   |
| ENE         | 0           | 1           | 1           | 1           | 8           | 13          | 17          | 4           | 0            | 0             | 0             | 0   | 45   |
| E           | 0           | 0           | 0           | 4           | 3           | 12          | 23          | 0           | 0            | 0             | 0             | 0   | 42   |
| ESE         | 0           | 0           | 0           | 5           | 5           | 31          | 49          | 13          | 0            | 0             | 0             | 0   | 103  |
| SE          | 0           | 0           | 1           | 5           | 12          | 20          | 21          | 12          | 0            | 0             | 0             | 0   | 71   |
| SSE         | 0           | 0           | 0           | 2           | 6           | 13          | 32          | 7           | 0            | 0             | 0             | 0   | 60   |
| S           | 0           | 0           | 0           | 4           | 6           | 18          | 85          | 15          | 1            | 0             | 0             | 0   | 129  |
| SSW         | 0           | 0           | 1           | 2           | 3           | 17          | 50          | 17          | 0            | 0             | 0             | 0   | 90   |
| SW          | 0           | 0           | 0           | 5           | 4           | 13          | 16          | 9           | 0            | 0             | 0             | 0   | 47   |
| WSW         | 0           | 0           | 0           | 1           | 4           | 2           | 14          | 2           | 0            | 0             | 0             | 0   | 23   |
| W           | 0           | 0           | 0           | 3           | 4           | 13          | 5           | 1           | 0            | 0             | 0             | 0   | 26   |
| WNW         | 0           | 0           | 0           | 2           | 5           | 6           | 5           | 1           | 0            | 0             | 0             | 0   | 19   |
| NW          | 0           | 0           | 2           | 1           | 1           | 6           | 7           | 0           | 0            | 0             | 0             | 0   | 17   |
| NNW         | 0           | 0           | 0           | 0           | 5           | 3           | 10          | 0           | 0            | 0             | 0             | 0   | 18   |
| TOTAL       | 0           | 1           | 5           | 37          | 69          | 174         | 370         | 96          | 4            | 0             | 0             | 0   | 756  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 756  
TOTAL HOURS FOR THE PERIOD: 756



RIVER JEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 8           | 0           | 0            | 0             | 0             | 0   | 9    |
| NNE         | 0           | 0           | 0           | 1           | 0           | 11          | 14          | 0           | 0            | 0             | 0             | 0   | 26   |
| NE          | 0           | 0           | 0           | 1           | 6           | 5           | 8           | 0           | 0            | 0             | 0             | 0   | 20   |
| ENE         | 0           | 1           | 0           | 2           | 6           | 19          | 8           | 0           | 0            | 0             | 0             | 0   | 36   |
| E           | 0           | 0           | 0           | 4           | 14          | 21          | 16          | 0           | 0            | 0             | 0             | 0   | 55   |
| ESE         | 0           | 1           | 0           | 0           | 8           | 50          | 37          | 4           | 0            | 0             | 0             | 0   | 100  |
| SE          | 0           | 0           | 0           | 3           | 1           | 42          | 37          | 4           | 1            | 0             | 0             | 0   | 88   |
| SSE         | 0           | 0           | 2           | 1           | 3           | 22          | 19          | 2           | 0            | 0             | 0             | 0   | 49   |
| S           | 0           | 0           | 1           | 1           | 4           | 25          | 41          | 1           | 0            | 0             | 0             | 0   | 73   |
| SSW         | 0           | 0           | 0           | 2           | 2           | 19          | 36          | 0           | 0            | 0             | 0             | 0   | 59   |
| SW          | 0           | 0           | 2           | 0           | 1           | 6           | 9           | 2           | 0            | 0             | 0             | 0   | 20   |
| WSW         | 0           | 0           | 0           | 1           | 0           | 8           | 13          | 0           | 0            | 0             | 0             | 0   | 22   |
| W           | 0           | 1           | 1           | 0           | 1           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 7    |
| WNW         | 0           | 0           | 0           | 0           | 1           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 5    |
| NW          | 0           | 0           | 0           | 2           | 0           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| NNW         | 0           | 0           | 0           | 0           | 0           | 5           | 3           | 0           | 0            | 0             | 0             | 0   | 8    |
| TOTAL       | 0           | 3           | 6           | 18          | 47          | 240         | 253         | 13          | 1            | 0             | 0             | 0   | 581  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 581  
TOTAL HOURS FOR THE PERIOD: 581

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 1           | 3           | 0           | 0            | 0             | 0             | 0   | 4    |
| NNE         | 0           | 0           | 0           | 0           | 0           | 5           | 10          | 0           | 0            | 0             | 0             | 0   | 15   |
| NE          | 0           | 0           | 0           | 0           | 1           | 7           | 13          | 0           | 0            | 0             | 0             | 0   | 21   |
| ENE         | 0           | 1           | 0           | 0           | 1           | 7           | 16          | 0           | 0            | 0             | 0             | 0   | 25   |
| E           | 0           | 0           | 0           | 1           | 3           | 6           | 2           | 0           | 0            | 0             | 0             | 0   | 12   |
| ESE         | 0           | 0           | 1           | 0           | 1           | 11          | 1           | 0           | 0            | 0             | 0             | 0   | 14   |
| SE          | 0           | 0           | 0           | 0           | 3           | 6           | 8           | 0           | 0            | 0             | 0             | 0   | 17   |
| SSE         | 0           | 0           | 0           | 2           | 5           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 11   |
| S           | 0           | 0           | 2           | 1           | 2           | 12          | 1           | 0           | 0            | 0             | 0             | 0   | 18   |
| SSW         | 0           | 0           | 0           | 0           | 1           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| SW          | 0           | 1           | 0           | 0           | 1           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 6    |
| WSW         | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| W           | 0           | 0           | 2           | 0           | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| WNW         | 0           | 0           | 0           | 0           | 1           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 2    |
| NW          | 0           | 0           | 0           | 0           | 0           | 6           | 1           | 0           | 0            | 0             | 0             | 0   | 7    |
| NNW         | 0           | 0           | 0           | 2           | 1           | 1           | 5           | 0           | 0            | 0             | 0             | 0   | 9    |
| TOTAL       | 0           | 2           | 5           | 6           | 22          | 75          | 61          | 0           | 0            | 0             | 0             | 0   | 171  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 171  
TOTAL HOURS FOR THE PERIOD: 171

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 4/ 1/89 0:00 TO 6/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N           | 0           | 0           | 0           | 0           | 0           | 3           | 5           | 0           | 0            | 0             | 0             | 0   | 8    |
| NNE         | 0           | 0           | 0           | 1           | 1           | 3           | 5           | 0           | 0            | 0             | 0             | 0   | 10   |
| NE          | 0           | 0           | 0           | 0           | 2           | 10          | 9           | 0           | 0            | 0             | 0             | 0   | 21   |
| ENE         | 0           | 0           | 0           | 5           | 0           | 8           | 7           | 0           | 0            | 0             | 0             | 0   | 20   |
| E           | 0           | 0           | 0           | 2           | 1           | 8           | 4           | 0           | 0            | 0             | 0             | 0   | 15   |
| ESE         | 0           | 0           | 0           | 1           | 0           | 6           | 3           | 0           | 0            | 0             | 0             | 0   | 10   |
| SE          | 0           | 0           | 0           | 1           | 2           | 5           | 1           | 0           | 0            | 0             | 0             | 0   | 7    |
| SSE         | 0           | 0           | 1           | 0           | 1           | 2           | 2           | 0           | 0            | 0             | 0             | 0   | 6    |
| S           | 0           | 0           | 0           | 3           | 2           | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 9    |
| SSW         | 0           | 0           | 0           | 0           | 2           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 4    |
| SW          | 0           | 0           | 2           | 3           | 2           | 1           | 1           | 0           | 0            | 0             | 0             | 0   | 9    |
| WSW         | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 1    |
| W           | 0           | 0           | 0           | 0           | 1           | 4           | 0           | 0           | 0            | 0             | 0             | 0   | 5    |
| WNW         | 0           | 0           | 0           | 2           | 1           | 6           | 0           | 0           | 0            | 0             | 0             | 0   | 9    |
| NW          | 0           | 0           | 0           | 3           | 2           | 2           | 0           | 0           | 0            | 0             | 0             | 0   | 7    |
| NNW         | 0           | 0           | 0           | 1           | 0           | 3           | 5           | 0           | 0            | 0             | 0             | 0   | 9    |
| TOTAL       | 0           | 0           | 3           | 22          | 17          | 66          | 44          | 0           | 0            | 0             | 0             | 0   | 152  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 152  
TOTAL HOURS FOR THE PERIOD: 152



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 7/ 1/89 0100 TO 9/30/89 23100

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 2           | 1           | 8           | 7           | 17          | 3           | 0           | 0            | 0             | 0             | 38          |
| NNE         | 1           | 6           | 10          | 64          | 56          | 36          | 6           | 0           | 0            | 0             | 0             | 179         |
| NE          | 3           | 12          | 24          | 30          | 43          | 21          | 0           | 0           | 0            | 0             | 0             | 133         |
| ENE         | 12          | 18          | 27          | 39          | 37          | 32          | 2           | 0           | 0            | 0             | 0             | 167         |
| E           | 17          | 26          | 25          | 24          | 9           | 4           | 0           | 0           | 0            | 0             | 0             | 105         |
| ESE         | 13          | 22          | 24          | 25          | 17          | 18          | 1           | 0           | 0            | 0             | 0             | 120         |
| SE          | 13          | 27          | 16          | 53          | 28          | 21          | 4           | 0           | 0            | 0             | 0             | 162         |
| SSE         | 16          | 18          | 11          | 24          | 21          | 29          | 2           | 0           | 0            | 0             | 0             | 121         |
| S           | 9           | 9           | 7           | 26          | 33          | 39          | 15          | 0           | 0            | 0             | 0             | 138         |
| SSW         | 11          | 14          | 20          | 33          | 26          | 13          | 7           | 0           | 0            | 0             | 0             | 124         |
| SW          | 21          | 21          | 18          | 27          | 27          | 13          | 5           | 0           | 0            | 0             | 0             | 132         |
| WSW         | 15          | 22          | 20          | 26          | 29          | 14          | 3           | 0           | 0            | 0             | 0             | 129         |
| W           | 13          | 20          | 18          | 20          | 39          | 23          | 0           | 0           | 0            | 0             | 0             | 133         |
| WNW         | 12          | 20          | 10          | 28          | 34          | 24          | 6           | 0           | 0            | 0             | 0             | 134         |
| NW          | 13          | 15          | 16          | 20          | 22          | 15          | 2           | 0           | 0            | 0             | 0             | 103         |
| NNW         | 4           | 6           | 7           | 10          | 23          | 51          | 6           | 0           | 0            | 0             | 0             | 107         |
| TOTAL       | 173         | 258         | 254         | 457         | 451         | 370         | 62          | 0           | 0            | 0             | 0             | 2025        |

NUMBER OF CALMS: 24  
NUMBER OF INVALID HOURS: 159  
NUMBER OF VALID HOURS: 2049  
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNE   | 0    | 0    | 0    | 0    | 3    | 4    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| NE    | 0    | 0    | 0    | 0    | 4    | 12   | 0    | 0    | 0    | 0     | 0     | 0   | 16   |
| ENE   | 0    | 0    | 0    | 0    | 7    | 9    | 0    | 0    | 0    | 0     | 0     | 0   | 16   |
| E     | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| ESE   | 0    | 0    | 0    | 0    | 3    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| SE    | 0    | 0    | 0    | 0    | 2    | 6    | 1    | 0    | 0    | 0     | 0     | 0   | 9    |
| SSE   | 0    | 0    | 1    | 0    | 2    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| S     | 0    | 0    | 0    | 0    | 0    | 2    | 4    | 0    | 0    | 0     | 0     | 0   | 6    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| SW    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| W     | 0    | 0    | 0    | 0    | 1    | 8    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| WNW   | 0    | 0    | 0    | 0    | 3    | 8    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| NW    | 0    | 0    | 0    | 1    | 4    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| NNW   | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 3    |
| TOTAL | 0    | 0    | 1    | 1    | 32   | 63   | 8    | 0    | 0    | 0     | 0     | 0   | 105  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 105  
TOTAL HOURS FOR THE PERIOD: 105

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNE   | 0    | 0    | 0    | 0    | 2    | 13   | 1    | 0    | 0    | 0     | 0     | 0   | 16   |
| NE    | 0    | 0    | 0    | 2    | 9    | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 17   |
| ENE   | 0    | 0    | 0    | 2    | 9    | 6    | 1    | 0    | 0    | 0     | 0     | 0   | 18   |
| E     | 0    | 0    | 0    | 0    | 3    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| ESE   | 0    | 0    | 0    | 1    | 4    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| SE    | 0    | 0    | 0    | 1    | 6    | 3    | 1    | 0    | 0    | 0     | 0     | 0   | 11   |
| SSE   | 0    | 0    | 1    | 0    | 5    | 8    | 1    | 0    | 0    | 0     | 0     | 0   | 15   |
| S     | 0    | 0    | 0    | 1    | 6    | 6    | 4    | 0    | 0    | 0     | 0     | 0   | 17   |
| SSW   | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| SW    | 0    | 0    | 0    | 0    | 2    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 5    |
| WSW   | 0    | 0    | 0    | 1    | 5    | 7    | 2    | 0    | 0    | 0     | 0     | 0   | 15   |
| W     | 0    | 0    | 0    | 1    | 13   | 9    | 0    | 0    | 0    | 0     | 0     | 0   | 23   |
| WNW   | 0    | 0    | 0    | 1    | 9    | 8    | 2    | 0    | 0    | 0     | 0     | 0   | 20   |
| NW    | 0    | 0    | 0    | 0    | 5    | 7    | 2    | 0    | 0    | 0     | 0     | 0   | 14   |
| NNW   | 0    | 0    | 0    | 0    | 1    | 11   | 1    | 0    | 0    | 0     | 0     | 0   | 13   |
| TOTAL | 0    | 0    | 1    | 10   | 79   | 91   | 17   | 0    | 0    | 0     | 0     | 0   | 198  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 198  
TOTAL HOURS FOR THE PERIOD: 198



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNE   | 0    | 0    | 0    | 0    | 5    | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| NE    | 0    | 0    | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| ENE   | 0    | 0    | 0    | 2    | 3    | 4    | 1    | 0    | 0    | 0     | 0     | 0   | 10   |
| E     | 0    | 0    | 0    | 4    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| ESE   | 0    | 0    | 2    | 0    | 2    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 6    |
| SE    | 0    | 0    | 0    | 1    | 3    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| SSE   | 0    | 0    | 0    | 1    | 2    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| S     | 0    | 0    | 0    | 3    | 1    | 8    | 2    | 0    | 0    | 0     | 0     | 0   | 14   |
| SSW   | 1    | 0    | 0    | 1    | 1    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| SW    | 0    | 0    | 0    | 1    | 0    | 4    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| WSW   | 0    | 0    | 0    | 0    | 3    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| W     | 0    | 0    | 0    | 2    | 5    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| WNW   | 0    | 0    | 0    | 1    | 8    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 12   |
| NW    | 0    | 0    | 0    | 1    | 2    | 5    | 0    | 0    | 0    | 0     | 0     | 0   | 8    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| TOTAL | 1    | 0    | 2    | 17   | 42   | 54   | 4    | 0    | 0    | 0     | 0     | 0   | 120  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 120  
TOTAL HOURS FOR THE PERIOD: 120

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 3           | 2           | 13          | 2           | 0           | 0            | 0             | 0             | 20          |
| NNE         | 0           | 1           | 1           | 10          | 26          | 10          | 5           | 0           | 0            | 0             | 0             | 53          |
| NE          | 0           | 1           | 5           | 14          | 17          | 2           | 0           | 0           | 0            | 0             | 0             | 39          |
| ENE         | 0           | 1           | 6           | 16          | 10          | 12          | 0           | 0           | 0            | 0             | 0             | 45          |
| E           | 0           | 3           | 11          | 10          | 2           | 1           | 0           | 0           | 0            | 0             | 0             | 27          |
| ESE         | 1           | 2           | 6           | 16          | 7           | 14          | 0           | 0           | 0            | 0             | 0             | 46          |
| SE          | 0           | 1           | 1           | 24          | 14          | 10          | 1           | 0           | 0            | 0             | 0             | 51          |
| SSE         | 0           | 5           | 2           | 15          | 8           | 12          | 1           | 0           | 0            | 0             | 0             | 43          |
| S           | 1           | 2           | 1           | 12          | 17          | 18          | 5           | 0           | 0            | 0             | 0             | 56          |
| SSW         | 0           | 1           | 3           | 12          | 15          | 9           | 6           | 0           | 0            | 0             | 0             | 46          |
| SW          | 1           | 0           | 3           | 9           | 18          | 4           | 3           | 0           | 0            | 0             | 0             | 38          |
| WSW         | 0           | 3           | 9           | 20          | 15          | 1           | 1           | 0           | 0            | 0             | 0             | 49          |
| W           | 0           | 0           | 5           | 12          | 17          | 2           | 0           | 0           | 0            | 0             | 0             | 36          |
| WNW         | 0           | 0           | 4           | 16          | 13          | 4           | 2           | 0           | 0            | 0             | 0             | 39          |
| NW          | 0           | 2           | 4           | 13          | 11          | 1           | 0           | 0           | 0            | 0             | 0             | 31          |
| NNW         | 0           | 0           | 1           | 2           | 16          | 26          | 4           | 0           | 0            | 0             | 0             | 49          |
| TOTAL       | 3           | 22          | 62          | 204         | 208         | 139         | 30          | 0           | 0            | 0             | 0             | 668         |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 668  
TOTAL HOURS FOR THE PERIOD: 668

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 7/ 1/89 01:00 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 1           | 0           | 3           | 4           | 0           | 0           | 0           | 0            | 0             | 0             | 8           |
| NNE         | 0           | 2           | 4           | 24          | 15          | 3           | 0           | 0           | 0            | 0             | 0             | 48          |
| NE          | 0           | 6           | 11          | 9           | 8           | 1           | 0           | 0           | 0            | 0             | 0             | 35          |
| ENE         | 4           | 12          | 18          | 12          | 7           | 1           | 0           | 0           | 0            | 0             | 0             | 54          |
| E           | 3           | 16          | 11          | 8           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 39          |
| ESE         | 7           | 15          | 8           | 7           | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 39          |
| SE          | 4           | 17          | 13          | 22          | 3           | 0           | 1           | 0           | 0            | 0             | 0             | 60          |
| SSE         | 2           | 5           | 6           | 7           | 4           | 3           | 0           | 0           | 0            | 0             | 0             | 27          |
| S           | 6           | 4           | 5           | 8           | 7           | 5           | 0           | 0           | 0            | 0             | 0             | 35          |
| SSW         | 2           | 9           | 15          | 18          | 10          | 0           | 0           | 0           | 0            | 0             | 0             | 54          |
| SW          | 6           | 11          | 11          | 13          | 7           | 1           | 0           | 0           | 0            | 0             | 0             | 49          |
| WSW         | 2           | 10          | 10          | 4           | 5           | 1           | 0           | 0           | 0            | 0             | 0             | 32          |
| W           | 4           | 10          | 7           | 4           | 2           | 1           | 0           | 0           | 0            | 0             | 0             | 28          |
| WNW         | 3           | 8           | 5           | 8           | 1           | 1           | 1           | 0           | 0            | 0             | 0             | 27          |
| NW          | 1           | 5           | 6           | 3           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 15          |
| NNW         | 1           | 2           | 3           | 3           | 4           | 2           | 0           | 0           | 0            | 0             | 0             | 15          |
| TOTAL       | 45          | 133         | 133         | 153         | 79          | 20          | 2           | 0           | 0            | 0             | 0             | 565         |

NUMBER OF CALMS: 4  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 569  
TOTAL HOURS FOR THE PERIOD: 569



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18 | TOT. |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-----|------|
| N        | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 1    |
| NNE      | 1           | 3           | 3           | 30          | 5           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 42   |
| NE       | 2           | 3           | 7           | 4           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 16   |
| ENE      | 6           | 5           | 1           | 4           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 17   |
| E        | 8           | 7           | 3           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 20   |
| ESE      | 2           | 4           | 8           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 15   |
| SE       | 5           | 7           | 1           | 5           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 18   |
| SSE      | 13          | 8           | 1           | 1           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 23   |
| S        | 1           | 2           | 1           | 2           | 2           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 8    |
| SSW      | 5           | 4           | 2           | 2           | 0           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 13   |
| SW       | 6           | 7           | 4           | 3           | 0           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 21   |
| WSW      | 4           | 9           | 0           | 1           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 15   |
| W        | 5           | 6           | 4           | 0           | 1           | 0           | 0           | 0           | 0            | 0             | 0             | 0   | 16   |
| WNW      | 4           | 10          | 1           | 2           | 0           | 0           | 1           | 0           | 0            | 0             | 0             | 0   | 18   |
| NW       | 8           | 3           | 6           | 1           | 0           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 19   |
| NNW      | 2           | 3           | 1           | 3           | 1           | 1           | 0           | 0           | 0            | 0             | 0             | 0   | 11   |
| TOTAL    | 72          | 81          | 43          | 62          | 11          | 3           | 1           | 0           | 0            | 0             | 0             | 0   | 273  |

NUMBER OF CALMS: 11  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 284  
TOTAL HOURS FOR THE PERIOD: 284

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 1    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| NNE   | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NE    | 1    | 2    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| ENE   | 2    | 0    | 2    | 3    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| E     | 6    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| ESE   | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| SE    | 4    | 2    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| SSE   | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| S     | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| SSW   | 3    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| SW    | 8    | 3    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 12   |
| WSW   | 9    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| W     | 4    | 4    | 2    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| WNW   | 5    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| NW    | 4    | 5    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| NNW   | 1    | 1    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| TOTAL | 52   | 22   | 12   | 10   | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 96   |

NUMBER OF CALMS: 9  
NUMBER OF INVALID HOURS: 1  
NUMBER OF VALID HOURS: 105  
TOTAL HOURS FOR THE PERIOD: 106

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 1    | 0    | 6    | 24   | 4    | 0    | 0     | 0     | 0   | 35   |
| NNE   | 0    | 0    | 1    | 4    | 10   | 54   | 68   | 1    | 0    | 0     | 0     | 0   | 138  |
| NE    | 0    | 1    | 2    | 9    | 16   | 77   | 97   | 2    | 0    | 0     | 0     | 0   | 204  |
| ENE   | 1    | 3    | 1    | 17   | 27   | 69   | 96   | 13   | 0    | 0     | 0     | 0   | 227  |
| E     | 0    | 0    | 3    | 22   | 26   | 34   | 11   | 5    | 0    | 0     | 0     | 0   | 101  |
| ESE   | 0    | 2    | 5    | 10   | 30   | 37   | 54   | 15   | 2    | 0     | 0     | 0   | 155  |
| SE    | 0    | 3    | 2    | 14   | 28   | 54   | 37   | 2    | 0    | 0     | 0     | 0   | 140  |
| SSE   | 0    | 5    | 3    | 18   | 14   | 47   | 16   | 1    | 0    | 0     | 0     | 0   | 104  |
| S     | 0    | 3    | 7    | 28   | 27   | 55   | 34   | 4    | 0    | 0     | 0     | 0   | 158  |
| SSW   | 0    | 2    | 7    | 13   | 18   | 45   | 25   | 3    | 0    | 0     | 0     | 0   | 113  |
| SW    | 1    | 2    | 2    | 16   | 26   | 50   | 12   | 1    | 0    | 0     | 0     | 0   | 110  |
| WSW   | 0    | 3    | 7    | 19   | 32   | 59   | 16   | 1    | 0    | 0     | 0     | 0   | 137  |
| W     | 0    | 0    | 4    | 15   | 21   | 68   | 27   | 0    | 0    | 0     | 0     | 0   | 135  |
| WNW   | 0    | 1    | 2    | 12   | 30   | 45   | 17   | 1    | 0    | 0     | 0     | 0   | 108  |
| NW    | 0    | 1    | 6    | 7    | 17   | 36   | 17   | 1    | 0    | 0     | 0     | 0   | 85   |
| NNW   | 0    | 0    | 1    | 6    | 7    | 34   | 50   | 0    | 0    | 0     | 0     | 0   | 98   |
| TOTAL | 2    | 26   | 53   | 211  | 329  | 770  | 601  | 54   | 2    | 0     | 0     | 0   | 2048 |

NUMBER OF CALMS: 1  
NUMBER OF INVALID HOURS: 159  
NUMBER OF VALID HOURS: 2049  
TOTAL HOURS FOR THE PERIOD: 2208



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 7/ 1/89 0:00 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 0    | 0     | 0     | 0   | 3    |
| NNE   | 0    | 0    | 0    | 0    | 2    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 4    |
| NE    | 0    | 0    | 0    | 0    | 0    | 4    | 8    | 0    | 0    | 0     | 0     | 0   | 12   |
| ENE   | 0    | 0    | 0    | 0    | 0    | 8    | 16   | 0    | 0    | 0     | 0     | 0   | 24   |
| E     | 0    | 0    | 0    | 0    | 0    | 1    | 5    | 0    | 0    | 0     | 0     | 0   | 6    |
| ESE   | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 3    | 0    | 0     | 0     | 0   | 5    |
| SE    | 0    | 0    | 0    | 0    | 0    | 3    | 4    | 0    | 0    | 0     | 0     | 0   | 7    |
| SSE   | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| S     | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 2    | 0    | 0     | 0     | 0   | 5    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| SW    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| WSW   | 0    | 0    | 1    | 0    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 4    |
| W     | 0    | 0    | 0    | 0    | 0    | 7    | 11   | 0    | 0    | 0     | 0     | 0   | 18   |
| WNW   | 0    | 0    | 0    | 0    | 2    | 2    | 4    | 0    | 0    | 0     | 0     | 0   | 8    |
| NW    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 3    |
| TOTAL | 0    | 0    | 1    | 0    | 5    | 38   | 56   | 5    | 0    | 0     | 0     | 0   | 105  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 105  
TOTAL HOURS FOR THE PERIOD: 105

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 7/ 1/89 0100 TO 9/30/89 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 16.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | 1    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 3    | 9    | 0    | 0    | 0     | 0     | 0   | 12   |
| NE    | 0    | 0    | 0    | 0    | 0    | 11   | 9    | 1    | 0    | 0     | 0     | 0   | 21   |
| ENE   | 0    | 0    | 0    | 0    | 2    | 9    | 11   | 2    | 0    | 0     | 0     | 0   | 24   |
| E     | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 3    |
| ESE   | 0    | 0    | 1    | 0    | 0    | 3    | 3    | 2    | 0    | 0     | 0     | 0   | 9    |
| SE    | 0    | 0    | 0    | 0    | 3    | 8    | 1    | 0    | 0    | 0     | 0     | 0   | 12   |
| SSE   | 0    | 0    | 0    | 0    | 0    | 6    | 4    | 1    | 0    | 0     | 0     | 0   | 11   |
| S     | 0    | 0    | 0    | 0    | 3    | 6    | 7    | 0    | 0    | 0     | 0     | 0   | 16   |
| SSW   | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| SW    | 0    | 0    | 0    | 0    | 1    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | 3    |
| WSW   | 0    | 0    | 0    | 2    | 1    | 9    | 3    | 0    | 0    | 0     | 0     | 0   | 15   |
| W     | 0    | 0    | 0    | 0    | 1    | 18   | 8    | 0    | 0    | 0     | 0     | 0   | 27   |
| WNW   | 0    | 0    | 0    | 0    | 3    | 6    | 5    | 1    | 0    | 0     | 0     | 0   | 15   |
| NW    | 0    | 0    | 0    | 1    | 2    | 5    | 8    | 0    | 0    | 0     | 0     | 0   | 15   |
| NNW   | 0    | 0    | 0    | 0    | 2    | 6    | 5    | 0    | 0    | 0     | 0     | 0   | 13   |
| TOTAL | 0    | 0    | 1    | 2    | 10   | 93   | 76   | 8    | 0    | 0     | 0     | 0   | 198  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 198  
TOTAL HOURS FOR THE PERIOD: 198

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 1           | 0            | 0             | 0             | 3           |
| NNE         | 0           | 0           | 1           | 1           | 0           | 10          | 2           | 0           | 0            | 0             | 0             | 14          |
| NE          | 0           | 0           | 0           | 1           | 0           | 6           | 2           | 0           | 0            | 0             | 0             | 9           |
| ENE         | 0           | 0           | 0           | 0           | 0           | 4           | 4           | 2           | 0            | 0             | 0             | 10          |
| E           | 0           | 0           | 0           | 0           | 0           | 2           | 0           | 2           | 0            | 0             | 0             | 4           |
| ESE         | 0           | 0           | 0           | 0           | 0           | 0           | 3           | 0           | 0            | 0             | 0             | 3           |
| SE          | 0           | 0           | 0           | 0           | 2           | 5           | 2           | 0           | 0            | 0             | 0             | 9           |
| SSE         | 0           | 0           | 0           | 1           | 0           | 3           | 1           | 0           | 0            | 0             | 0             | 5           |
| S           | 0           | 0           | 0           | 1           | 2           | 4           | 3           | 0           | 0            | 0             | 0             | 10          |
| SSW         | 0           | 0           | 0           | 0           | 1           | 2           | 0           | 0           | 0            | 0             | 0             | 3           |
| SW          | 0           | 0           | 0           | 0           | 1           | 1           | 2           | 0           | 0            | 0             | 0             | 4           |
| WSW         | 0           | 0           | 0           | 0           | 1           | 3           | 1           | 0           | 0            | 0             | 0             | 5           |
| W           | 0           | 0           | 0           | 0           | 0           | 10          | 2           | 0           | 0            | 0             | 0             | 12          |
| WNW         | 0           | 0           | 0           | 0           | 3           | 7           | 0           | 0           | 0            | 0             | 0             | 10          |
| NW          | 0           | 0           | 0           | 0           | 1           | 2           | 5           | 0           | 0            | 0             | 0             | 8           |
| NNW         | 0           | 0           | 0           | 0           | 1           | 6           | 3           | 0           | 0            | 0             | 0             | 10          |
| TOTAL       | 0           | 0           | 1           | 4           | 12          | 67          | 30          | 5           | 0            | 0             | 0             | 119         |

NUMBER OF CALMS: 1  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 120  
TOTAL HOURS FOR THE PERIOD: 120



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 1    | 0    | 3    | 11   | 2    | 0    | 0     | 0     | 0   | 17   |
| NNE   | 0    | 0    | 0    | 1    | 2    | 18   | 24   | 1    | 0    | 0     | 0     | 0   | 46   |
| NE    | 0    | 1    | 1    | 4    | 10   | 17   | 17   | 0    | 0    | 0     | 0     | 0   | 50   |
| ENE   | 0    | 2    | 0    | 7    | 8    | 17   | 32   | 6    | 0    | 0     | 0     | 0   | 72   |
| E     | 0    | 0    | 1    | 5    | 7    | 7    | 3    | 3    | 0    | 0     | 0     | 0   | 26   |
| ESE   | 0    | 1    | 2    | 4    | 10   | 9    | 20   | 10   | 2    | 0     | 0     | 0   | 58   |
| SE    | 0    | 0    | 0    | 4    | 7    | 13   | 14   | 1    | 0    | 0     | 0     | 0   | 39   |
| SSE   | 0    | 1    | 1    | 3    | 3    | 10   | 5    | 0    | 0    | 0     | 0     | 0   | 23   |
| S     | 0    | 1    | 1    | 9    | 7    | 18   | 16   | 2    | 0    | 0     | 0     | 0   | 54   |
| SSW   | 0    | 1    | 4    | 4    | 9    | 12   | 9    | 3    | 0    | 0     | 0     | 0   | 42   |
| SW    | 0    | 2    | 0    | 10   | 8    | 13   | 5    | 1    | 0    | 0     | 0     | 0   | 39   |
| WSW   | 0    | 0    | 4    | 5    | 19   | 16   | 5    | 1    | 0    | 0     | 0     | 0   | 50   |
| W     | 0    | 0    | 2    | 8    | 11   | 21   | 3    | 0    | 0    | 0     | 0     | 0   | 45   |
| WNW   | 0    | 0    | 1    | 5    | 14   | 10   | 3    | 0    | 0    | 0     | 0     | 0   | 33   |
| NW    | 0    | 0    | 1    | 4    | 4    | 14   | 2    | 0    | 0    | 0     | 0     | 0   | 25   |
| NNW   | 0    | 0    | 0    | 3    | 3    | 14   | 29   | 0    | 0    | 0     | 0     | 0   | 49   |
| TOTAL | 0    | 9    | 18   | 77   | 122  | 212  | 198  | 30   | 2    | 0     | 0     | 0   | 668  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 668  
TOTAL HOURS FOR THE PERIOD: 668

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 7/ 1/89 01:00 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0     | 0     | 0   | 6    |
| NNE   | 0    | 0    | 0    | 1    | 5    | 13   | 15   | 0    | 0    | 0     | 0     | 0   | 34   |
| NE    | 0    | 0    | 1    | 0    | 5    | 28   | 31   | 1    | 0    | 0     | 0     | 0   | 66   |
| ENE   | 0    | 1    | 0    | 5    | 10   | 19   | 23   | 3    | 0    | 0     | 0     | 0   | 61   |
| E     | 0    | 0    | 2    | 12   | 9    | 15   | 2    | 0    | 0    | 0     | 0     | 0   | 40   |
| ESE   | 0    | 0    | 1    | 5    | 6    | 18   | 20   | 0    | 0    | 0     | 0     | 0   | 50   |
| SE    | 0    | 0    | 2    | 7    | 6    | 17   | 12   | 1    | 0    | 0     | 0     | 0   | 45   |
| SSE   | 0    | 2    | 1    | 6    | 5    | 12   | 5    | 0    | 0    | 0     | 0     | 0   | 31   |
| S     | 0    | 2    | 1    | 7    | 6    | 21   | 6    | 0    | 0    | 0     | 0     | 0   | 43   |
| SSW   | 0    | 0    | 0    | 4    | 2    | 21   | 16   | 0    | 0    | 0     | 0     | 0   | 43   |
| SW    | 0    | 0    | 1    | 5    | 8    | 25   | 3    | 0    | 0    | 0     | 0     | 0   | 42   |
| WSW   | 0    | 1    | 1    | 3    | 5    | 24   | 4    | 0    | 0    | 0     | 0     | 0   | 38   |
| W     | 0    | 0    | 1    | 2    | 7    | 7    | 3    | 0    | 0    | 0     | 0     | 0   | 20   |
| WNW   | 0    | 0    | 0    | 4    | 5    | 12   | 2    | 0    | 0    | 0     | 0     | 0   | 23   |
| NW    | 0    | 0    | 3    | 2    | 4    | 7    | 1    | 0    | 0    | 0     | 0     | 0   | 17   |
| NNW   | 0    | 0    | 1    | 1    | 1    | 2    | 5    | 0    | 0    | 0     | 0     | 0   | 10   |
| TOTAL | 0    | 6    | 15   | 64   | 84   | 241  | 154  | 5    | 0    | 0     | 0     | 0   | 569  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 569  
TOTAL HOURS FOR THE PERIOD: 569

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND<br>DIR | .22-<br>.50 | .51-<br>.75 | .76-<br>1.0 | 1.1-<br>1.5 | 1.6-<br>2.0 | 2.1-<br>3.0 | 3.1-<br>5.0 | 5.1-<br>7.0 | 7.1-<br>10.0 | 10.1-<br>13.0 | 13.1-<br>18.0 | >18<br>TOT. |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|
| N           | 0           | 0           | 0           | 0           | 0           | 0           | 3           | 0           | 0            | 0             | 0             | 3           |
| NNE         | 0           | 0           | 0           | 1           | 1           | 7           | 17          | 0           | 0            | 0             | 0             | 26          |
| NE          | 0           | 0           | 0           | 2           | 1           | 8           | 24          | 0           | 0            | 0             | 0             | 35          |
| ENE         | 1           | 0           | 1           | 4           | 6           | 10          | 9           | 0           | 0            | 0             | 0             | 31          |
| E           | 0           | 0           | 0           | 2           | 9           | 2           | 0           | 0           | 0            | 0             | 0             | 13          |
| ESE         | 0           | 0           | 1           | 0           | 12          | 7           | 6           | 0           | 0            | 0             | 0             | 26          |
| SE          | 0           | 3           | 0           | 1           | 7           | 5           | 4           | 0           | 0            | 0             | 0             | 20          |
| SSE         | 0           | 1           | 1           | 7           | 3           | 11          | 1           | 0           | 0            | 0             | 0             | 24          |
| S           | 0           | 0           | 1           | 5           | 1           | 4           | 1           | 0           | 0            | 0             | 0             | 12          |
| SSW         | 0           | 0           | 3           | 3           | 5           | 7           | 0           | 0           | 0            | 0             | 0             | 18          |
| SW          | 1           | 0           | 1           | 1           | 7           | 8           | 0           | 0           | 0            | 0             | 0             | 18          |
| WSW         | 0           | 2           | 1           | 6           | 5           | 2           | 2           | 0           | 0            | 0             | 0             | 18          |
| W           | 0           | 0           | 0           | 2           | 2           | 4           | 0           | 0           | 0            | 0             | 0             | 8           |
| WNW         | 0           | 1           | 1           | 1           | 2           | 7           | 3           | 0           | 0            | 0             | 0             | 15          |
| NW          | 0           | 0           | 0           | 0           | 3           | 4           | 1           | 1           | 0            | 0             | 0             | 9           |
| NNW         | 0           | 0           | 0           | 1           | 0           | 1           | 6           | 0           | 0            | 0             | 0             | 8           |
| TOTAL       | 2           | 7           | 10          | 36          | 64          | 87          | 77          | 1           | 0            | 0             | 0             | 284         |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 284  
TOTAL HOURS FOR THE PERIOD: 284



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS G

FROM 7/ 1/89 0100 TO 9/30/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NE    | 0    | 0    | 0    | 2    | 0    | 3    | 6    | 0    | 0    | 0     | 0     | 0   | 11   |
| ENE   | 0    | 0    | 0    | 1    | 1    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 5    |
| E     | 0    | 0    | 0    | 3    | 1    | 5    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| ESE   | 0    | 1    | 0    | 1    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| SE    | 0    | 0    | 0    | 2    | 3    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 8    |
| SSE   | 0    | 1    | 0    | 1    | 3    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| S     | 0    | 0    | 4    | 6    | 8    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 18   |
| SSW   | 0    | 1    | 0    | 2    | 1    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| SW    | 0    | 0    | 0    | 0    | 1    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| WSW   | 0    | 0    | 0    | 3    | 1    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| W     | 0    | 0    | 1    | 3    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| WNW   | 0    | 0    | 0    | 2    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| NW    | 0    | 1    | 2    | 1    | 2    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| NNW   | 0    | 0    | 0    | 1    | 0    | 3    | 1    | 0    | 0    | 0     | 0     | 0   | 5    |
| TOTAL | 0    | 4    | 7    | 28   | 24   | 32   | 10   | 0    | 0    | 0     | 0     | 0   | 105  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 1  
NUMBER OF VALID HOURS: 105  
TOTAL HOURS FOR THE PERIOD: 106

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 10/ 1/89 0100 TO 12/31/89 23100

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 1    | 6    | 4    | 17   | 44   | 4    | 0    | 0     | 0     | 0   | 76   |
| NNE   | 0    | 2    | 4    | 42   | 41   | 31   | 13   | 0    | 0    | 0     | 0     | 0   | 133  |
| NE    | 8    | 7    | 8    | 28   | 38   | 33   | 3    | 0    | 0    | 0     | 0     | 0   | 125  |
| ENE   | 37   | 21   | 17   | 40   | 22   | 25   | 17   | 1    | 0    | 0     | 0     | 0   | 180  |
| E     | 24   | 27   | 16   | 29   | 14   | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 116  |
| ESE   | 19   | 25   | 28   | 52   | 17   | 11   | 3    | 0    | 0    | 0     | 0     | 0   | 156  |
| SE    | 15   | 23   | 35   | 56   | 64   | 43   | 8    | 0    | 0    | 0     | 0     | 0   | 244  |
| SSE   | 8    | 11   | 15   | 43   | 28   | 70   | 23   | 0    | 0    | 0     | 0     | 0   | 200  |
| S     | 11   | 9    | 9    | 31   | 32   | 67   | 31   | 0    | 0    | 0     | 0     | 0   | 210  |
| SSW   | 10   | 6    | 5    | 23   | 18   | 12   | 14   | 2    | 0    | 0     | 0     | 0   | 89   |
| SW    | 11   | 10   | 8    | 18   | 21   | 18   | 8    | 0    | 0    | 0     | 0     | 0   | 94   |
| WSW   | 13   | 9    | 9    | 10   | 15   | 20   | 8    | 1    | 0    | 0     | 0     | 0   | 83   |
| W     | 7    | 13   | 7    | 13   | 6    | 18   | 0    | 0    | 0    | 0     | 0     | 0   | 64   |
| WNW   | 9    | 25   | 15   | 12   | 9    | 16   | 19   | 1    | 0    | 0     | 0     | 0   | 106  |
| NW    | 4    | 9    | 13   | 15   | 18   | 19   | 7    | 0    | 0    | 0     | 0     | 0   | 85   |
| NNW   | 3    | 1    | 3    | 18   | 19   | 43   | 119  | 3    | 0    | 0     | 0     | 0   | 209  |
| TOTAL | 179  | 198  | 193  | 437  | 366  | 449  | 339  | 11   | 0    | 0     | 0     | 0   | 2172 |

NUMBER OF CALHS: 27  
NUMBER OF INVALID HOURS: 7  
NUMBER OF VALID HOURS: 2199  
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 10/ 1/89 0100 TO 12/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 2    | 4    | 0    | 0    | 0     | 0     | 0   | 6    |
| NE    | 0    | 0    | 0    | 0    | 1    | 7    | 2    | 0    | 0    | 0     | 0     | 0   | 10   |
| NNE   | 0    | 0    | 0    | 0    | 2    | 8    | 2    | 0    | 0    | 0     | 0     | 0   | 12   |
| E     | 0    | 0    | 0    | 1    | 2    | 5    | 0    | 0    | 0    | 0     | 0     | 0   | 8    |
| ESE   | 0    | 0    | 0    | 0    | 3    | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| SE    | 0    | 0    | 1    | 0    | 2    | 13   | 3    | 0    | 0    | 0     | 0     | 0   | 19   |
| SSE   | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| S     | 0    | 0    | 0    | 0    | 0    | 3    | 5    | 0    | 0    | 0     | 0     | 0   | 8    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0     | 0     | 0   | 3    |
| SW    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| W     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 1    |
| NW    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    | 0     | 0     | 0   | 4    |
| TOTAL | 0    | 0    | 1    | 1    | 10   | 45   | 26   | 1    | 0    | 0     | 0     | 0   | 84   |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 84  
TOTAL HOURS FOR THE PERIOD: 84



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 10/ 1/89 01:00 TO 12/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1 | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|-----|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0 | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 3   | 0    | 0    | 0     | 0     | 0   | 3    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 4    | 1   | 0    | 0    | 0     | 0     | 0   | 5    |
| NE    | 0    | 0    | 0    | 1    | 5    | 6    | 0   | 0    | 0    | 0     | 0     | 0   | 12   |
| NNE   | 0    | 0    | 0    | 0    | 5    | 2    | 5   | 0    | 0    | 0     | 0     | 0   | 12   |
| E     | 0    | 0    | 0    | 3    | 1    | 1    | 0   | 0    | 0    | 0     | 0     | 0   | 5    |
| ESE   | 0    | 0    | 0    | 2    | 4    | 1    | 0   | 0    | 0    | 0     | 0     | 0   | 7    |
| SE    | 0    | 0    | 0    | 0    | 9    | 9    | 1   | 0    | 0    | 0     | 0     | 0   | 19   |
| ESE   | 0    | 0    | 0    | 0    | 0    | 9    | 6   | 0    | 0    | 0     | 0     | 0   | 15   |
| S     | 0    | 0    | 0    | 0    | 0    | 1    | 4   | 0    | 0    | 0     | 0     | 0   | 5    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0     | 0     | 0   | 1    |
| SW    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0     | 0     | 0   | 1    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 1    | 1   | 0    | 0    | 0     | 0     | 0   | 2    |
| W     | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0     | 0     | 0   | 0    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 2    | 3   | 0    | 0    | 0     | 0     | 0   | 5    |
| NW    | 0    | 0    | 0    | 0    | 2    | 3    | 1   | 0    | 0    | 0     | 0     | 0   | 6    |
| NNW   | 0    | 0    | 0    | 0    | 1    | 3    | 12  | 1    | 0    | 0     | 0     | 0   | 17   |
| TOTAL | 0    | 0    | 0    | 6    | 28   | 42   | 39  | 1    | 0    | 0     | 0     | 0   | 116  |

NUMBER OF CALKS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 116  
TOTAL HOURS FOR THE PERIOD: 116

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 10/ 1/89 0100 TO 12/31/89 23100

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 3    | 3    | 0    | 0     | 0     | 0   | 6    |
| NNE   | 0    | 0    | 0    | 1    | 2    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| NE    | 0    | 0    | 0    | 1    | 3    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| NNE   | 0    | 0    | 0    | 0    | 3    | 1    | 0    | 1    | 0    | 0     | 0     | 0   | 5    |
| E     | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 3    | 0     | 0     | 0   | 5    |
| ESE   | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| SE    | 0    | 0    | 0    | 3    | 4    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| SSE   | 0    | 0    | 0    | 0    | 4    | 4    | 3    | 0    | 0    | 0     | 0     | 0   | 10   |
| S     | 0    | 0    | 0    | 0    | 2    | 2    | 0    | 0    | 1    | 0     | 0     | 0   | 5    |
| SSW   | 0    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 2    |
| SW    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| WSW   | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 1    | 0    | 0     | 0     | 0   | 4    |
| W     | 0    | 0    | 0    | 0    | 1    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 4    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | 1    |
| NW    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 2    | 11   | 0    | 0    | 0     | 0     | 0   | 13   |
| TOTAL | 0    | 0    | 0    | 8    | 24   | 24   | 23   | 6    | 0    | 0     | 0     | 0   | 85   |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 85  
TOTAL HOURS FOR THE PERIOD: 85

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 10/ 1/89 01:00 TO 12/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | 18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |    |      |
| N     | 0    | 0    | 0    | 3    | 1    | 12   | 37   | 1    | 0    | 0     | 0     | 0  | 54   |
| NNE   | 0    | 0    | 0    | 5    | 22   | 18   | 8    | 0    | 0    | 0     | 0     | 0  | 53   |
| NNE   | 0    | 2    | 1    | 13   | 17   | 13   | 1    | 0    | 0    | 0     | 0     | 0  | 47   |
| NNE   | 0    | 1    | 1    | 11   | 7    | 13   | 9    | 0    | 0    | 0     | 0     | 0  | 42   |
| NNE   | 0    | 0    | 4    | 12   | 6    | 0    | 0    | 0    | 0    | 0     | 0     | 0  | 22   |
| NNE   | 0    | 2    | 8    | 22   | 8    | 3    | 3    | 0    | 0    | 0     | 0     | 0  | 41   |
| NNE   | 0    | 1    | 2    | 19   | 18   | 11   | 4    | 0    | 0    | 0     | 0     | 0  | 55   |
| NNE   | 0    | 0    | 2    | 14   | 12   | 34   | 11   | 0    | 0    | 0     | 0     | 0  | 53   |
| NNE   | 0    | 1    | 0    | 12   | 11   | 47   | 34   | 0    | 0    | 0     | 0     | 0  | 105  |
| NNE   | 0    | 0    | 1    | 9    | 6    | 8    | 9    | 0    | 0    | 0     | 0     | 0  | 33   |
| NNE   | 0    | 0    | 1    | 11   | 13   | 17   | 7    | 0    | 0    | 0     | 0     | 0  | 48   |
| NNE   | 0    | 0    | 2    | 6    | 12   | 16   | 6    | 0    | 0    | 0     | 0     | 0  | 42   |
| NNE   | 0    | 1    | 1    | 8    | 5    | 11   | 0    | 0    | 0    | 0     | 0     | 0  | 26   |
| NNE   | 1    | 0    | 1    | 5    | 5    | 11   | 15   | 0    | 0    | 0     | 0     | 0  | 41   |
| NNE   | 0    | 0    | 1    | 4    | 11   | 14   | 2    | 0    | 0    | 0     | 0     | 0  | 32   |
| NNE   | 0    | 0    | 0    | 3    | 11   | 33   | 56   | 1    | 0    | 0     | 0     | 0  | 104  |
| TOTAL | 1    | 0    | 21   | 137  | 166  | 161  | 333  | 2    | 0    | 0     | 0     | 0  | 849  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 849  
TOTAL HOURS FOR THE PERIOD: 849



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 10/ 1/89 0400 TO 12/31/89 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| NNE   | 0    | 0    | 0    | 2    | 3    | 3    | 1    | 0    | 0    | 0     | 0     | 0   | 11   |
| N     | 0    | 1    | 1    | 15   | 15   | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 38   |
| NNE   | 0    | 0    | 2    | 7    | 7    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 19   |
| ENE   | 0    | 2    | 3    | 15   | 5    | 1    | 1    | 0    | 0    | 0     | 0     | 0   | 27   |
| E     | 0    | 3    | 6    | 10   | 4    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 23   |
| ESE   | 1    | 11   | 17   | 24   | 1    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 55   |
| SE    | 2    | 11   | 22   | 31   | 30   | 8    | 0    | 0    | 0    | 0     | 0     | 0   | 104  |
| SSE   | 0    | 4    | 6    | 24   | 12   | 13   | 3    | 0    | 0    | 0     | 0     | 0   | 74   |
| S     | 0    | 0    | 5    | 15   | 18   | 16   | 2    | 0    | 0    | 0     | 0     | 0   | 56   |
| SSW   | 1    | 3    | 2    | 5    | 10   | 4    | 1    | 0    | 0    | 0     | 0     | 0   | 26   |
| SW    | 1    | 4    | 3    | 5    | 7    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 20   |
| WSW   | 1    | 2    | 5    | 4    | 2    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 15   |
| W     | 1    | 2    | 3    | 4    | 0    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| WNW   | 0    | 6    | 3    | 3    | 3    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 17   |
| NW    | 1    | 4    | 5    | 7    | 2    | 0    | 2    | 0    | 0    | 0     | 0     | 0   | 21   |
| NNW   | 0    | 0    | 3    | 3    | 7    | 0    | 4    | 1    | 0    | 0     | 0     | 0   | 27   |
| TOTAL | 5    | 53   | 56   | 176  | 126  | 76   | 18   | 1    | 0    | 0     | 0     | 0   | 544  |

NUMBER OF GAPS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 544  
TOTAL HOURS FOR THE PERIOD: 544

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 10/ 1/89 0100 TO 12/31/89 23100

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| NNE   | 0    | 0    | 1    | 14   | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 17   |
| NE    | 1    | 2    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 5    |
| ENE   | 2    | 2    | 4    | 5    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| E     | 2    | 7    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| ESE   | 3    | 4    | 6    | 3    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 18   |
| SE    | 3    | 6    | 10   | 3    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 23   |
| SSE   | 0    | 4    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 14   |
| S     | 1    | 4    | 2    | 4    | 1    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 12   |
| BSW   | 4    | 2    | 1    | 7    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 16   |
| SW    | 2    | 3    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| WSW   | 4    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| W     | 0    | 3    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 7    |
| WNW   | 1    | 2    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| NW    | 0    | 1    | 3    | 3    | 2    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 9    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| TOTAL | 22   | 31   | 46   | 38   | 8    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 188  |

NUMBER OF DALKS: 2  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 190  
TOTAL HOURS FOR THE PERIOD: 190

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 10/1/89 0100 TO 12/31/89 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| NNE   | 0    | 1    | 2    | 7    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 10   |
| NE    | 7    | 3    | 4    | 3    | 4    | 1    | 2    | 0    | 0    | 0     | 0     | 0   | 24   |
| ENE   | 35   | 16   | 9    | 9    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 59   |
| E     | 22   | 17   | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 40   |
| ESE   | 13   | 8    | 2    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 24   |
| SE    | 10   | 3    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| SSE   | 8    | 3    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| S     | 10   | 4    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 16   |
| SSW   | 5    | 1    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 8    |
| SW    | 8    | 3    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| WSW   | 8    | 2    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 11   |
| W     | 6    | 7    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 13   |
| WNW   |      | 11   | 0    | 3    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 26   |
| NW    | 3    | 4    | 4    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 12   |
| NNW   | 1    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| TOTAL | 145  | 86   | 39   | 31   | 4    | 1    | 0    | 0    | 0    | 0     | 0     | 0   | 306  |

NUMBER OF CALMS: 25  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 331  
TOTAL HOURS FOR THE PERIOD: 331



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
ALL STABILITY CLASSES

FROM 10/ 1/89 0100 TO 12/31/89 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | 18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |    |      |
| N     | 0    | 0    | 0    | 1    | 0    | 11   | 54   | 30   | 8    | 0     | 0     | 0  | 104  |
| NNE   | 0    | 0    | 0    | 2    | 2    | 36   | 56   | 9    | 0    | 0     | 0     | 0  | 104  |
| NE    | 0    | 0    | 2    | 3    | 9    | 46   | 83   | 3    | 0    | 0     | 0     | 0  | 146  |
| ENE   | 1    | 0    | 4    | 3    | 12   | 48   | 119  | 17   | 0    | 0     | 0     | 0  | 204  |
| E     | 0    | 1    | 1    | 11   | 17   | 60   | 30   | 1    | 0    | 0     | 0     | 0  | 121  |
| ESE   | 0    | 1    | 2    | 6    | 14   | 56   | 121  | 12   | 0    | 0     | 0     | 0  | 212  |
| SE    | 0    | 0    | 2    | 12   | 12   | 54   | 119  | 11   | 0    | 0     | 0     | 0  | 210  |
| SSE   | 1    | 0    | 0    | 4    | 13   | 58   | 74   | 5    | 0    | 0     | 0     | 0  | 165  |
| S     | 0    | 0    | 0    | 5    | 20   | 70   | 104  | 18   | 0    | 0     | 0     | 0  | 217  |
| SSW   | 0    | 1    | 0    | 9    | 7    | 31   | 42   | 6    | 0    | 0     | 0     | 0  | 96   |
| SW    | 0    | 0    | 0    | 8    | 13   | 35   | 35   | 4    | 0    | 0     | 0     | 0  | 95   |
| WSW   | 0    | 2    | 0    | 8    | 16   | 45   | 22   | 8    | 1    | 0     | 0     | 0  | 102  |
| W     | 0    | 2    | 1    | 6    | 10   | 25   | 16   | 0    | 0    | 0     | 0     | 0  | 60   |
| WNW   | 0    | 0    | 0    | 4    | 9    | 27   | 26   | 14   | 0    | 0     | 0     | 0  | 80   |
| NW    | 0    | 0    | 0    | 3    | 8    | 34   | 36   | 13   | 2    | 0     | 0     | 0  | 95   |
| NNW   | 0    | 0    | 0    | 2    | 5    | 24   | 75   | 80   | 2    | 0     | 0     | 0  | 188  |
| TOTAL | 2    | 7    | 12   | 89   | 164  | 670  | 1012 | 230  | 13   | 0     | 0     | 0  | 2199 |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 9  
NUMBER OF VALID HOURS: 2199  
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS A

FROM 10/ 1/89 0100 TO 12/31/89 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 0    | 3    | 2    | 0    | 0     | 0     | 0   | 5    |
| NE    | 0    | 0    | 0    | 0    | 0    | 3    | 7    | 0    | 0    | 0     | 0     | 0   | 10   |
| ENE   | 0    | 0    | 0    | 0    | 0    | 2    | 10   | 3    | 0    | 0     | 0     | 0   | 15   |
| E     | 0    | 0    | 0    | 0    | 0    | 3    | 6    | 0    | 0    | 0     | 0     | 0   | 9    |
| ESE   | 0    | 0    | 0    | 0    | 0    | 0    | 13   | 4    | 0    | 0     | 0     | 0   | 17   |
| SE    | 0    | 0    | 0    | 1    | 0    | 1    | 7    | 0    | 0    | 0     | 0     | 0   | 9    |
| SSE   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| S     | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 2    | 0    | 0     | 0     | 0   | 8    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 3    | 0    | 0     | 0     | 0   | 3    |
| SW    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0     | 0     | 0   | 1    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| W     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0   | 0    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| NW    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0     | 0     | 0   | 3    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 0     | 0     | 0   | 3    |
| TOTAL | 0    | 0    | 0    | 1    | 0    | 9    | 56   | 18   | 0    | 0     | 0     | 0   | 84   |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 84  
TOTAL HOURS FOR THE PERIOD: 84

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS B

FROM 10/ 1/89 0100 TO 12/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .20- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | 18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |    |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | 0     | 0     | 0  | 3    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 3    | 3    | 4    | 0    | 0     | 0     | 0  | 10   |
| NE    | 0    | 0    | 0    | 0    | 1    | 3    | 5    | 0    | 0    | 0     | 0     | 0  | 9    |
| ENE   | 0    | 0    | 0    | 0    | 0    | 2    | 10   | 1    | 0    | 0     | 0     | 0  | 13   |
| E     | 0    | 0    | 0    | 0    | 0    | 3    | 2    | 0    | 0    | 0     | 0     | 0  | 5    |
| ESE   | 0    | 0    | 0    | 0    | 1    | 10   | 3    | 0    | 0    | 0     | 0     | 0  | 14   |
| SE    | 0    | 0    | 0    | 0    | 0    | 7    | 9    | 2    | 0    | 0     | 0     | 0  | 18   |
| SSE   | 0    | 0    | 0    | 0    | 0    | 1    | 5    | 2    | 0    | 0     | 0     | 0  | 8    |
| S     | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 1    | 0    | 0     | 0     | 0  | 5    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0  | 2    |
| SW    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0  | 0    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0     | 0     | 0  | 2    |
| W     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0  | 1    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 0    | 3    | 2    | 0    | 0     | 0     | 0  | 5    |
| NW    | 0    | 0    | 0    | 0    | 0    | 3    | 2    | 4    | 1    | 0     | 0     | 0  | 10   |
| NNW   | 0    | 0    | 0    | 0    | 0    | 1    | 3    | 7    | 0    | 0     | 0     | 0  | 11   |
| TOTAL | 0    | 0    | 0    | 0    | 2    | 33   | 55   | 25   | 1    | 0     | 0     | 0  | 116  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 116  
TOTAL HOURS FOR THE PERIOD: 116



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS C

FROM 10/ 1/89 0100 TO 12/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .31- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 4    | 0     | 0     | 0   | 7    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 3    | 0    | 0    | 0    | 0     | 0     | 0   | 3    |
| NE    | 0    | 0    | 0    | 0    | 1    | 3    | 3    | 0    | 0    | 0     | 0     | 0   | 7    |
| ENE   | 0    | 0    | 0    | 0    | 1    | 1    | 3    | 1    | 0    | 0     | 0     | 0   | 6    |
| E     | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0     | 0     | 0   | 6    |
| ESE   | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 3    |
| SE    | 0    | 0    | 0    | 0    | 3    | 3    | 2    | 0    | 0    | 0     | 0     | 0   | 8    |
| SSE   | 0    | 0    | 0    | 0    | 1    | 3    | 2    | 0    | 0    | 0     | 0     | 0   | 8    |
| S     | 2    | 0    | 0    | 0    | 0    | 0    | 3    | 2    | 0    | 0     | 0     | 0   | 5    |
| SSW   | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0     | 0     | 0   | 1    |
| SW    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0     | 0     | 0   | 2    |
| WSW   | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    | 1    | 0     | 0     | 0   | 5    |
| W     | 0    | 0    | 0    | 0    | 0    | 2    | 3    | 0    | 0    | 0     | 0     | 0   | 5    |
| WNW   | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 0    | 0     | 0     | 0   | 3    |
| NW    | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 1    | 0    | 0     | 0     | 0   | 4    |
| NNW   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 2    | 0    | 0     | 0     | 0   | 12   |
| TOTAL | 0    | 0    | 0    | 0    | 6    | 34   | 26   | 14   | 5    | 0     | 0     | 0   | 85   |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 2  
NUMBER OF VALID HOURS: 85  
TOTAL HOURS FOR THE PERIOD: 85

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS D

FROM 10/ 1/89 0100 TO 12/31/89 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >13 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 1    | 0    | 4    | 35   | 26   | 4    | 0     | 0     | 0   | 70   |
| NNE   | 0    | 0    | 0    | 2    | 1    | 9    | 30   | 2    | 0    | 0     | 0     | 0   | 44   |
| NE    | 0    | 0    | 1    | 3    | 4    | 23   | 24   | 1    | 0    | 0     | 0     | 0   | 56   |
| ENE   | 0    | 0    | 2    | 2    | 7    | 17   | 29   | 6    | 0    | 0     | 0     | 0   | 63   |
| E     | 0    | 0    | 1    | 3    | 5    | 10   | 5    | 0    | 0    | 0     | 0     | 0   | 24   |
| ESE   | 0    | 1    | 0    | 2    | 5    | 10   | 17   | 3    | 0    | 0     | 0     | 0   | 41   |
| SE    | 0    | 0    | 1    | 5    | 3    | 11   | 28   | 6    | 0    | 0     | 0     | 0   | 56   |
| SSE   | 0    | 0    | 0    | 1    | 6    | 12   | 21   | 3    | 0    | 0     | 0     | 0   | 43   |
| S     | 0    | 0    | 0    | 1    | 10   | 26   | 55   | 11   | 0    | 0     | 0     | 0   | 103  |
| SSW   | 0    | 0    | 0    | 6    | 2    | 12   | 16   | 3    | 0    | 0     | 0     | 0   | 39   |
| SW    | 0    | 0    | 0    | 3    | 4    | 10   | 15   | 3    | 0    | 0     | 0     | 0   | 35   |
| WSW   | 0    | 0    | 0    | 1    | 11   | 18   | 11   | 8    | 0    | 0     | 0     | 0   | 49   |
| W     | 0    | 0    | 1    | 3    | 6    | 12   | 8    | 0    | 0    | 0     | 0     | 0   | 30   |
| WNW   | 0    | 0    | 0    | 1    | 6    | 6    | 15   | 11   | 0    | 0     | 0     | 0   | 39   |
| NW    | 0    | 0    | 0    | 2    | 4    | 12   | 16   | 4    | 0    | 0     | 0     | 0   | 38   |
| NNW   | 0    | 0    | 0    | 1    | 2    | 11   | 44   | 60   | 1    | 0     | 0     | 0   | 119  |
| TOTAL | 0    | 1    | 6    | 37   | 81   | 203  | 369  | 147  | 5    | 0     | 0     | 0   | 849  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 849  
TOTAL HOURS FOR THE PERIOD: 849

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS E

FROM 10/ 1/89 0:00 TO 12/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .78- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | 18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |    |      |
| N     | 0    | 0    | 0    | 0    | 0    | 7    | 9    | 1    | 0    | 0     | 0     | 0  | 17   |
| NNE   | 0    | 0    | 0    | 0    | 0    | 17   | 16   | 0    | 0    | 0     | 0     | 0  | 33   |
| NE    | 0    | 0    | 0    | 0    | 0    | 10   | 18   | 2    | 0    | 0     | 0     | 0  | 32   |
| ENE   | 0    | 0    | 0    | 1    | 0    | 11   | 35   | 5    | 0    | 0     | 0     | 0  | 55   |
| E     | 0    | 1    | 0    | 2    | 3    | 8    | 5    | 1    | 0    | 0     | 0     | 0  | 21   |
| ESE   | 0    | 0    | 0    | 0    | 1    | 17   | 52   | 5    | 0    | 0     | 0     | 0  | 75   |
| SE    | 0    | 0    | 1    | 2    | 1    | 18   | 44   | 3    | 0    | 0     | 0     | 0  | 69   |
| SSE   | 0    | 0    | 0    | 0    | 4    | 26   | 34   | 0    | 0    | 0     | 0     | 0  | 64   |
| S     | 0    | 0    | 0    | 2    | 3    | 26   | 30   | 2    | 0    | 0     | 0     | 0  | 63   |
| SSW   | 0    | 1    | 0    | 1    | 1    | 3    | 15   | 0    | 0    | 0     | 0     | 0  | 23   |
| SW    | 0    | 0    | 0    | 1    | 0    | 4    | 9    | 0    | 0    | 0     | 0     | 0  | 16   |
| WSW   | 0    | 0    | 0    | 2    | 3    | 5    | 2    | 0    | 0    | 0     | 0     | 0  | 12   |
| W     | 0    | 1    | 0    | 2    | 1    | 4    | 1    | 0    | 0    | 0     | 0     | 0  | 9    |
| WNW   | 0    | 0    | 0    | 1    | 1    | 8    | 3    | 0    | 0    | 0     | 0     | 0  | 13   |
| W     | 0    | 0    | 0    | 2    | 0    | 3    | 4    | 3    | 1    | 0     | 0     | 0  | 13   |
| NNW   | 0    | 0    | 0    | 0    | 3    | 5    | 14   | 3    | 1    | 0     | 0     | 0  | 29   |
| TOTAL | 0    | 3    | 1    | 16   | 28   | 177  | 292  | 25   | 2    | 0     | 0     | 0  | 544  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 544  
TOTAL HOURS FOR THE PERIOD: 544



RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS F

FROM 10/ 1/89 0:00 TO 12/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .31- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    | 0     | 0     | 0   | 4    |
| NNE   | 0    | 0    | 0    | 0    | 1    | 3    | 1    | 0    | 0    | 0     | 0     | 0   | 5    |
| NE    | 0    | 0    | 0    | 0    | 1    | 4    | 13   | 0    | 0    | 0     | 0     | 0   | 18   |
| ENE   | 0    | 0    | 1    | 0    | 1    | 5    | 14   | 1    | 0    | 0     | 0     | 0   | 22   |
| E     | 0    | 0    | 0    | 1    | 2    | 9    | 1    | 0    | 0    | 0     | 0     | 0   | 13   |
| ESE   | 0    | 0    | 0    | 0    | 1    | 6    | 14   | 0    | 0    | 0     | 0     | 0   | 21   |
| SE    | 0    | 0    | 0    | 1    | 1    | 6    | 15   | 0    | 0    | 0     | 0     | 0   | 23   |
| SSE   | 0    | 0    | 0    | 0    | 0    | 10   | 4    | 0    | 0    | 0     | 0     | 0   | 14   |
| S     | 0    | 0    | 0    | 0    | 2    | 1    | 2    | 0    | 0    | 0     | 0     | 0   | 5    |
| SSW   | 0    | 0    | 0    | 0    | 1    | 3    | 4    | 0    | 0    | 0     | 0     | 0   | 8    |
| SW    | 0    | 0    | 0    | 0    | 1    | 7    | 4    | 0    | 0    | 0     | 0     | 0   | 12   |
| WSW   | 0    | 0    | 0    | 0    | 2    | 8    | 1    | 0    | 0    | 0     | 0     | 0   | 11   |
| W     | 0    | 0    | 0    | 1    | 1    | 3    | 1    | 0    | 0    | 0     | 0     | 0   | 6    |
| WNW   | 0    | 0    | 0    | 1    | 0    | 4    | 1    | 0    | 0    | 0     | 0     | 0   | 6    |
| NW    | 0    | 0    | 0    | 0    | 1    | 7    | 4    | 0    | 0    | 0     | 0     | 0   | 12   |
| NNW   | 0    | 0    | 0    | 0    | 0    | 2    | 8    | 0    | 0    | 0     | 0     | 0   | 10   |
| TOTAL | 0    | 0    | 1    | 4    | 15   | 78   | 91   | 1    | 0    | 0     | 0     | 0   | 190  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 190  
TOTAL HOURS FOR THE PERIOD: 190

RIVER BEND STATION  
JOINT FREQUENCY TABLE  
STABILITY CLASS 5

FROM 10/ 1/89 01:00 TO 12/31/89 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

| WIND  | .22- | .51- | .76- | 1.1- | 1.6- | 2.1- | 3.1- | 5.1- | 7.1- | 10.1- | 13.1- | >18 | TOT. |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-----|------|
| DIR   | .50  | .75  | 1.0  | 1.5  | 2.0  | 3.0  | 5.0  | 7.0  | 10.0 | 13.0  | 18.0  |     |      |
| N     | 0    | 0    | 0    | 0    | 0    | 0    | 3    | 0    | 0    | 0     | 0     | 0   | 3    |
| NNE   | 0    | 0    | 0    | 0    | 0    | 1    | 3    | 0    | 0    | 0     | 0     | 0   | 4    |
| NE    | 0    | 0    | 1    | 0    | 0    | 0    | 12   | 0    | 0    | 0     | 0     | 0   | 14   |
| ENE   | 1    | 0    | 1    | 0    | 0    | 10   | 18   | 0    | 0    | 0     | 0     | 0   | 30   |
| E     | 0    | 0    | 0    | 5    | 7    | 21   | 10   | 0    | 0    | 0     | 0     | 0   | 43   |
| ESE   | 0    | 0    | 2    | 4    | 3    | 11   | 21   | 0    | 0    | 0     | 0     | 0   | 41   |
| SE    | 0    | 0    | 0    | 3    | 2    | 8    | 14   | 0    | 0    | 0     | 0     | 0   | 27   |
| SSE   | 1    | 0    | 0    | 3    | 2    | 14   | 8    | 0    | 0    | 0     | 0     | 0   | 28   |
| S     | 0    | 0    | 0    | 2    | 3    | 17   | 4    | 0    | 0    | 0     | 0     | 0   | 28   |
| SSW   | 0    | 0    | 0    | 2    | 3    | 11   | 4    | 0    | 0    | 0     | 0     | 0   | 20   |
| SW    | 0    | 0    | 0    | 4    | 4    | 12   | 7    | 0    | 0    | 0     | 0     | 0   | 29   |
| WSW   | 0    | 2    | 0    | 3    | 0    | 10   | 6    | 0    | 0    | 0     | 0     | 0   | 23   |
| W     | 0    | 1    | 0    | 0    | 12   | 4    | 2    | 0    | 0    | 0     | 0     | 0   | 9    |
| WNW   | 0    | 0    | 0    | 1    | 1    | 8    | 2    | 0    | 0    | 0     | 0     | 0   | 13   |
| NW    | 0    | 0    | 0    | 1    | 0    | 7    | 7    | 0    | 0    | 0     | 0     | 0   | 15   |
| NNW   | 0    | 0    | 0    | 1    | 0    | 2    | 1    | 0    | 0    | 0     | 0     | 0   | 4    |
| TOTAL | 2    | 3    | 4    | 31   | 32   | 136  | 123  | 0    | 0    | 0     | 0     | 0   | 331  |

NUMBER OF CALMS: 0  
NUMBER OF INVALID HOURS: 0  
NUMBER OF VALID HOURS: 331  
TOTAL HOURS FOR THE PERIOD: 331

**Table 16**

**Atmospheric Dispersion Factors**

**1989**



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.227E-05                 |
| NNW                | 0.60     | 960    | 0.156E-05                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.142E-07      |
| NNW                | 0.60     | 960    | 0.161E-07      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.793E-06                 |
| NNW                | 0.81     | 1300   | 0.104E-05                 |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.348E-08      |
| NNW                | 0.81     | 1300   | 0.996E-08      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 902      | 275    | 0.152E-04                 |
| SW                 | 8202     | 2500   | 0.469E-06                 |
| WNW                | 1640     | 500    | 0.922E-05                 |
| ENE                | 377      | 115    | 0.367E-04                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 902      | 275    | 0.113E-06      |
| SW                 | 8202     | 2500   | 0.259E-08      |
| WNW                | 1640     | 500    | 0.407E-07      |
| ENE                | 377      | 115    | 0.591E-07      |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.119E-05 | 0.270E-06 | 0.102E-06 | 0.397E-07 | 0.179E-07 | 0.682E-08 | 0.342E-08 | 0.342E-08 | 0.216E-08 | 0.153E-08 |
| SSW                | 0.234E-05 | 0.454E-06 | 0.171E-06 | 0.103E-06 | 0.691E-07 | 0.322E-07 | 0.130E-07 | 0.685E-08 | 0.448E-08 | 0.326E-08 |
| SW                 | 0.314E-05 | 0.441E-06 | 0.171E-06 | 0.101E-06 | 0.674E-07 | 0.314E-07 | 0.127E-07 | 0.675E-08 | 0.443E-08 | 0.323E-08 |
| WSW                | 0.195E-05 | 0.314E-06 | 0.128E-06 | 0.763E-07 | 0.509E-07 | 0.237E-07 | 0.962E-08 | 0.509E-08 | 0.334E-08 | 0.244E-08 |
| W                  | 0.168E-05 | 0.230E-06 | 0.930E-07 | 0.569E-07 | 0.388E-07 | 0.190E-07 | 0.821E-08 | 0.455E-08 | 0.308E-08 | 0.230E-08 |
| WNW                | 0.444E-05 | 0.626E-06 | 0.238E-06 | 0.165E-06 | 0.106E-06 | 0.433E-07 | 0.176E-07 | 0.935E-08 | 0.616E-08 | 0.451E-08 |
| NW                 | 0.338E-05 | 0.541E-06 | 0.224E-06 | 0.138E-06 | 0.983E-07 | 0.493E-07 | 0.268E-07 | 0.143E-07 | 0.587E-08 | 0.437E-08 |
| NNW                | 0.186E-05 | 0.345E-06 | 0.138E-06 | 0.945E-07 | 0.623E-07 | 0.314E-07 | 0.131E-07 | 0.668E-08 | 0.429E-08 | 0.242E-08 |
| N                  | 0.312E-05 | 0.681E-06 | 0.298E-06 | 0.181E-06 | 0.120E-06 | 0.610E-07 | 0.233E-07 | 0.119E-07 | 0.763E-08 | 0.548E-08 |
| NNE                | 0.280E-05 | 0.564E-06 | 0.234E-06 | 0.136E-06 | 0.899E-07 | 0.455E-07 | 0.173E-07 | 0.883E-08 | 0.567E-08 | 0.408E-08 |
| NE                 | 0.180E-05 | 0.307E-06 | 0.141E-06 | 0.775E-07 | 0.567E-07 | 0.347E-07 | 0.169E-07 | 0.894E-08 | 0.588E-08 | 0.431E-08 |
| ENE                | 0.142E-05 | 0.237E-06 | 0.910E-07 | 0.495E-07 | 0.323E-07 | 0.220E-07 | 0.973E-08 | 0.523E-08 | 0.347E-08 | 0.253E-08 |
| E                  | 0.197E-05 | 0.256E-06 | 0.100E-06 | 0.569E-07 | 0.384E-07 | 0.260E-07 | 0.144E-07 | 0.912E-08 | 0.611E-08 | 0.454E-08 |
| ESE                | 0.116E-05 | 0.195E-06 | 0.748E-07 | 0.423E-07 | 0.292E-07 | 0.140E-07 | 0.570E-08 | 0.272E-08 | 0.180E-08 | 0.132E-08 |
| SE                 | 0.115E-05 | 0.232E-06 | 0.905E-07 | 0.499E-07 | 0.334E-07 | 0.155E-07 | 0.625E-08 | 0.331E-08 | 0.218E-08 | 0.160E-08 |
| SSE                | 0.116E-05 | 0.218E-06 | 0.862E-07 | 0.502E-07 | 0.327E-07 | 0.144E-07 | 0.540E-08 | 0.270E-08 | 0.171E-08 | 0.122E-08 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.158E-07 | 0.240E-08 | 0.704E-09 | 0.370E-09 | 0.221E-09 | 0.815E-10 | 0.246E-10 | 0.106E-10 | 0.612E-11 | 0.408E-11 |
| SSW                | 0.203E-07 | 0.299E-08 | 0.883E-09 | 0.462E-09 | 0.276E-09 | 0.102E-09 | 0.306E-10 | 0.132E-10 | 0.781E-11 | 0.536E-11 |
| SW                 | 0.210E-07 | 0.267E-08 | 0.824E-09 | 0.428E-09 | 0.255E-09 | 0.943E-10 | 0.287E-10 | 0.127E-10 | 0.757E-11 | 0.520E-11 |
| WSW                | 0.150E-07 | 0.202E-08 | 0.647E-09 | 0.339E-09 | 0.202E-09 | 0.749E-10 | 0.226E-10 | 0.980E-11 | 0.579E-11 | 0.396E-11 |
| W                  | 0.700E-08 | 0.867E-09 | 0.271E-09 | 0.141E-09 | 0.846E-10 | 0.314E-10 | 0.964E-11 | 0.431E-11 | 0.269E-11 | 0.195E-11 |
| WNW                | 0.236E-07 | 0.305E-08 | 0.927E-09 | 0.489E-09 | 0.290E-09 | 0.104E-09 | 0.316E-10 | 0.137E-10 | 0.821E-11 | 0.570E-11 |
| NW                 | 0.175E-07 | 0.228E-08 | 0.692E-09 | 0.354E-09 | 0.211E-09 | 0.114E-09 | 0.467E-10 | 0.194E-10 | 0.604E-11 | 0.429E-11 |
| NNW                | 0.202E-07 | 0.244E-08 | 0.732E-09 | 0.384E-09 | 0.229E-09 | 0.102E-09 | 0.355E-10 | 0.144E-10 | 0.776E-11 | 0.429E-11 |
| N                  | 0.321E-07 | 0.408E-08 | 0.125E-08 | 0.651E-09 | 0.420E-09 | 0.209E-09 | 0.668E-10 | 0.273E-10 | 0.147E-10 | 0.913E-11 |
| NNE                | 0.300E-07 | 0.368E-08 | 0.113E-08 | 0.579E-09 | 0.361E-09 | 0.176E-09 | 0.558E-10 | 0.226E-10 | 0.122E-10 | 0.756E-11 |
| NE                 | 0.121E-07 | 0.155E-08 | 0.477E-09 | 0.240E-09 | 0.142E-09 | 0.815E-10 | 0.281E-10 | 0.114E-10 | 0.615E-11 | 0.382E-11 |
| ENE                | 0.827E-08 | 0.114E-08 | 0.350E-09 | 0.178E-09 | 0.105E-09 | 0.505E-10 | 0.173E-10 | 0.717E-11 | 0.384E-11 | 0.239E-11 |
| E                  | 0.105E-07 | 0.123E-08 | 0.370E-09 | 0.185E-09 | 0.110E-09 | 0.475E-10 | 0.250E-10 | 0.100E-10 | 0.545E-11 | 0.341E-11 |
| ESE                | 0.909E-08 | 0.128E-08 | 0.399E-09 | 0.201E-09 | 0.123E-09 | 0.452E-10 | 0.136E-10 | 0.601E-11 | 0.354E-11 | 0.239E-11 |
| SE                 | 0.705E-08 | 0.122E-08 | 0.376E-09 | 0.193E-09 | 0.115E-09 | 0.418E-10 | 0.122E-10 | 0.511E-11 | 0.295E-11 | 0.201E-11 |
| SSE                | 0.175E-07 | 0.231E-08 | 0.709E-08 | 0.364E-09 | 0.216E-09 | 0.784E-10 | 0.234E-10 | 0.993E-11 | 0.569E-11 | 0.377E-11 |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.344E-04                 |
| NNW                | 0.60     | 960    | 0.186E-04                 |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.673E-07      |
| NNW                | 0.60     | 960    | 0.456E-07      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.715E-05                 |
| NNW                | 0.81     | 1300   | 0.109E-04                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.123E-07      |
| NNW                | 0.81     | 1300   | 0.255E-07      |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 820      | 250    | 0.198E-03                 |
| SW                 | 8202     | 2500   | 0.138E-05                 |
| WNW                | 1558     | 475    | 0.848E-04                 |
| ENE                | 410      | 125    | 0.339E-03                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 820      | 250    | 0.631E-06      |
| SW                 | 8202     | 2500   | 0.370E-08      |
| WNW                | 1558     | 475    | 0.125E-06      |
| ENE                | 410      | 125    | 0.332E-06      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASES FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | <u>0.500</u> | <u>1.500</u> | <u>2.500</u> | <u>3.500</u> | <u>4.500</u> | <u>7.500</u> | <u>15.00</u> | <u>25.00</u> | <u>35.00</u> | <u>45.00</u> |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| S                  | 0.626E-05    | 0.584E-06    | 0.189E-06    | 0.949E-07    | 0.584E-07    | 0.239E-07    | 0.857E-08    | 0.421E-08    | 0.264E-08    | 0.186E-08    |
| SSW                | 0.196E-04    | 0.200E-05    | 0.666E-06    | 0.340E-06    | 0.213E-06    | 0.893E-07    | 0.338E-07    | 0.177E-07    | 0.116E-07    | 0.549E-08    |
| SW                 | 0.150E-04    | 0.149E-05    | 0.496E-06    | 0.253E-06    | 0.158E-06    | 0.662E-07    | 0.250E-07    | 0.130E-07    | 0.845E-08    | 0.614E-08    |
| WSW                | 0.358E-04    | 0.401E-05    | 0.138E-05    | 0.724E-06    | 0.460E-06    | 0.201E-06    | 0.798E-07    | 0.434E-07    | 0.291E-07    | 0.216E-07    |
| W                  | 0.316E-04    | 0.344E-05    | 0.118E-05    | 0.616E-06    | 0.391E-06    | 0.170E-06    | 0.670E-07    | 0.360E-07    | 0.239E-07    | 0.176E-07    |
| WNW                | 0.371E-04    | 0.388E-05    | 0.132E-05    | 0.683E-06    | 0.431E-06    | 0.185E-06    | 0.720E-07    | 0.380E-07    | 0.250E-07    | 0.183E-07    |
| NW                 | 0.448E-04    | 0.467E-05    | 0.158E-05    | 0.814E-06    | 0.513E-06    | 0.219E-06    | 0.846E-07    | 0.448E-07    | 0.295E-07    | 0.216E-07    |
| NNW                | 0.242E-04    | 0.252E-05    | 0.850E-06    | 0.439E-06    | 0.276E-06    | 0.117E-06    | 0.454E-07    | 0.241E-07    | 0.159E-07    | 0.117E-07    |
| N                  | 0.307E-04    | 0.302E-05    | 0.100E-05    | 0.510E-06    | 0.318E-06    | 0.132E-06    | 0.497E-07    | 0.256E-07    | 0.166E-07    | 0.120E-07    |
| NNE                | 0.212E-04    | 0.220E-05    | 0.738E-06    | 0.380E-06    | 0.238E-06    | 0.101E-06    | 0.389E-07    | 0.206E-07    | 0.136E-07    | 0.994E-08    |
| NE                 | 0.131E-04    | 0.137E-05    | 0.462E-06    | 0.239E-06    | 0.151E-06    | 0.645E-07    | 0.250E-07    | 0.133E-07    | 0.875E-08    | 0.641E-08    |
| ENE                | 0.105E-04    | 0.106E-05    | 0.356E-06    | 0.183E-06    | 0.115E-06    | 0.489E-07    | 0.187E-07    | 0.976E-08    | 0.637E-08    | 0.464E-08    |
| E                  | 0.144E-04    | 0.158E-05    | 0.540E-06    | 0.281E-06    | 0.178E-06    | 0.773E-07    | 0.305E-07    | 0.165E-07    | 0.110E-07    | 0.814E-08    |
| ESE                | 0.149E-04    | 0.156E-05    | 0.530E-06    | 0.274E-06    | 0.173E-06    | 0.740E-07    | 0.286E-07    | 0.152E-07    | 0.100E-07    | 0.736E-08    |
| SE                 | 0.851E-05    | 0.849E-06    | 0.282E-06    | 0.143E-07    | 0.892E-07    | 0.372E-07    | 0.139E-08    | 0.718E-08    | 0.466E-08    | 0.337E-08    |
| SSE                | 0.786E-05    | 0.705E-06    | 0.224E-06    | 0.110E-06    | 0.670E-07    | 0.265E-07    | 0.911E-08    | 0.435E-08    | 0.268E-08    | 0.187E-08    |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.274E-07 | 0.234E-08 | 0.685E-09 | 0.318E-09 | 0.184E-09 | 0.651E-10 | 0.200E-10 | 0.810E-11 | 0.436E-11 | 0.271E-11 |
| SSW                | 0.612E-07 | 0.522E-08 | 0.153E-08 | 0.711E-09 | 0.410E-09 | 0.145E-09 | 0.446E-10 | 0.181E-10 | 0.973E-11 | 0.604E-11 |
| SW                 | 0.473E-07 | 0.403E-08 | 0.118E-08 | 0.550E-09 | 0.317E-09 | 0.112E-09 | 0.344E-10 | 0.140E-10 | 0.752E-11 | 0.467E-11 |
| WSW                | 0.488E-07 | 0.416E-08 | 0.122E-08 | 0.567E-09 | 0.327E-09 | 0.116E-09 | 0.355E-10 | 0.144E-10 | 0.776E-11 | 0.482E-11 |
| W                  | 0.349E-07 | 0.298E-08 | 0.873E-09 | 0.406E-09 | 0.234E-10 | 0.829E-10 | 0.254E-10 | 0.103E-10 | 0.555E-11 | 0.345E-11 |
| WNW                | 0.544E-07 | 0.464E-08 | 0.136E-08 | 0.632E-09 | 0.365E-09 | 0.129E-09 | 0.396E-10 | 0.161E-10 | 0.865E-11 | 0.537E-11 |
| NW                 | 0.897E-07 | 0.765E-08 | 0.224E-08 | 0.104E-08 | 0.601E-09 | 0.213E-09 | 0.653E-10 | 0.265E-10 | 0.143E-10 | 0.886E-11 |
| NNW                | 0.608E-07 | 0.519E-08 | 0.152E-08 | 0.707E-09 | 0.408E-09 | 0.144E-09 | 0.443E-10 | 0.180E-10 | 0.967E-11 | 0.600E-11 |
| N                  | 0.106E-06 | 0.903E-08 | 0.265E-08 | 0.123E-08 | 0.710E-09 | 0.252E-09 | 0.771E-10 | 0.313E-10 | 0.168E-10 | 0.105E-10 |
| NNE                | 0.683E-07 | 0.583E-08 | 0.171E-08 | 0.794E-09 | 0.458E-09 | 0.162E-09 | 0.497E-10 | 0.202E-10 | 0.109E-10 | 0.675E-11 |
| NE                 | 0.300E-07 | 0.256E-08 | 0.751E-09 | 0.349E-09 | 0.201E-09 | 0.713E-10 | 0.219E-10 | 0.887E-11 | 0.477E-11 | 0.297E-11 |
| ENE                | 0.233E-07 | 0.198E-08 | 0.582E-09 | 0.270E-09 | 0.156E-09 | 0.553E-10 | 0.169E-10 | 0.688E-11 | 0.370E-11 | 0.230E-11 |
| E                  | 0.214E-07 | 0.182E-08 | 0.535E-09 | 0.249E-09 | 0.143E-09 | 0.508E-10 | 0.156E-10 | 0.632E-11 | 0.340E-11 | 0.211E-11 |
| ESE                | 0.319E-07 | 0.272E-08 | 0.798E-09 | 0.371E-09 | 0.214E-09 | 0.758E-10 | 0.232E-10 | 0.943E-11 | 0.507E-11 | 0.315E-11 |
| SE                 | 0.266E-07 | 0.227E-08 | 0.666E-09 | 0.310E-09 | 0.179E-09 | 0.633E-10 | 0.194E-10 | 0.787E-11 | 0.424E-11 | 0.263E-11 |
| SSE                | 0.510E-07 | 0.435E-08 | 0.128E-08 | 0.593E-09 | 0.342E-09 | 0.121E-09 | 0.372E-10 | 0.151E-10 | 0.812E-11 | 0.504E-11 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.312E-04                 |
| NNW                | 0.60     | 960    | 0.169E-04                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.673E-07      |
| NNW                | 0.60     | 960    | 0.456E-07      |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.667E-05                 |
| NNW                | 0.81     | 1300   | 0.988E-05                 |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.123E-07      |
| NNW                | 0.81     | 1300   | 0.255E-07      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 1033     | 315    | 0.125E-03                 |
| SW                 | 8202     | 2500   | 0.131E-05                 |
| WNW                | 1575     | 480    | 0.777E-04                 |
| ENE                | 492      | 150    | 0.161E-03                 |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 1033     | 315    | 0.451E-06      |
| SW                 | 8202     | 2500   | 0.370E-08      |
| WNW                | 1575     | 480    | 0.123E-06      |
| ENE                | 492      | 150    | 0.283E-06      |

RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.582E-05 | 0.570E-06 | 0.186E-06 | 0.938E-07 | 0.579E-07 | 0.237E-07 | 0.853E-08 | 0.419E-08 | 0.263E-08 | 0.186E-08 |
| SSW                | 0.185E-04 | 0.189E-05 | 0.641E-06 | 0.330E-06 | 0.207E-06 | 0.876E-06 | 0.333E-07 | 0.175E-07 | 0.115E-07 | 0.839E-08 |
| SW                 | 0.140E-04 | 0.142E-05 | 0.479E-06 | 0.246E-06 | 0.154E-06 | 0.650E-07 | 0.246E-07 | 0.128E-07 | 0.835E-08 | 0.608E-08 |
| WSW                | 0.332E-04 | 0.368E-05 | 0.130E-05 | 0.690E-06 | 0.442E-06 | 0.195E-06 | 0.781E-07 | 0.426E-07 | 0.286E-07 | 0.212E-07 |
| W                  | 0.290E-04 | 0.319E-05 | 0.112E-05 | 0.590E-06 | 0.377E-06 | 0.166E-06 | 0.657E-07 | 0.354E-07 | 0.236E-07 | 0.174E-07 |
| WNW                | 0.339E-04 | 0.365E-05 | 0.126E-05 | 0.660E-06 | 0.419E-06 | 0.182E-06 | 0.709E-07 | 0.375E-07 | 0.247E-07 | 0.181E-07 |
| NW                 | 0.414E-04 | 0.439E-05 | 0.151E-05 | 0.787E-06 | 0.498E-06 | 0.214E-06 | 0.833E-07 | 0.442E-07 | 0.292E-07 | 0.214E-07 |
| NNW                | 0.225E-04 | 0.237E-05 | 0.814E-06 | 0.424E-06 | 0.268E-06 | 0.115E-06 | 0.447E-07 | 0.238E-07 | 0.157E-07 | 0.115E-07 |
| N                  | 0.285E-04 | 0.290E-05 | 0.973E-06 | 0.498E-06 | 0.312E-06 | 0.131E-06 | 0.492E-07 | 0.254E-07 | 0.164E-07 | 0.119E-07 |
| NNE                | 0.198E-04 | 0.207E-05 | 0.707E-06 | 0.367E-06 | 0.232E-06 | 0.992E-07 | 0.385E-07 | 0.203E-07 | 0.134E-07 | 0.982E-08 |
| NE                 | 0.121E-04 | 0.128E-05 | 0.442E-06 | 0.231E-06 | 0.146E-06 | 0.631E-07 | 0.246E-07 | 0.131E-07 | 0.863E-08 | 0.634E-08 |
| ENE                | 0.970E-05 | 0.101E-05 | 0.343E-06 | 0.178E-06 | 0.112E-06 | 0.480E-07 | 0.185E-07 | 0.965E-08 | 0.630E-08 | 0.459E-08 |
| E                  | 0.134E-04 | 0.145E-05 | 0.510E-06 | 0.296E-06 | 0.172E-06 | 0.752E-07 | 0.299E-07 | 0.162E-07 | 0.108E-07 | 0.802E-08 |
| ESE                | 0.138E-04 | 0.147E-05 | 0.506E-06 | 0.264E-06 | 0.167E-06 | 0.723E-07 | 0.281E-07 | 0.150E-07 | 0.989E-08 | 0.727E-08 |
| SE                 | 0.795E-05 | 0.812E-06 | 0.273E-06 | 0.140E-06 | 0.874E-07 | 0.366E-07 | 0.138E-07 | 0.711E-08 | 0.461E-08 | 0.334E-08 |
| SSE                | 0.747E-05 | 0.696E-06 | 0.222E-06 | 0.110E-06 | 0.667E-07 | 0.264E-07 | 0.910E-08 | 0.435E-08 | 0.268E-08 | 0.187E-08 |



RIVER BEND STATION FIRST QUARTER (JANUARY 1, 1989 TO MARCH 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.274E-07 | 0.234E-08 | 0.685E-09 | 0.318E-09 | 0.184E-09 | 0.651E-10 | 0.200E-10 | 0.810E-11 | 0.436E-11 | 0.271E-11 |
| SSW                | 0.612E-07 | 0.522E-08 | 0.153E-08 | 0.711E-09 | 0.410E-09 | 0.145E-09 | 0.446E-10 | 0.181E-10 | 0.973E-11 | 0.604E-11 |
| SW                 | 0.473E-07 | 0.403E-08 | 0.118E-08 | 0.550E-09 | 0.317E-09 | 0.112E-09 | 0.344E-10 | 0.140E-10 | 0.752E-11 | 0.467E-11 |
| WSW                | 0.488E-07 | 0.416E-08 | 0.122E-08 | 0.567E-09 | 0.327E-09 | 0.116E-09 | 0.355E-10 | 0.144E-10 | 0.776E-11 | 0.482E-11 |
| W                  | 0.349E-07 | 0.298E-08 | 0.873E-09 | 0.406E-09 | 0.234E-10 | 0.829E-10 | 0.254E-10 | 0.103E-10 | 0.555E-11 | 0.345E-11 |
| WNW                | 0.544E-07 | 0.464E-08 | 0.136E-08 | 0.632E-09 | 0.365E-09 | 0.129E-09 | 0.396E-10 | 0.161E-10 | 0.865E-11 | 0.537E-11 |
| NW                 | 0.897E-07 | 0.765E-08 | 0.224E-08 | 0.104E-08 | 0.601E-09 | 0.213E-09 | 0.653E-10 | 0.265E-10 | 0.143E-10 | 0.886E-11 |
| NNW                | 0.608E-07 | 0.519E-08 | 0.152E-08 | 0.707E-09 | 0.408E-09 | 0.144E-09 | 0.443E-10 | 0.180E-10 | 0.967E-11 | 0.600E-11 |
| N                  | 0.106E-06 | 0.903E-08 | 0.265E-08 | 0.123E-08 | 0.710E-09 | 0.252E-09 | 0.771E-10 | 0.313E-10 | 0.168E-10 | 0.105E-10 |
| NNE                | 0.683E-07 | 0.583E-08 | 0.171E-08 | 0.794E-09 | 0.458E-09 | 0.162E-09 | 0.497E-10 | 0.202E-10 | 0.109E-10 | 0.675E-11 |
| NE                 | 0.300E-07 | 0.256E-08 | 0.751E-09 | 0.349E-09 | 0.201E-09 | 0.713E-10 | 0.219E-10 | 0.887E-11 | 0.477E-11 | 0.297E-11 |
| ENE                | 0.233E-07 | 0.198E-08 | 0.582E-09 | 0.270E-09 | 0.156E-09 | 0.553E-10 | 0.169E-10 | 0.688E-11 | 0.370E-11 | 0.230E-11 |
| E                  | 0.214E-07 | 0.182E-08 | 0.535E-09 | 0.249E-09 | 0.143E-09 | 0.508E-10 | 0.156E-10 | 0.632E-11 | 0.340E-11 | 0.211E-11 |
| ESE                | 0.319E-07 | 0.272E-08 | 0.798E-09 | 0.371E-09 | 0.214E-09 | 0.758E-10 | 0.232E-10 | 0.943E-11 | 0.507E-11 | 0.315E-11 |
| SE                 | 0.266E-07 | 0.227E-08 | 0.666E-09 | 0.310E-09 | 0.179E-09 | 0.633E-10 | 0.194E-10 | 0.787E-11 | 0.424E-11 | 0.263E-11 |
| SSE                | 0.510E-07 | 0.435E-08 | 0.128E-08 | 0.593E-09 | 0.342E-09 | 0.121E-09 | 0.372E-10 | 0.151E-10 | 0.812E-11 | 0.504E-11 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.488E-05                 |
| NNW                | 0.60     | 960    | 0.239E-05                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.239E-07      |
| NNW                | 0.60     | 960    | 0.156E-07      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.135E-05                 |
| NNW                | 0.81     | 1300   | 0.160E-05                 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.523E-08      |
| NNW                | 0.81     | 1300   | 0.959E-08      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 902      | 275    | 0.293E-04                 |
| SW                 | 8202     | 2500   | 0.630E-06                 |
| WNW                | 1640     | 500    | 0.131E-04                 |
| ENE                | 377      | 115    | 0.230E-04                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 902      | 275    | 0.162E-06      |
| SW                 | 8202     | 2500   | 0.140E-08      |
| WNW                | 1640     | 500    | 0.521E-07      |
| ENE                | 377      | 115    | 0.644E-07      |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.188E-05 | 0.198E-06 | 0.732E-07 | 0.433E-07 | 0.288E-07 | 0.138E-07 | 0.596E-08 | 0.335E-08 | 0.229E-08 | 0.172E-08 |
| SSW                | 0.212E-05 | 0.276E-06 | 0.103E-06 | 0.626E-07 | 0.425E-07 | 0.207E-07 | 0.896E-08 | 0.498E-08 | 0.337E-08 | 0.252E-08 |
| SW                 | 0.619E-05 | 0.653E-06 | 0.246E-06 | 0.146E-06 | 0.984E-07 | 0.474E-07 | 0.204E-07 | 0.114E-07 | 0.777E-08 | 0.582E-08 |
| WSW                | 0.750E-05 | 0.853E-06 | 0.328E-06 | 0.196E-06 | 0.132E-06 | 0.634E-07 | 0.271E-07 | 0.149E-07 | 0.101E-07 | 0.750E-08 |
| W                  | 0.469E-05 | 0.591E-06 | 0.238E-06 | 0.145E-06 | 0.986E-07 | 0.475E-07 | 0.201E-07 | 0.110E-07 | 0.742E-08 | 0.551E-08 |
| WNW                | 0.631E-05 | 0.909E-06 | 0.353E-06 | 0.251E-06 | 0.161E-06 | 0.655E-07 | 0.266E-07 | 0.141E-07 | 0.930E-08 | 0.680E-08 |
| NW                 | 0.609E-05 | 0.922E-06 | 0.371E-06 | 0.223E-06 | 0.154E-06 | 0.715E-07 | 0.315E-07 | 0.163E-07 | 0.861E-08 | 0.630E-08 |
| NNW                | 0.292E-05 | 0.536E-06 | 0.212E-06 | 0.142E-06 | 0.935E-07 | 0.467E-07 | 0.196E-07 | 0.101E-07 | 0.652E-08 | 0.364E-08 |
| N                  | 0.550E-05 | 0.925E-06 | 0.393E-06 | 0.242E-06 | 0.162E-06 | 0.852E-07 | 0.328E-07 | 0.168E-07 | 0.109E-07 | 0.784E-08 |
| NNE                | 0.390E-05 | 0.672E-06 | 0.273E-06 | 0.158E-06 | 0.104E-06 | 0.499E-07 | 0.187E-07 | 0.955E-08 | 0.613E-08 | 0.441E-08 |
| NE                 | 0.183E-05 | 0.314E-06 | 0.146E-06 | 0.805E-07 | 0.588E-07 | 0.357E-07 | 0.170E-07 | 0.895E-08 | 0.587E-08 | 0.428E-08 |
| ENE                | 0.974E-06 | 0.192E-06 | 0.742E-07 | 0.398E-07 | 0.257E-07 | 0.140E-07 | 0.536E-08 | 0.271E-08 | 0.173E-08 | 0.124E-08 |
| E                  | 0.172E-05 | 0.236E-06 | 0.938E-07 | 0.532E-07 | 0.360E-07 | 0.211E-07 | 0.953E-08 | 0.536E-08 | 0.351E-08 | 0.256E-08 |
| ESE                | 0.200E-05 | 0.232E-06 | 0.842E-07 | 0.477E-07 | 0.324E-07 | 0.160E-07 | 0.689E-08 | 0.342E-08 | 0.233E-08 | 0.176E-08 |
| SE                 | 0.123E-05 | 0.167E-06 | 0.632E-07 | 0.350E-07 | 0.238E-07 | 0.116E-07 | 0.508E-08 | 0.282E-08 | 0.192E-08 | 0.144E-08 |
| SSE                | 0.219E-05 | 0.237E-06 | 0.907E-07 | 0.541E-07 | 0.364E-07 | 0.176E-07 | 0.763E-08 | 0.428E-08 | 0.292E-08 | 0.219E-08 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.428E-08 | 0.477E-09 | 0.140E-09 | 0.710E-10 | 0.415E-10 | 0.151E-10 | 0.456E-11 | 0.199E-11 | 0.123E-11 | 0.902E-12 |
| SSW                | 0.764E-08 | 0.879E-09 | 0.260E-09 | 0.133E-09 | 0.782E-10 | 0.284E-10 | 0.864E-11 | 0.380E-11 | 0.238E-11 | 0.176E-11 |
| SW                 | 0.140E-07 | 0.148E-08 | 0.439E-09 | 0.224E-09 | 0.132E-09 | 0.482E-10 | 0.149E-10 | 0.665E-11 | 0.413E-11 | 0.301E-11 |
| WSW                | 0.152E-07 | 0.171E-08 | 0.535E-09 | 0.279E-09 | 0.167E-09 | 0.623E-10 | 0.197E-10 | 0.894E-11 | 0.561E-11 | 0.407E-11 |
| W                  | 0.168E-07 | 0.190E-08 | 0.570E-09 | 0.294E-09 | 0.175E-09 | 0.653E-10 | 0.205E-10 | 0.934E-11 | 0.590E-11 | 0.430E-11 |
| WNW                | 0.301E-07 | 0.359E-08 | 0.108E-08 | 0.575E-09 | 0.340E-09 | 0.122E-09 | 0.378E-10 | 0.169E-10 | 0.103E-10 | 0.736E-11 |
| NW                 | 0.300E-07 | 0.335E-08 | 0.101E-08 | 0.517E-09 | 0.307E-09 | 0.159E-09 | 0.649E-10 | 0.271E-10 | 0.936E-11 | 0.668E-11 |
| NNW                | 0.194E-07 | 0.235E-08 | 0.703E-09 | 0.372E-09 | 0.228E-09 | 0.117E-09 | 0.401E-10 | 0.163E-10 | 0.869E-11 | 0.437E-11 |
| N                  | 0.481E-07 | 0.550E-08 | 0.165E-08 | 0.866E-09 | 0.541E-09 | 0.264E-09 | 0.836E-10 | 0.341E-10 | 0.184E-10 | 0.114E-10 |
| NNE                | 0.370E-07 | 0.408E-08 | 0.123E-08 | 0.631E-09 | 0.393E-09 | 0.188E-09 | 0.599E-10 | 0.243E-10 | 0.131E-10 | 0.813E-11 |
| NE                 | 0.157E-07 | 0.183E-08 | 0.567E-09 | 0.284E-09 | 0.170E-09 | 0.835E-10 | 0.284E-10 | 0.116E-10 | 0.629E-11 | 0.391E-11 |
| ENE                | 0.708E-08 | 0.894E-09 | 0.269E-09 | 0.136E-09 | 0.802E-10 | 0.433E-10 | 0.153E-10 | 0.595E-11 | 0.322E-11 | 0.200E-11 |
| E                  | 0.940E-08 | 0.106E-08 | 0.325E-09 | 0.167E-09 | 0.996E-10 | 0.437E-10 | 0.193E-10 | 0.751E-11 | 0.424E-11 | 0.273E-11 |
| ESE                | 0.885E-08 | 0.967E-09 | 0.287E-09 | 0.145E-09 | 0.884E-10 | 0.332E-10 | 0.107E-10 | 0.513E-11 | 0.321E-11 | 0.225E-11 |
| SE                 | 0.107E-07 | 0.111E-08 | 0.333E-09 | 0.169E-09 | 0.101E-09 | 0.376E-10 | 0.123E-10 | 0.574E-11 | 0.357E-11 | 0.250E-11 |
| SSE                | 0.109E-07 | 0.111E-08 | 0.335E-09 | 0.172E-09 | 0.102E-09 | 0.379E-10 | 0.122E-10 | 0.565E-11 | 0.350E-11 | 0.248E-11 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.594E-04                 |
| NNW                | 0.60     | 960    | 0.253E-04                 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.758E-07      |
| NNW                | 0.60     | 960    | 0.513E-07      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.123E-04                 |
| NNW                | 0.81     | 1300   | 0.147E-04                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.138E-07      |
| NNW                | 0.81     | 1300   | 0.286E-07      |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 820      | 250    | 0.731E-06      |
| SW                 | 8202     | 2500   | 0.253E-08      |
| WNW                | 1558     | 475    | 0.176E-06      |
| ENE                | 410      | 125    | 0.210E-06      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 820      | 250    | 0.305E-03                 |
| SW                 | 8202     | 2500   | 0.295E-05                 |
| WNW                | 1558     | 475    | 0.177E-03                 |
| ENE                | 410      | 125    | 0.374E-03                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASES FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.427E-05 | 0.429E-06 | 0.144E-06 | 0.742E-07 | 0.467E-07 | 0.198E-07 | 0.760E-08 | 0.393E-08 | 0.255E-08 | 0.184E-08 |
| SSW                | 0.282E-04 | 0.315E-05 | 0.109E-05 | 0.570E-06 | 0.362E-06 | 0.158E-06 | 0.628E-07 | 0.341E-07 | 0.228E-07 | 0.169E-07 |
| SW                 | 0.296E-04 | 0.319E-05 | 0.109E-05 | 0.570E-06 | 0.362E-06 | 0.157E-06 | 0.619E-07 | 0.331E-07 | 0.219E-07 | 0.161E-07 |
| WSW                | 0.572E-04 | 0.629E-05 | 0.216E-05 | 0.113E-05 | 0.719E-06 | 0.313E-06 | 0.124E-06 | 0.670E-07 | 0.447E-07 | 0.330E-07 |
| W                  | 0.753E-04 | 0.806E-05 | 0.275E-05 | 0.143E-05 | 0.907E-06 | 0.391E-06 | 0.153E-06 | 0.821E-07 | 0.544E-07 | 0.400E-07 |
| WNW                | 0.771E-04 | 0.803E-05 | 0.272E-05 | 0.141E-05 | 0.888E-06 | 0.380E-06 | 0.147E-06 | 0.779E-07 | 0.513E-07 | 0.375E-07 |
| NW                 | 0.774E-04 | 0.804E-05 | 0.272E-05 | 0.141E-05 | 0.887E-06 | 0.379E-06 | 0.147E-06 | 0.778E-07 | 0.512E-07 | 0.375E-07 |
| NNW                | 0.331E-04 | 0.338E-05 | 0.113E-05 | 0.584E-06 | 0.367E-06 | 0.155E-06 | 0.597E-07 | 0.314E-07 | 0.206E-07 | 0.150E-07 |
| N                  | 0.452E-04 | 0.462E-05 | 0.155E-05 | 0.800E-06 | 0.503E-06 | 0.214E-06 | 0.823E-07 | 0.434E-07 | 0.285E-07 | 0.208E-07 |
| NNE                | 0.279E-04 | 0.273E-05 | 0.908E-06 | 0.465E-06 | 0.292E-06 | 0.123E-06 | 0.468E-07 | 0.241E-07 | 0.156E-07 | 0.113E-07 |
| NE                 | 0.224E-04 | 0.239E-05 | 0.813E-06 | 0.422E-06 | 0.266E-06 | 0.115E-06 | 0.448E-07 | 0.240E-07 | 0.159E-07 | 0.117E-07 |
| ENE                | 0.107E-04 | 0.112E-05 | 0.379E-06 | 0.196E-06 | 0.124E-06 | 0.532E-07 | 0.207E-07 | 0.110E-07 | 0.728E-08 | 0.534E-08 |
| E                  | 0.152E-04 | 0.168E-05 | 0.578E-06 | 0.302E-06 | 0.191E-06 | 0.833E-07 | 0.330E-07 | 0.180E-07 | 0.121E-07 | 0.900E-08 |
| ESE                | 0.158E-04 | 0.172E-05 | 0.587E-06 | 0.305E-06 | 0.193E-06 | 0.838E-07 | 0.330E-07 | 0.179E-07 | 0.119E-07 | 0.885E-08 |
| SE                 | 0.200E-04 | 0.222E-05 | 0.765E-06 | 0.401E-06 | 0.255E-06 | 0.112E-06 | 0.446E-07 | 0.243E-07 | 0.163E-07 | 0.121E-07 |
| SSE                | 0.150E-04 | 0.169E-05 | 0.584E-06 | 0.306E-06 | 0.195E-06 | 0.853E-07 | 0.340E-07 | 0.186E-07 | 0.125E-07 | 0.934E-08 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.899E-08 | 0.767E-09 | 0.225E-09 | 0.105E-09 | 0.603E-10 | 0.214E-10 | 0.655E-10 | 0.266E-11 | 0.143E-11 | 0.888E-12 |
| SSW                | 0.331E-07 | 0.282E-08 | 0.828E-09 | 0.385E-09 | 0.222E-09 | 0.787E-10 | 0.241E-10 | 0.978E-11 | 0.526E-11 | 0.327E-11 |
| SW                 | 0.324E-07 | 0.276E-08 | 0.810E-09 | 0.376E-09 | 0.217E-09 | 0.769E-10 | 0.236E-10 | 0.957E-11 | 0.515E-11 | 0.320E-11 |
| WSW                | 0.507E-07 | 0.433E-08 | 0.127E-08 | 0.590E-09 | 0.340E-09 | 0.121E-09 | 0.369E-10 | 0.150E-10 | 0.807E-11 | 0.501E-11 |
| W                  | 0.665E-07 | 0.568E-08 | 0.166E-08 | 0.773E-09 | 0.446E-09 | 0.158E-09 | 0.485E-10 | 0.197E-10 | 0.106E-10 | 0.657E-11 |
| WNW                | 0.766E-07 | 0.654E-08 | 0.192E-08 | 0.891E-09 | 0.514E-09 | 0.182E-09 | 0.558E-10 | 0.226E-10 | 0.122E-10 | 0.757E-11 |
| NW                 | 0.101E-06 | 0.862E-08 | 0.253E-08 | 0.117E-08 | 0.678E-09 | 0.240E-09 | 0.736E-10 | 0.299E-10 | 0.161E-10 | 0.998E-11 |
| NNW                | 0.683E-07 | 0.583E-08 | 0.171E-08 | 0.794E-09 | 0.458E-09 | 0.162E-09 | 0.498E-10 | 0.202E-10 | 0.109E-10 | 0.675E-11 |
| N                  | 0.123E-06 | 0.105E-07 | 0.307E-08 | 0.143E-08 | 0.822E-09 | 0.292E-09 | 0.893E-10 | 0.363E-10 | 0.195E-10 | 0.121E-10 |
| NNE                | 0.754E-07 | 0.635E-08 | 0.186E-08 | 0.865E-09 | 0.499E-09 | 0.177E-09 | 0.542E-10 | 0.220E-10 | 0.118E-10 | 0.736E-11 |
| NE                 | 0.370E-07 | 0.316E-08 | 0.927E-09 | 0.431E-09 | 0.248E-09 | 0.881E-10 | 0.270E-10 | 0.110E-10 | 0.589E-11 | 0.366E-11 |
| ENE                | 0.169E-07 | 0.144E-08 | 0.423E-09 | 0.197E-09 | 0.113E-09 | 0.402E-10 | 0.123E-10 | 0.500E-11 | 0.269E-11 | 0.167E-11 |
| E                  | 0.205E-07 | 0.175E-08 | 0.513E-09 | 0.238E-09 | 0.137E-09 | 0.487E-10 | 0.149E-10 | 0.606E-11 | 0.326E-11 | 0.203E-11 |
| ESE                | 0.223E-07 | 0.190E-08 | 0.558E-09 | 0.259E-09 | 0.150E-09 | 0.530E-10 | 0.162E-10 | 0.659E-11 | 0.355E-11 | 0.220E-11 |
| SE                 | 0.273E-07 | 0.233E-08 | 0.684E-09 | 0.318E-09 | 0.183E-09 | 0.650E-10 | 0.199E-10 | 0.808E-11 | 0.435E-11 | 0.270E-11 |
| SSE                | 0.237E-07 | 0.203E-08 | 0.594E-09 | 0.276E-09 | 0.159E-09 | 0.564E-10 | 0.173E-10 | 0.702E-11 | 0.378E-11 | 0.235E-11 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.538E-04                 |
| NNW                | 0.60     | 960    | 0.231E-04                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.758E-07      |
| NNW                | 0.60     | 960    | 0.513E-07      |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.115E-04                 |
| NNW                | 0.81     | 1300   | 0.135E-04                 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.138E-07      |
| NNW                | 0.81     | 1300   | 0.286E-07      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 1033     | 315    | 0.194E-03                 |
| SW                 | 8202     | 2500   | 0.275E-05                 |
| WNW                | 1575     | 480    | 0.161E-03                 |
| ENE                | 492      | 150    | 0.169E-03                 |



RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 1033     | 315    | 0.523E-06      |
| SW                 | 8202     | 2500   | 0.253E-08      |
| WNW                | 1575     | 480    | 0.173E-06      |
| ENE                | 492      | 150    | 0.205E-06      |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.385E-05 | 0.411E-06 | 0.140E-06 | 0.725E-07 | 0.458E-07 | 0.196E-07 | 0.753E-08 | 0.390E-08 | 0.253E-08 | 0.183E-08 |
| SSW                | 0.261E-04 | 0.290E-05 | 0.103E-05 | 0.544E-06 | 0.348E-06 | 0.154E-06 | 0.615E-07 | 0.355E-07 | 0.224E-07 | 0.166E-07 |
| SW                 | 0.270E-04 | 0.297E-05 | 0.104E-05 | 0.548E-06 | 0.350E-06 | 0.153E-06 | 0.608E-07 | 0.326E-07 | 0.216E-07 | 0.159E-07 |
| WSW                | 0.526E-04 | 0.580E-05 | 0.204E-05 | 0.108E-05 | 0.692E-06 | 0.305E-06 | 0.122E-06 | 0.659E-07 | 0.440E-07 | 0.326E-07 |
| W                  | 0.691E-04 | 0.753E-05 | 0.262E-05 | 0.138E-05 | 0.878E-06 | 0.382E-06 | 0.151E-06 | 0.809E-07 | 0.537E-07 | 0.395E-07 |
| WNW                | 0.706E-04 | 0.757E-05 | 0.261E-05 | 0.136E-05 | 0.865E-06 | 0.372E-06 | 0.145E-06 | 0.770E-07 | 0.507E-07 | 0.371E-07 |
| NW                 | 0.710E-04 | 0.757E-05 | 0.261E-05 | 0.136E-05 | 0.863E-06 | 0.372E-06 | 0.145E-06 | 0.769E-07 | 0.507E-07 | 0.371E-07 |
| NNW                | 0.305E-04 | 0.320E-05 | 0.109E-05 | 0.567E-06 | 0.358E-06 | 0.153E-06 | 0.590E-07 | 0.310E-07 | 0.203E-07 | 0.149E-07 |
| N                  | 0.419E-04 | 0.436E-05 | 0.149E-05 | 0.775E-06 | 0.489E-06 | 0.210E-06 | 0.811E-07 | 0.428E-07 | 0.281E-07 | 0.206E-07 |
| NNE                | 0.254E-04 | 0.262E-05 | 0.882E-06 | 0.455E-06 | 0.286E-06 | 0.122E-06 | 0.464E-07 | 0.239E-07 | 0.155E-07 | 0.112E-07 |
| NE                 | 0.208E-04 | 0.223E-05 | 0.773E-06 | 0.405E-06 | 0.258E-06 | 0.112E-06 | 0.440E-07 | 0.236E-07 | 0.157E-07 | 0.116E-07 |
| ENE                | 0.980E-05 | 0.105E-05 | 0.362E-06 | 0.189E-06 | 0.120E-06 | 0.521E-07 | 0.204E-07 | 0.109E-07 | 0.719E-08 | 0.528E-08 |
| E                  | 0.143E-04 | 0.154E-05 | 0.543E-06 | 0.287E-06 | 0.184E-06 | 0.808E-07 | 0.323E-07 | 0.177E-07 | 0.119E-07 | 0.885E-08 |
| ESE                | 0.148E-04 | 0.158E-05 | 0.554E-06 | 0.292E-06 | 0.186E-06 | 0.814E-07 | 0.323E-07 | 0.175E-07 | 0.117E-07 | 0.871E-08 |
| SE                 | 0.185E-04 | 0.203E-05 | 0.719E-06 | 0.382E-06 | 0.245E-06 | 0.109E-06 | 0.436E-07 | 0.238E-07 | 0.160E-07 | 0.119E-07 |
| SSE                | 0.140E-04 | 0.154E-05 | 0.547E-06 | 0.291E-06 | 0.186E-06 | 0.826E-07 | 0.333E-07 | 0.183E-07 | 0.123E-07 | 0.918E-08 |

RIVER BEND STATION SECOND QUARTER (APRIL 1, 1989 TO JUNE 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.899E-08 | 0.767E-09 | 0.225E-09 | 0.105E-09 | 0.603E-10 | 0.214E-10 | 0.655E-10 | 0.266E-11 | 0.143E-11 | 0.888E-12 |
| SSW                | 0.331E-07 | 0.282E-08 | 0.828E-09 | 0.385E-09 | 0.222E-09 | 0.787E-10 | 0.241E-10 | 0.978E-11 | 0.526E-11 | 0.327E-11 |
| SW                 | 0.324E-07 | 0.276E-08 | 0.810E-09 | 0.376E-09 | 0.217E-09 | 0.769E-10 | 0.236E-10 | 0.957E-11 | 0.515E-11 | 0.320E-11 |
| WSW                | 0.507E-07 | 0.433E-08 | 0.127E-08 | 0.590E-09 | 0.340E-09 | 0.121E-09 | 0.369E-10 | 0.150E-10 | 0.807E-11 | 0.501E-11 |
| W                  | 0.665E-07 | 0.568E-08 | 0.166E-08 | 0.773E-09 | 0.446E-09 | 0.158E-09 | 0.485E-10 | 0.197E-10 | 0.106E-10 | 0.657E-11 |
| WNW                | 0.766E-07 | 0.654E-08 | 0.192E-08 | 0.891E-09 | 0.514E-09 | 0.182E-09 | 0.558E-10 | 0.226E-10 | 0.122E-10 | 0.757E-11 |
| NW                 | 0.101E-06 | 0.862E-08 | 0.253E-08 | 0.117E-08 | 0.678E-09 | 0.240E-09 | 0.736E-10 | 0.299E-10 | 0.161E-10 | 0.998E-11 |
| NNW                | 0.683E-07 | 0.583E-08 | 0.171E-08 | 0.794E-09 | 0.458E-09 | 0.162E-09 | 0.498E-10 | 0.202E-10 | 0.109E-10 | 0.675E-11 |
| N                  | 0.123E-06 | 0.105E-07 | 0.307E-08 | 0.143E-08 | 0.822E-09 | 0.292E-09 | 0.893E-10 | 0.363E-10 | 0.195E-10 | 0.121E-10 |
| NNE                | 0.754E-07 | 0.635E-08 | 0.186E-08 | 0.865E-09 | 0.499E-09 | 0.177E-09 | 0.542E-10 | 0.220E-10 | 0.118E-10 | 0.736E-11 |
| NE                 | 0.370E-07 | 0.316E-08 | 0.927E-09 | 0.431E-09 | 0.248E-09 | 0.881E-10 | 0.270E-10 | 0.110E-10 | 0.589E-11 | 0.366E-11 |
| ENE                | 0.169E-07 | 0.144E-08 | 0.423E-09 | 0.197E-09 | 0.113E-09 | 0.402E-10 | 0.123E-10 | 0.500E-11 | 0.269E-11 | 0.167E-11 |
| E                  | 0.205E-07 | 0.175E-08 | 0.513E-09 | 0.238E-09 | 0.137E-09 | 0.487E-10 | 0.149E-10 | 0.606E-11 | 0.326E-11 | 0.203E-11 |
| ESE                | 0.223E-07 | 0.190E-08 | 0.558E-09 | 0.259E-09 | 0.150E-09 | 0.530E-10 | 0.162E-10 | 0.659E-11 | 0.355E-11 | 0.220E-11 |
| SE                 | 0.273E-07 | 0.233E-08 | 0.684E-09 | 0.318E-09 | 0.183E-09 | 0.650E-10 | 0.199E-10 | 0.808E-11 | 0.435E-11 | 0.270E-11 |
| SSE                | 0.237E-07 | 0.203E-08 | 0.594E-09 | 0.276E-09 | 0.159E-09 | 0.564E-10 | 0.173E-10 | 0.702E-11 | 0.378E-11 | 0.235E-11 |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.178E-05                 |
| NNW                | 0.60     | 960    | 0.926E-06                 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.115E-07      |
| NNW                | 0.60     | 960    | 0.656E-08      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.598E-06                 |
| NNW                | 0.81     | 1300   | 0.643E-06                 |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELJ. ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.264E-08      |
| NNW                | 0.81     | 1300   | 0.401E-08      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 902      | 275    | 0.623E-05                 |
| SW                 | 8202     | 2500   | 0.663E-06                 |
| WNW                | 1640     | 500    | 0.411E-05                 |
| ENE                | 377      | 115    | 0.287E-04                 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 902      | 275    | 0.367E-07      |
| SW                 | 8202     | 2500   | 0.230E-08      |
| WNW                | 1640     | 500    | 0.219E-07      |
| ENE                | 377      | 115    | 0.532E-07      |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.513E-06 | 0.874E-07 | 0.331E-07 | 0.198E-07 | 0.131E-07 | 0.608E-08 | 0.243E-08 | 0.128E-08 | 0.833E-09 | 0.606E-09 |
| SSW                | 0.181E-05 | 0.339E-06 | 0.132E-06 | 0.823E-07 | 0.567E-07 | 0.279E-07 | 0.117E-07 | 0.631E-08 | 0.418E-08 | 0.306E-08 |
| SW                 | 0.443E-05 | 0.611E-06 | 0.251E-06 | 0.155E-06 | 0.106E-06 | 0.521E-07 | 0.221E-07 | 0.120E-07 | 0.802E-08 | 0.591E-08 |
| WSW                | 0.273E-05 | 0.427E-06 | 0.195E-06 | 0.126E-06 | 0.887E-07 | 0.452E-07 | 0.196E-07 | 0.107E-07 | 0.713E-08 | 0.525E-08 |
| W                  | 0.726E-06 | 0.175E-06 | 0.989E-07 | 0.697E-07 | 0.516E-07 | 0.281E-07 | 0.128E-07 | 0.720E-08 | 0.489E-08 | 0.365E-08 |
| WNW                | 0.204E-05 | 0.361E-06 | 0.159E-06 | 0.140E-06 | 0.922E-07 | 0.369E-07 | 0.162E-07 | 0.889E-08 | 0.596E-08 | 0.441E-08 |
| NW                 | 0.217E-05 | 0.422E-06 | 0.201E-06 | 0.133E-06 | 0.100E-06 | 0.520E-07 | 0.269E-07 | 0.140E-07 | 0.623E-08 | 0.465E-08 |
| NNW                | 0.115E-05 | 0.294E-06 | 0.148E-06 | 0.125E-06 | 0.872E-07 | 0.525E-07 | 0.254E-07 | 0.132E-07 | 0.858E-08 | 0.393E-08 |
| N                  | 0.143E-05 | 0.389E-06 | 0.218E-06 | 0.155E-06 | 0.114E-06 | 0.833E-07 | 0.351E-07 | 0.186E-07 | 0.122E-07 | 0.887E-08 |
| NNE                | 0.103E-05 | 0.336E-06 | 0.194E-06 | 0.128E-06 | 0.924E-07 | 0.585E-07 | 0.241E-07 | 0.124E-07 | 0.805E-08 | 0.582E-08 |
| NE                 | 0.112E-05 | 0.337E-06 | 0.214E-06 | 0.121E-06 | 0.931E-07 | 0.547E-07 | 0.248E-07 | 0.128E-07 | 0.829E-08 | 0.597E-08 |
| ENE                | 0.135E-05 | 0.386E-06 | 0.185E-06 | 0.102E-06 | 0.699E-07 | 0.594E-07 | 0.264E-07 | 0.140E-07 | 0.921E-08 | 0.665E-08 |
| E                  | 0.120E-05 | 0.259E-06 | 0.123E-06 | 0.717E-07 | 0.502E-07 | 0.317E-07 | 0.146E-07 | 0.827E-08 | 0.534E-08 | 0.386E-08 |
| ESE                | 0.118E-05 | 0.243E-06 | 0.107E-06 | 0.630E-07 | 0.481E-07 | 0.255E-07 | 0.108E-07 | 0.523E-08 | 0.350E-08 | 0.259E-08 |
| SE                 | 0.116E-05 | 0.218E-06 | 0.940E-07 | 0.531E-07 | 0.376E-07 | 0.192E-07 | 0.865E-08 | 0.485E-08 | 0.330E-08 | 0.248E-08 |
| SSE                | 0.155E-05 | 0.236E-06 | 0.989E-07 | 0.603E-07 | 0.407E-07 | 0.192E-07 | 0.785E-08 | 0.417E-08 | 0.274E-08 | 0.201E-08 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.460E-08 | 0.613E-09 | 0.181E-09 | 0.924E-10 | 0.563E-10 | 0.208E-10 | 0.640E-11 | 0.283E-11 | 0.170E-11 | 0.118E-11 |
| SSW                | 0.140E-07 | 0.186E-08 | 0.538E-09 | 0.285E-09 | 0.172E-09 | 0.656E-10 | 0.209E-10 | 0.955E-11 | 0.593E-11 | 0.420E-11 |
| SW                 | 0.217E-07 | 0.227E-08 | 0.709E-09 | 0.374E-09 | 0.225E-09 | 0.857E-10 | 0.276E-10 | 0.128E-10 | 0.811E-11 | 0.589E-11 |
| WSW                | 0.252E-07 | 0.288E-08 | 0.916E-09 | 0.482E-09 | 0.290E-09 | 0.110E-09 | 0.351E-10 | 0.162E-10 | 0.100E-10 | 0.706E-11 |
| W                  | 0.594E-08 | 0.782E-09 | 0.263E-09 | 0.142E-09 | 0.859E-10 | 0.325E-10 | 0.104E-10 | 0.470E-11 | 0.294E-11 | 0.213E-11 |
| WNW                | 0.128E-07 | 0.167E-08 | 0.530E-09 | 0.293E-09 | 0.173E-09 | 0.625E-10 | 0.195E-10 | 0.874E-11 | 0.539E-11 | 0.387E-11 |
| NW                 | 0.141E-07 | 0.169E-08 | 0.532E-09 | 0.276E-09 | 0.166E-09 | 0.669E-10 | 0.515E-10 | 0.224E-10 | 0.571E-11 | 0.408E-11 |
| NNW                | 0.809E-08 | 0.994E-09 | 0.307E-09 | 0.160E-09 | 0.962E-10 | 0.808E-10 | 0.276E-10 | 0.112E-10 | 0.612E-11 | 0.242E-11 |
| N                  | 0.147E-07 | 0.199E-08 | 0.638E-09 | 0.332E-09 | 0.216E-09 | 0.131E-09 | 0.437E-10 | 0.181E-10 | 0.980E-11 | 0.626E-11 |
| NNE                | 0.522E-08 | 0.975E-09 | 0.334E-09 | 0.174E-09 | 0.124E-09 | 0.892E-10 | 0.296E-10 | 0.121E-10 | 0.650E-11 | 0.406E-11 |
| NE                 | 0.620E-08 | 0.106E-08 | 0.361E-09 | 0.188E-09 | 0.113E-09 | 0.921E-10 | 0.307E-10 | 0.126E-10 | 0.690E-11 | 0.429E-11 |
| ENE                | 0.985E-08 | 0.161E-08 | 0.513E-09 | 0.257E-09 | 0.155E-09 | 0.107E-09 | 0.454E-10 | 0.154E-10 | 0.807E-11 | 0.511E-11 |
| E                  | 0.199E-07 | 0.222E-08 | 0.702E-09 | 0.357E-09 | 0.216E-09 | 0.857E-10 | 0.421E-10 | 0.187E-10 | 0.106E-10 | 0.689E-11 |
| ESE                | 0.106E-07 | 0.131E-08 | 0.412E-09 | 0.215E-09 | 0.132E-09 | 0.508E-10 | 0.164E-10 | 0.789E-11 | 0.496E-11 | 0.349E-11 |
| SE                 | 0.949E-08 | 0.118E-08 | 0.358E-09 | 0.181E-09 | 0.110E-09 | 0.421E-10 | 0.139E-10 | 0.659E-11 | 0.415E-11 | 0.292E-11 |
| SSE                | 0.110E-07 | 0.159E-08 | 0.517E-09 | 0.273E-09 | 0.165E-09 | 0.619E-10 | 0.195E-10 | 0.882E-11 | 0.533E-11 | 0.364E-11 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.444E-04                 |
| NNW                | 0.60     | 960    | 0.232E-04                 |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.500E-07      |
| NNW                | 0.60     | 960    | 0.325E-07      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.915E-05                 |
| NNW                | 0.81     | 1300   | 0.134E-04                 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.911E-08      |
| NNW                | 0.81     | 1300   | 0.181E-07      |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 820      | 250    | 0.175E-03                 |
| SW                 | 8202     | 2500   | 0.377E-05                 |
| WNW                | 1558     | 475    | 0.940E-04                 |
| ENE                | 410      | 125    | 0.886E-03                 |

RIVER BEND STATION THIRD QUARTER (JUL 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 820      | 250    | 0.317E-06      |
| SW                 | 8202     | 2500   | 0.434E-08      |
| WNW                | 1558     | 475    | 0.105E-06      |
| ENE                | 410      | 125    | 0.802E-06      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASES FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.700E-05 | 0.697E-06 | 0.232E-06 | 0.118E-06 | 0.734E-07 | 0.304E-07 | 0.115E-07 | 0.96E-08  | 0.388E-08 | 0.282E-08 |
| SSW                | 0.394E-04 | 0.397E-05 | 0.133E-05 | 0.689E-06 | 0.434E-06 | 0.185E-06 | 0.713E-07 | 0.371E-07 | 0.241E-07 | 0.175E-07 |
| SW                 | 0.394E-04 | 0.407E-05 | 0.138E-05 | 0.713E-06 | 0.451E-06 | 0.193E-06 | 0.750E-07 | 0.396E-07 | 0.260E-07 | 0.190E-07 |
| WSW                | 0.481E-04 | 0.495E-05 | 0.167E-05 | 0.865E-06 | 0.546E-06 | 0.234E-06 | 0.907E-07 | 0.477E-07 | 0.313E-07 | 0.228E-07 |
| W                  | 0.439E-04 | 0.455E-05 | 0.154E-05 | 0.793E-06 | 0.500E-06 | 0.213E-06 | 0.823E-07 | 0.434E-07 | 0.286E-07 | 0.209E-07 |
| WNW                | 0.411E-04 | 0.420E-05 | 0.141E-05 | 0.729E-06 | 0.458E-06 | 0.195E-06 | 0.749E-07 | 0.393E-07 | 0.257E-07 | 0.187E-07 |
| NW                 | 0.579E-04 | 0.596E-05 | 0.201E-05 | 0.104E-05 | 0.656E-06 | 0.208E-06 | 0.109E-06 | 0.571E-07 | 0.374E-07 | 0.273E-07 |
| NNW                | 0.305E-04 | 0.305E-05 | 0.102E-05 | 0.527E-06 | 0.331E-06 | 0.141E-06 | 0.538E-07 | 0.279E-07 | 0.181E-07 | 0.131E-07 |
| N                  | 0.269E-04 | 0.267E-05 | 0.888E-06 | 0.455E-06 | 0.284E-06 | 0.120E-06 | 0.454E-07 | 0.236E-07 | 0.154E-07 | 0.112E-07 |
| NNE                | 0.387E-04 | 0.396E-05 | 0.133E-05 | 0.685E-06 | 0.430E-06 | 0.182E-06 | 0.701E-07 | 0.367E-07 | 0.240E-07 | 0.175E-07 |
| NE                 | 0.447E-04 | 0.453E-05 | 0.152E-05 | 0.789E-06 | 0.498E-06 | 0.212E-06 | 0.819E-07 | 0.426E-07 | 0.278E-07 | 0.201E-07 |
| ENE                | 0.405E-04 | 0.415E-05 | 0.140E-05 | 0.721E-06 | 0.454E-06 | 0.194E-06 | 0.747E-07 | 0.392E-07 | 0.257E-07 | 0.187E-07 |
| E                  | 0.403E-04 | 0.421E-05 | 0.143E-05 | 0.741E-06 | 0.468E-06 | 0.202E-06 | 0.786E-07 | 0.417E-07 | 0.275E-07 | 0.202E-07 |
| ESE                | 0.357E-04 | 0.363E-05 | 0.122E-05 | 0.633E-06 | 0.399E-06 | 0.171E-06 | 0.661E-07 | 0.347E-07 | 0.227E-07 | 0.165E-07 |
| SE                 | 0.352E-04 | 0.372E-05 | 0.127E-05 | 0.660E-06 | 0.418E-06 | 0.181E-06 | 0.709E-07 | 0.377E-07 | 0.249E-07 | 0.183E-07 |
| SSE                | 0.210E-04 | 0.221E-05 | 0.751E-06 | 0.389E-06 | 0.246E-06 | 0.106E-06 | 0.413E-07 | 0.220E-07 | 0.145E-07 | 0.107E-07 |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.157E-07 | 0.134E-08 | 0.393E-09 | 0.182E-09 | 0.105E-09 | 0.373E-10 | 0.114E-10 | 0.464E-11 | 0.250E-11 | 0.155E-11 |
| SSW                | 0.697E-07 | 0.595E-08 | 0.174E-08 | 0.810E-09 | 0.467E-09 | 0.166E-09 | 0.508E-10 | 0.206E-10 | 0.111E-10 | 0.688E-11 |
| SW                 | 0.555E-07 | 0.474E-08 | 0.139E-08 | 0.645E-09 | 0.372E-09 | 0.132E-09 | 0.404E-10 | 0.164E-10 | 0.883E-11 | 0.548E-11 |
| WSW                | 0.636E-07 | 0.542E-08 | 0.159E-08 | 0.739E-09 | 0.426E-09 | 0.151E-09 | 0.463E-10 | 0.188E-10 | 0.101E-10 | 0.628E-11 |
| W                  | 0.417E-07 | 0.356E-08 | 0.104E-08 | 0.485E-09 | 0.280E-09 | 0.992E-10 | 0.304E-10 | 0.123E-10 | 0.664E-11 | 0.412E-11 |
| WNW                | 0.456E-07 | 0.389E-08 | 0.114E-08 | 0.530E-09 | 0.306E-09 | 0.108E-09 | 0.332E-10 | 0.135E-10 | 0.725E-11 | 0.450E-11 |
| NW                 | 0.666E-07 | 0.569E-08 | 0.167E-08 | 0.774E-09 | 0.447E-09 | 0.158E-09 | 0.485E-10 | 0.197E-10 | 0.106E-10 | 0.658E-11 |
| NNW                | 0.433E-07 | 0.369E-08 | 0.108E-08 | 0.503E-09 | 0.290E-09 | 0.103E-09 | 0.315E-10 | 0.128E-10 | 0.688E-11 | 0.427E-11 |
| N                  | 0.532E-07 | 0.454E-08 | 0.133E-08 | 0.619E-09 | 0.357E-09 | 0.127E-09 | 0.388E-10 | 0.157E-10 | 0.847E-11 | 0.526E-11 |
| NNE                | 0.475E-07 | 0.405E-08 | 0.119E-08 | 0.552E-09 | 0.318E-09 | 0.113E-09 | 0.346E-10 | 0.140E-10 | 0.755E-11 | 0.469E-11 |
| NE                 | 0.494E-07 | 0.421E-08 | 0.124E-08 | 0.574E-09 | 0.331E-09 | 0.117E-09 | 0.360E-10 | 0.146E-10 | 0.786E-11 | 0.488E-11 |
| ENE                | 0.482E-07 | 0.412E-08 | 0.121E-08 | 0.561E-09 | 0.324E-09 | 0.115E-09 | 0.351E-10 | 0.143E-10 | 0.767E-11 | 0.477E-11 |
| E                  | 0.517E-07 | 0.441E-08 | 0.129E-08 | 0.601E-09 | 0.347E-09 | 0.123E-09 | 0.377E-10 | 0.153E-10 | 0.822E-11 | 0.511E-11 |
| ESE                | 0.502E-07 | 0.428E-08 | 0.125E-08 | 0.583E-09 | 0.336E-09 | 0.119E-09 | 0.365E-10 | 0.148E-10 | 0.798E-11 | 0.496E-11 |
| SE                 | 0.398E-07 | 0.340E-08 | 0.996E-09 | 0.463E-09 | 0.267E-09 | 0.947E-10 | 0.290E-10 | 0.118E-10 | 0.633E-11 | 0.393E-11 |
| SSE                | 0.410E-07 | 0.350E-08 | 0.102E-08 | 0.476E-09 | 0.275E-09 | 0.974E-10 | 0.298E-10 | 0.121E-10 | 0.652E-11 | 0.405E-11 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.402E-04                 |
| NNW                | 0.60     | 960    | 0.212E-04                 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.500E-07      |
| NNW                | 0.60     | 960    | 0.325E-07      |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.858E-05                 |
| NNW                | 0.81     | 1300   | 0.124E-04                 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.911E-08      |
| NNW                | 0.81     | 1300   | 0.181E-07      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 1033     | 315    | 0.110E-03                 |
| SW                 | 8202     | 2500   | 0.356E-05                 |
| WNW                | 1575     | 480    | 0.849E-04                 |
| ENE                | 492      | 150    | 0.615E-03                 |



RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 1033     | 315    | 0.227E-06      |
| SW                 | 8202     | 2500   | 0.434E-08      |
| WNW                | 1575     | 480    | 0.103E-06      |
| ENE                | 492      | 150    | 0.586E-06      |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.654E-05 | 0.668E-06 | 0.225E-06 | 0.115E-06 | 0.720E-07 | 0.300E-07 | 0.113E-07 | 0.590E-08 | 0.385E-08 | 0.280E-08 |
| SSW                | 0.355E-04 | 0.378E-05 | 0.129E-05 | 0.672E-06 | 0.425E-06 | 0.183E-06 | 0.706E-07 | 0.368E-07 | 0.239E-07 | 0.174E-07 |
| SW                 | 0.360E-04 | 0.384E-05 | 0.132E-05 | 0.691E-06 | 0.439E-06 | 0.190E-06 | 0.740E-07 | 0.391E-07 | 0.257E-07 | 0.188E-07 |
| WSW                | 0.437E-04 | 0.467E-05 | 0.161E-05 | 0.839E-06 | 0.532E-06 | 0.230E-06 | 0.895E-07 | 0.472E-07 | 0.310E-07 | 0.226E-07 |
| W                  | 0.403E-04 | 0.430E-05 | 0.148E-05 | 0.769E-06 | 0.487E-06 | 0.209E-06 | 0.812E-07 | 0.429E-07 | 0.282E-07 | 0.207E-07 |
| WNW                | 0.377E-04 | 0.399E-05 | 0.136E-05 | 0.709E-06 | 0.448E-06 | 0.191E-06 | 0.740E-07 | 0.389E-07 | 0.255E-07 | 0.186E-07 |
| NW                 | 0.527E-04 | 0.564E-05 | 0.194E-05 | 0.101E-05 | 0.640E-06 | 0.275E-06 | 0.107E-06 | 0.565E-07 | 0.371E-07 | 0.271E-07 |
| NNW                | 0.277E-04 | 0.291E-05 | 0.990E-06 | 0.514E-06 | 0.324E-06 | 0.139E-06 | 0.532E-07 | 0.276E-07 | 0.180E-07 | 0.130E-07 |
| N                  | 0.248E-04 | 0.255E-05 | 0.861E-06 | 0.444E-06 | 0.279E-06 | 0.118E-06 | 0.449E-07 | 0.234E-07 | 0.152E-07 | 0.111E-07 |
| NNE                | 0.355E-04 | 0.376E-05 | 0.128E-05 | 0.667E-06 | 0.421E-06 | 0.179E-06 | 0.692E-07 | 0.363E-07 | 0.238E-07 | 0.173E-07 |
| NE                 | 0.402E-04 | 0.432E-05 | 0.148E-05 | 0.769E-06 | 0.487E-06 | 0.209E-06 | 0.811E-07 | 0.423E-07 | 0.275E-07 | 0.200E-07 |
| ENE                | 0.370E-04 | 0.392E-05 | 0.134E-05 | 0.699E-06 | 0.443E-06 | 0.190E-06 | 0.738E-07 | 0.388E-07 | 0.254E-07 | 0.186E-07 |
| E                  | 0.368E-04 | 0.395E-05 | 0.136E-05 | 0.715E-06 | 0.455E-06 | 0.197E-06 | 0.774E-07 | 0.412E-07 | 0.272E-07 | 0.199E-07 |
| ESE                | 0.324E-04 | 0.344E-05 | 0.118E-05 | 0.614E-06 | 0.389E-06 | 0.168E-06 | 0.652E-07 | 0.343E-07 | 0.225E-07 | 0.164E-07 |
| SE                 | 0.321E-04 | 0.348E-05 | 0.121E-05 | 0.636E-06 | 0.405E-06 | 0.177E-06 | 0.698E-07 | 0.372E-07 | 0.246E-07 | 0.181E-07 |
| SSE                | 0.194E-04 | 0.207E-05 | 0.715E-06 | 0.375E-06 | 0.238E-06 | 0.103E-06 | 0.406E-07 | 0.217E-07 | 0.143E-07 | 0.106E-07 |

RIVER BEND STATION THIRD QUARTER (JULY 1, 1989 TO SEPTEMBER 30, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.157E-07 | 0.134E-08 | 0.393E-09 | 0.182E-09 | 0.105E-09 | 0.373E-10 | 0.114E-10 | 0.464E-11 | 0.250E-11 | 0.155E-11 |
| SSW                | 0.697E-07 | 0.595E-08 | 0.174E-08 | 0.810E-09 | 0.467E-09 | 0.166E-09 | 0.508E-10 | 0.206E-10 | 0.111E-10 | 0.688E-11 |
| SW                 | 0.555E-07 | 0.474E-08 | 0.139E-08 | 0.645E-09 | 0.372E-09 | 0.132E-09 | 0.404E-10 | 0.164E-10 | 0.883E-11 | 0.548E-11 |
| WSW                | 0.636E-07 | 0.542E-08 | 0.159E-08 | 0.739E-09 | 0.426E-09 | 0.151E-09 | 0.463E-10 | 0.188E-10 | 0.101E-10 | 0.628E-11 |
| W                  | 0.417E-07 | 0.356E-08 | 0.104E-08 | 0.485E-09 | 0.280E-09 | 0.992E-10 | 0.304E-10 | 0.123E-10 | 0.664E-11 | 0.412E-11 |
| WNW                | 0.456E-07 | 0.389E-08 | 0.114E-08 | 0.530E-09 | 0.306E-09 | 0.108E-09 | 0.332E-10 | 0.135E-10 | 0.725E-11 | 0.450E-11 |
| NW                 | 0.666E-07 | 0.569E-08 | 0.167E-08 | 0.774E-09 | 0.447E-09 | 0.158E-09 | 0.485E-10 | 0.197E-10 | 0.106E-10 | 0.658E-11 |
| NNW                | 0.433E-07 | 0.369E-08 | 0.108E-08 | 0.503E-09 | 0.290E-09 | 0.103E-09 | 0.315E-10 | 0.128E-10 | 0.688E-11 | 0.427E-11 |
| N                  | 0.532E-07 | 0.454E-08 | 0.133E-08 | 0.619E-09 | 0.357E-09 | 0.127E-09 | 0.388E-10 | 0.157E-10 | 0.847E-11 | 0.526E-11 |
| NNE                | 0.475E-07 | 0.405E-08 | 0.119E-08 | 0.552E-09 | 0.318E-09 | 0.113E-09 | 0.346E-10 | 0.140E-10 | 0.755E-11 | 0.469E-11 |
| NE                 | 0.494E-07 | 0.421E-08 | 0.124E-08 | 0.574E-09 | 0.331E-09 | 0.117E-09 | 0.360E-10 | 0.146E-10 | 0.786E-11 | 0.488E-11 |
| ENE                | 0.482E-07 | 0.412E-08 | 0.121E-08 | 0.561E-09 | 0.324E-09 | 0.115E-09 | 0.351E-10 | 0.143E-10 | 0.767E-11 | 0.477E-11 |
| E                  | 0.517E-07 | 0.441E-08 | 0.129E-08 | 0.601E-09 | 0.347E-09 | 0.123E-09 | 0.377E-10 | 0.153E-10 | 0.822E-11 | 0.511E-11 |
| ESE                | 0.502E-07 | 0.428E-08 | 0.125E-08 | 0.583E-09 | 0.336E-09 | 0.119E-09 | 0.365E-10 | 0.148E-10 | 0.798E-11 | 0.496E-11 |
| SE                 | 0.398E-07 | 0.340E-08 | 0.996E-09 | 0.463E-09 | 0.267E-09 | 0.947E-10 | 0.290E-10 | 0.118E-10 | 0.633E-11 | 0.393E-11 |
| SSE                | 0.410E-07 | 0.350E-08 | 0.102E-08 | 0.476E-09 | 0.275E-09 | 0.974E-10 | 0.298E-10 | 0.121E-10 | 0.652E-11 | 0.405E-11 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.537E-05                 |
| NNW                | 0.60     | 960    | 0.349E-05                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.161E-07      |
| NNW                | 0.60     | 960    | 0.100E-07      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
WELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.133E-05                 |
| NNW                | 0.81     | 1300   | 0.217E-05                 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.369E-08      |
| NNW                | 0.81     | 1300   | 0.628E-08      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 902      | 275    | 0.262E-04                 |
| SW                 | 8202     | 2500   | 0.499E-06                 |
| WNW                | 1640     | 500    | 0.146E-04                 |
| ENE                | 377      | 115    | 0.557E-04                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 902      | 275    | 0.575E-07      |
| SW                 | 8202     | 2500   | 0.190E-08      |
| WNW                | 1640     | 500    | 0.333E-07      |
| ENE                | 377      | 115    | 0.531E-07      |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.125E-05 | 0.230E-06 | 0.864E-07 | 0.513E-07 | 0.336E-07 | 0.154E-07 | 0.598E-08 | 0.308E-08 | 0.198E-08 | 0.143E-08 |
| SSW                | 0.106E-05 | 0.195E-06 | 0.753E-07 | 0.466E-07 | 0.318E-07 | 0.152E-07 | 0.624E-08 | 0.331E-08 | 0.218E-08 | 0.159E-08 |
| SW                 | 0.390E-05 | 0.478E-06 | 0.190E-06 | 0.115E-06 | 0.776E-07 | 0.372E-07 | 0.157E-07 | 0.861E-08 | 0.580E-08 | 0.432E-08 |
| WSW                | 0.411E-05 | 0.526E-06 | 0.214E-06 | 0.131E-06 | 0.889E-07 | 0.433E-07 | 0.186E-07 | 0.102E-07 | 0.689E-08 | 0.513E-08 |
| W                  | 0.219E-05 | 0.269E-06 | 0.114E-06 | 0.719E-07 | 0.505E-07 | 0.266E-07 | 0.127E-07 | 0.746E-08 | 0.525E-08 | 0.404E-08 |
| WNW                | 0.659E-05 | 0.758E-06 | 0.293E-06 | 0.208E-06 | 0.137E-06 | 0.577E-07 | 0.252E-07 | 0.142E-07 | 0.969E-08 | 0.730E-08 |
| NW                 | 0.695E-05 | 0.899E-06 | 0.367E-06 | 0.226E-06 | 0.161E-06 | 0.799E-07 | 0.400E-07 | 0.213E-07 | 0.103E-07 | 0.765E-08 |
| NNW                | 0.447E-05 | 0.655E-06 | 0.264E-06 | 0.185E-06 | 0.125E-06 | 0.726E-07 | 0.355E-07 | 0.190E-07 | 0.126E-07 | 0.571E-08 |
| N                  | 0.431E-05 | 0.717E-06 | 0.319E-06 | 0.203E-06 | 0.141E-06 | 0.855E-07 | 0.346E-07 | 0.174E-07 | 0.121E-07 | 0.888E-08 |
| NNE                | 0.219E-05 | 0.343E-06 | 0.160E-06 | 0.102E-06 | 0.730E-07 | 0.483E-07 | 0.200E-07 | 0.107E-07 | 0.709E-08 | 0.522E-08 |
| NE                 | 0.314E-05 | 0.398E-06 | 0.185E-06 | 0.106E-06 | 0.805E-07 | 0.551E-07 | 0.285E-07 | 0.155E-07 | 0.103E-07 | 0.767E-08 |
| ENE                | 0.191E-05 | 0.330E-06 | 0.139E-06 | 0.771E-07 | 0.515E-07 | 0.486E-07 | 0.243E-07 | 0.136E-07 | 0.932E-08 | 0.687E-08 |
| E                  | 0.105E-05 | 0.180E-06 | 0.783E-07 | 0.455E-07 | 0.315E-07 | 0.211E-07 | 0.107E-07 | 0.645E-08 | 0.425E-08 | 0.312E-08 |
| ESE                | 0.113E-05 | 0.195E-06 | 0.794E-07 | 0.458E-07 | 0.334E-07 | 0.176E-07 | 0.772E-08 | 0.366E-08 | 0.249E-08 | 0.187E-08 |
| SE                 | 0.198E-05 | 0.281E-06 | 0.111E-06 | 0.623E-07 | 0.425E-07 | 0.207E-07 | 0.902E-08 | 0.503E-08 | 0.342E-08 | 0.256E-08 |
| SSE                | 0.212E-05 | 0.354E-06 | 0.143E-06 | 0.847E-07 | 0.563E-07 | 0.257E-07 | 0.101E-07 | 0.528E-08 | 0.343E-08 | 0.248E-08 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM CONTAINMENT BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.120E-07 | 0.179E-08 | 0.542E-09 | 0.280E-09 | 0.166E-09 | 0.605E-10 | 0.178E-10 | 0.752E-11 | 0.434E-11 | 0.293E-11 |
| SSW                | 0.103E-07 | 0.136E-08 | 0.395E-09 | 0.207E-09 | 0.124E-09 | 0.465E-10 | 0.144E-10 | 0.648E-11 | 0.397E-11 | 0.280E-11 |
| SW                 | 0.165E-07 | 0.181E-08 | 0.574E-09 | 0.304E-09 | 0.183E-09 | 0.692E-10 | 0.220E-10 | 0.100E-10 | 0.620E-11 | 0.440E-11 |
| WSW                | 0.189E-07 | 0.221E-08 | 0.701E-09 | 0.368E-09 | 0.220E-09 | 0.824E-10 | 0.258E-10 | 0.116E-10 | 0.722E-11 | 0.520E-11 |
| W                  | 0.840E-08 | 0.947E-09 | 0.303E-09 | 0.161E-09 | 0.970E-10 | 0.371E-10 | 0.121E-10 | 0.572E-11 | 0.377E-11 | 0.284E-11 |
| WNW                | 0.186E-07 | 0.199E-08 | 0.604E-09 | 0.325E-09 | 0.192E-09 | 0.696E-10 | 0.223E-10 | 0.103E-10 | 0.671E-11 | 0.503E-11 |
| NW                 | 0.200E-07 | 0.239E-08 | 0.734E-09 | 0.380E-09 | 0.226E-09 | 0.116E-09 | 0.663E-10 | 0.283E-10 | 0.742E-11 | 0.545E-11 |
| NNW                | 0.124E-07 | 0.159E-08 | 0.483E-09 | 0.259E-09 | 0.161E-09 | 0.127E-09 | 0.430E-10 | 0.174E-10 | 0.936E-11 | 0.352E-11 |
| N                  | 0.188E-07 | 0.293E-08 | 0.931E-09 | 0.488E-09 | 0.321E-09 | 0.170E-09 | 0.559E-10 | 0.231E-10 | 0.124E-10 | 0.760E-11 |
| NNE                | 0.616E-08 | 0.101E-08 | 0.324E-09 | 0.173E-09 | 0.123E-09 | 0.726E-10 | 0.237E-10 | 0.963E-11 | 0.519E-11 | 0.323E-11 |
| NE                 | 0.606E-08 | 0.964E-09 | 0.314E-09 | 0.160E-09 | 0.952E-10 | 0.758E-10 | 0.253E-10 | 0.104E-10 | 0.562E-11 | 0.349E-11 |
| ENE                | 0.651E-08 | 0.121E-08 | 0.380E-09 | 0.189E-09 | 0.112E-09 | 0.757E-10 | 0.296E-10 | 0.103E-10 | 0.553E-11 | 0.345E-11 |
| E                  | 0.540E-08 | 0.752E-09 | 0.243E-09 | 0.125E-09 | 0.753E-10 | 0.319E-10 | 0.192E-10 | 0.784E-11 | 0.427E-11 | 0.268E-11 |
| ESE                | 0.646E-08 | 0.978E-09 | 0.310E-09 | 0.160E-09 | 0.962E-10 | 0.353E-10 | 0.105E-10 | 0.458E-11 | 0.275E-11 | 0.192E-11 |
| SE                 | 0.910E-08 | 0.127E-08 | 0.386E-09 | 0.194E-09 | 0.116E-09 | 0.432E-10 | 0.135E-10 | 0.602E-11 | 0.368E-11 | 0.261E-11 |
| SSE                | 0.233E-07 | 0.315E-08 | 0.979E-09 | 0.506E-09 | 0.301E-09 | 0.110E-09 | 0.331E-10 | 0.143E-10 | 0.838E-11 | 0.568E-11 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.641E-04                 |
| NNW                | 0.60     | 960    | 0.365E-04                 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 0.60     | 960    | 0.697E-07      |
| NNW                | 0.60     | 960    | 0.534E-07      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.137E-04                 |
| NNW                | 0.81     | 1300   | 0.216E-04                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.127E-07      |
| NNW                | 0.81     | 1300   | 0.298E-07      |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 820      | 250    | 0.273E-03                 |
| SW                 | 8202     | 2500   | 0.320E-05                 |
| WNW                | 1558     | 475    | 0.161E-03                 |
| ENE                | 410      | 125    | 0.656E-03                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 820      | 250    | 0.452E-06      |
| SW                 | 8202     | 2500   | 0.362E-08      |
| WNW                | 1558     | 475    | 0.132E-06      |
| ENE                | 410      | 125    | 0.381E-06      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASES FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.877E-05 | 0.931E-06 | 0.315E-06 | 0.162E-06 | 0.102E-06 | 0.436E-07 | 0.168E-07 | 0.899E-08 | 0.596E-08 | 0.439E-08 |
| SSW                | 0.349E-04 | 0.386E-05 | 0.133E-05 | 0.694E-06 | 0.440E-06 | 0.191E-06 | 0.757E-07 | 0.410E-07 | 0.275E-07 | 0.203E-07 |
| SW                 | 0.310E-04 | 0.346E-05 | 0.119E-05 | 0.622E-06 | 0.395E-06 | 0.172E-06 | 0.681E-07 | 0.371E-07 | 0.249E-07 | 0.185E-07 |
| WSW                | 0.719E-04 | 0.839E-05 | 0.293E-05 | 0.154E-05 | 0.984E-06 | 0.434E-06 | 0.175E-06 | 0.963E-07 | 0.651E-07 | 0.486E-07 |
| W                  | 0.562E-04 | 0.648E-05 | 0.226E-05 | 0.119E-05 | 0.758E-06 | 0.334E-06 | 0.134E-06 | 0.735E-07 | 0.495E-07 | 0.369E-07 |
| WNW                | 0.697E-04 | 0.765E-05 | 0.263E-05 | 0.138E-05 | 0.874E-06 | 0.381E-06 | 0.151E-06 | 0.812E-07 | 0.541E-07 | 0.400E-07 |
| NW                 | 0.827E-04 | 0.897E-05 | 0.307E-05 | 0.160E-05 | 0.102E-05 | 0.441E-06 | 0.174E-06 | 0.935E-07 | 0.622E-07 | 0.459E-07 |
| NNW                | 0.473E-04 | 0.509E-05 | 0.173E-05 | 0.901E-06 | 0.570E-06 | 0.245E-06 | 0.961E-07 | 0.516E-07 | 0.343E-07 | 0.253E-07 |
| N                  | 0.396E-04 | 0.425E-05 | 0.144E-05 | 0.749E-06 | 0.473E-06 | 0.203E-06 | 0.793E-07 | 0.424E-07 | 0.282E-07 | 0.207E-07 |
| NNE                | 0.263E-04 | 0.290E-05 | 0.996E-06 | 0.520E-06 | 0.330E-06 | 0.143E-06 | 0.566E-07 | 0.306E-07 | 0.204E-07 | 0.151E-07 |
| NE                 | 0.293E-04 | 0.323E-05 | 0.111E-05 | 0.579E-06 | 0.367E-06 | 0.160E-06 | 0.629E-07 | 0.340E-07 | 0.227E-07 | 0.168E-07 |
| ENE                | 0.221E-04 | 0.237E-05 | 0.806E-06 | 0.419E-06 | 0.265E-06 | 0.114E-06 | 0.448E-07 | 0.239E-07 | 0.158E-07 | 0.117E-07 |
| E                  | 0.274E-04 | 0.308E-05 | 0.106E-05 | 0.558E-06 | 0.355E-06 | 0.156E-06 | 0.619E-07 | 0.337E-07 | 0.226E-07 | 0.168E-07 |
| ESE                | 0.441E-04 | 0.505E-05 | 0.175E-05 | 0.922E-06 | 0.588E-06 | 0.258E-06 | 0.103E-06 | 0.566E-07 | 0.380E-07 | 0.283E-07 |
| SE                 | 0.306E-04 | 0.346E-05 | 0.120E-05 | 0.627E-06 | 0.399E-06 | 0.174E-06 | 0.694E-07 | 0.379E-07 | 0.255E-07 | 0.189E-07 |
| SSE                | 0.220E-04 | 0.221E-05 | 0.739E-06 | 0.379E-06 | 0.238E-06 | 0.101E-06 | 0.383E-07 | 0.199E-07 | 0.129E-07 | 0.938E-08 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM FUEL BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.288E-07 | 0.246E-08 | 0.721E-09 | 0.335E-09 | 0.193E-09 | 0.685E-10 | 0.210E-10 | 0.852E-11 | 0.459E-11 | 0.285E-11 |
| SSW                | 0.480E-07 | 0.410E-08 | 0.120E-08 | 0.559E-09 | 0.322E-09 | 0.114E-09 | 0.350E-10 | 0.142E-10 | 0.764E-11 | 0.475E-11 |
| SW                 | 0.463E-07 | 0.395E-08 | 0.116E-08 | 0.538E-09 | 0.310E-09 | 0.110E-09 | 0.337E-10 | 0.137E-10 | 0.736E-11 | 0.457E-11 |
| WSW                | 0.605E-07 | 0.516E-08 | 0.151E-08 | 0.703E-09 | 0.406E-09 | 0.144E-09 | 0.441E-10 | 0.179E-10 | 0.962E-11 | 0.598E-11 |
| W                  | 0.395E-07 | 0.337E-08 | 0.988E-09 | 0.459E-09 | 0.265E-09 | 0.939E-10 | 0.288E-10 | 0.117E-10 | 0.628E-11 | 0.390E-11 |
| WNW                | 0.573E-07 | 0.489E-08 | 0.143E-08 | 0.666E-09 | 0.384E-09 | 0.136E-09 | 0.417E-10 | 0.169E-10 | 0.911E-11 | 0.566E-11 |
| NW                 | 0.929E-07 | 0.793E-08 | 0.232E-08 | 0.108E-08 | 0.623E-09 | 0.221E-09 | 0.677E-10 | 0.275E-10 | 0.148E-10 | 0.918E-11 |
| NNW                | 0.712E-07 | 0.607E-08 | 0.178E-08 | 0.827E-09 | 0.477E-09 | 0.169E-09 | 0.519E-10 | 0.210E-10 | 0.113E-10 | 0.703E-11 |
| N                  | 0.758E-07 | 0.647E-08 | 0.190E-08 | 0.881E-09 | 0.508E-09 | 0.180E-09 | 0.552E-10 | 0.224E-10 | 0.121E-10 | 0.749E-11 |
| NNE                | 0.313E-07 | 0.267E-08 | 0.783E-09 | 0.364E-09 | 0.210E-09 | 0.745E-10 | 0.228E-10 | 0.926E-11 | 0.498E-11 | 0.309E-11 |
| NE                 | 0.331E-07 | 0.282E-08 | 0.828E-09 | 0.385E-09 | 0.222E-09 | 0.787E-10 | 0.241E-10 | 0.978E-11 | 0.526E-11 | 0.327E-11 |
| ENE                | 0.278E-07 | 0.237E-08 | 0.694E-09 | 0.323E-09 | 0.186E-09 | 0.660E-10 | 0.202E-10 | 0.821E-11 | 0.442E-11 | 0.274E-11 |
| E                  | 0.246E-07 | 0.210E-08 | 0.614E-09 | 0.285E-09 | 0.165E-09 | 0.584E-10 | 0.179E-10 | 0.726E-11 | 0.391E-11 | 0.243E-11 |
| ESE                | 0.381E-07 | 0.325E-08 | 0.953E-09 | 0.443E-09 | 0.255E-09 | 0.905E-10 | 0.277E-10 | 0.113E-10 | 0.606E-11 | 0.376E-11 |
| SE                 | 0.324E-07 | 0.276E-08 | 0.810E-09 | 0.376E-09 | 0.217E-09 | 0.770E-10 | 0.236E-10 | 0.957E-11 | 0.515E-11 | 0.320E-11 |
| SSE                | 0.751E-07 | 0.641E-08 | 0.188E-08 | 0.873E-09 | 0.504E-09 | 0.179E-09 | 0.547E-10 | 0.222E-10 | 0.119E-10 | 0.742E-11 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 0.60     | 960    | 0.573E-04                 |
| NNW                | 0.60     | 960    | 0.329E-04                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
VEGETABLE GARDEN D/Q VALUES ( $1/M^2$ )

| RECEI-TOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|---------------------|----------|--------|----------------|
|                     | HILES    | METERS |                |
| NW                  | 0.60     | 960    | 0.697E-07      |
| NNW                 | 0.60     | 960    | 0.534E-07      |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | MILES    | METERS |                           |
| NW                 | 1.24     | 2000   | 0.126E-04                 |
| NNW                | 0.81     | 1300   | 0.193E-04                 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
NELL ANDERSON D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | MILES    | METERS |                |
| NW                 | 1.24     | 2000   | 0.127E-07      |
| NNW                | 0.81     | 1300   | 0.298E-07      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDRY  
X/Q VALUES (SEC/M<sup>3</sup>)

| RECEPTOR<br>SECTOR | DISTANCE |        | X/Q<br>SEC/M <sup>3</sup> |
|--------------------|----------|--------|---------------------------|
|                    | FEET     | METERS |                           |
| N                  | 1033     | 315    | 0.175E-03                 |
| SW                 | 8202     | 2500   | 0.294E-03                 |
| WNW                | 1575     | 480    | 0.150E-03                 |
| ENE                | 492      | 150    | 0.355E-03                 |



RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT RECEPTORS WITHIN THE SITE BOUNDARY  
D/Q VALUES ( $1/M^2$ )

| RECEPTOR<br>SECTOR | DISTANCE |        | D/Q<br>$1/M^2$ |
|--------------------|----------|--------|----------------|
|                    | FEET     | METERS |                |
| N                  | 1033     | 315    | 0.323E-06      |
| SW                 | 8202     | 2500   | 0.362E-08      |
| WNW                | 1575     | 480    | 0.130E-06      |
| ENE                | 492      | 150    | 0.337E-06      |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM RADWASTE BUILDING  
AT POPULATION RECEPTORS  
X/Q VALUES (SEC/M<sup>3</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.827E-05 | 0.868E-06 | 0.299E-06 | 0.156E-06 | 0.986E-07 | 0.425E-07 | 0.165E-07 | 0.883E-08 | 0.586E-08 | 0.432E-08 |
| SSW                | 0.324E-04 | 0.356E-05 | 0.125E-05 | 0.663E-06 | 0.424E-06 | 0.186E-06 | 0.741E-07 | 0.403E-07 | 0.270E-07 | 0.200E-07 |
| SW                 | 0.290E-04 | 0.317E-05 | 0.112E-05 | 0.592E-06 | 0.379E-06 | 0.167E-06 | 0.666E-07 | 0.364E-07 | 0.244E-07 | 0.182E-07 |
| WSW                | 0.642E-04 | 0.759E-05 | 0.273E-05 | 0.146E-05 | 0.939E-06 | 0.420E-06 | 0.170E-06 | 0.942E-07 | 0.638E-07 | 0.477E-07 |
| W                  | 0.523E-04 | 0.589E-05 | 0.211E-05 | 0.113E-05 | 0.725E-06 | 0.323E-06 | 0.131E-06 | 0.720E-07 | 0.486E-07 | 0.363E-07 |
| WNW                | 0.639E-04 | 0.707E-05 | 0.249E-05 | 0.132E-05 | 0.843E-06 | 0.371E-06 | 0.148E-06 | 0.799E-07 | 0.533E-07 | 0.394E-07 |
| NW                 | 0.761E-04 | 0.832E-05 | 0.292E-05 | 0.154E-05 | 0.982E-06 | 0.430E-06 | 0.171E-06 | 0.920E-07 | 0.613E-07 | 0.453E-07 |
| NNW                | 0.438E-04 | 0.474E-05 | 0.165E-05 | 0.866E-06 | 0.551E-06 | 0.239E-06 | 0.944E-07 | 0.508E-07 | 0.338E-07 | 0.249E-07 |
| N                  | 0.368E-04 | 0.396E-05 | 0.137E-05 | 0.720E-06 | 0.457E-06 | 0.198E-06 | 0.779E-07 | 0.418E-07 | 0.277E-07 | 0.205E-07 |
| NNE                | 0.243E-04 | 0.268E-05 | 0.942E-06 | 0.498E-06 | 0.318E-06 | 0.139E-06 | 0.555E-07 | 0.301E-07 | 0.201E-07 | 0.149E-07 |
| NE                 | 0.272E-04 | 0.298E-05 | 0.105E-05 | 0.554E-06 | 0.354E-06 | 0.155E-06 | 0.617E-07 | 0.334E-07 | 0.223E-07 | 0.165E-07 |
| ENE                | 0.203E-04 | 0.220E-05 | 0.767E-06 | 0.403E-06 | 0.257E-06 | 0.112E-06 | 0.440E-07 | 0.235E-07 | 0.156E-07 | 0.115E-07 |
| E                  | 0.254E-04 | 0.282E-05 | 0.100E-05 | 0.532E-06 | 0.341E-06 | 0.151E-06 | 0.605E-07 | 0.330E-07 | 0.222E-07 | 0.165E-07 |
| ESE                | 0.409E-04 | 0.460E-05 | 0.164E-05 | 0.876E-06 | 0.563E-06 | 0.250E-06 | 0.101E-06 | 0.554E-07 | 0.374E-07 | 0.278E-07 |
| SE                 | 0.285E-04 | 0.316E-05 | 0.112E-05 | 0.597E-06 | 0.382E-06 | 0.168E-06 | 0.679E-07 | 0.372E-07 | 0.250E-07 | 0.186E-07 |
| SSE                | 0.203E-04 | 0.210E-05 | 0.713E-06 | 0.369E-06 | 0.232E-06 | 0.990E-07 | 0.378E-07 | 0.197E-07 | 0.128E-07 | 0.930E-08 |

RIVER BEND STATION FOURTH QUARTER (OCTOBER 1, 1989 TO DECEMBER 31, 1989)

CONTINUOUS RELEASE FROM WASTEWATER BUILDING  
AT POPULATION RECEPTORS  
D/Q VALUES (1/M<sup>2</sup>)

DISTANCE IN MILES

| RECEPTOR<br>SECTOR | 0.500     | 1.500     | 2.500     | 3.500     | 4.500     | 7.500     | 15.00     | 25.00     | 35.00     | 45.00     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S                  | 0.288E-07 | 0.246E-08 | 0.721E-09 | 0.335E-09 | 0.193E-09 | 0.685E-10 | 0.210E-10 | 0.852E-11 | 0.459E-11 | 0.285E-11 |
| SSW                | 0.480E-07 | 0.410E-08 | 0.120E-08 | 0.559E-09 | 0.322E-09 | 0.114E-09 | 0.350E-10 | 0.142E-10 | 0.764E-11 | 0.475E-11 |
| SW                 | 0.463E-07 | 0.395E-08 | 0.116E-08 | 0.538E-09 | 0.310E-09 | 0.110E-09 | 0.337E-10 | 0.137E-10 | 0.736E-11 | 0.457E-11 |
| WSW                | 0.605E-07 | 0.516E-08 | 0.151E-08 | 0.703E-09 | 0.406E-09 | 0.144E-09 | 0.441E-10 | 0.179E-10 | 0.962E-11 | 0.598E-11 |
| W                  | 0.395E-07 | 0.337E-08 | 0.988E-09 | 0.459E-09 | 0.265E-09 | 0.939E-10 | 0.288E-10 | 0.117E-10 | 0.628E-11 | 0.390E-11 |
| WNW                | 0.573E-07 | 0.489E-08 | 0.143E-08 | 0.666E-09 | 0.384E-09 | 0.136E-09 | 0.417E-10 | 0.169E-10 | 0.911E-11 | 0.566E-11 |
| NW                 | 0.929E-07 | 0.793E-08 | 0.232E-08 | 0.108E-08 | 0.623E-09 | 0.221E-09 | 0.677E-10 | 0.275E-10 | 0.148E-10 | 0.918E-11 |
| NNW                | 0.712E-07 | 0.607E-08 | 0.178E-08 | 0.827E-09 | 0.477E-09 | 0.169E-09 | 0.519E-10 | 0.210E-10 | 0.113E-10 | 0.703E-11 |
| N                  | 0.758E-07 | 0.647E-08 | 0.190E-08 | 0.881E-09 | 0.508E-09 | 0.180E-09 | 0.552E-10 | 0.224E-10 | 0.121E-10 | 0.749E-11 |
| NNE                | 0.313E-07 | 0.267E-08 | 0.783E-09 | 0.364E-09 | 0.210E-09 | 0.745E-10 | 0.228E-10 | 0.926E-11 | 0.498E-11 | 0.309E-11 |
| NE                 | 0.331E-07 | 0.282E-08 | 0.828E-09 | 0.385E-09 | 0.222E-09 | 0.787E-10 | 0.241E-10 | 0.978E-11 | 0.526E-11 | 0.327E-11 |
| ENE                | 0.278E-07 | 0.237E-08 | 0.694E-09 | 0.323E-09 | 0.186E-09 | 0.660E-10 | 0.202E-10 | 0.821E-11 | 0.442E-11 | 0.274E-11 |
| E                  | 0.246E-07 | 0.210E-08 | 0.614E-09 | 0.285E-09 | 0.165E-09 | 0.584E-10 | 0.179E-10 | 0.726E-11 | 0.391E-11 | 0.243E-11 |
| ESE                | 0.381E-07 | 0.325E-08 | 0.953E-09 | 0.443E-09 | 0.255E-09 | 0.905E-10 | 0.277E-10 | 0.113E-10 | 0.606E-11 | 0.376E-11 |
| SE                 | 0.324E-07 | 0.276E-08 | 0.810E-09 | 0.376E-09 | 0.217E-09 | 0.770E-10 | 0.236E-10 | 0.957E-11 | 0.515E-11 | 0.320E-11 |
| SSE                | 0.751E-07 | 0.641E-08 | 0.188E-08 | 0.873E-09 | 0.504E-09 | 0.179E-09 | 0.547E-10 | 0.222E-10 | 0.119E-10 | 0.742E-11 |