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U. S. Nuclear Regulatory Commission
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Washington, DC 20555

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Semiannual Radioactive Effluent
Release Report for the Second Half of 1991

Pursuant to the South Texas Project Electric Generating Station (STPEGS) Technical Specification 6.9.1.4 and 10CFR50.36a, attached is the Semiannual Radioactive Effluent Release Report for the second half of 1991. The report covers the period from July 1, 1991 to December 31, 1991.

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Attachment: Semiannual Radioactive Effluent
Release Report for the Second Half
of 1991.

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SOUTH TEXAS PROJECT
ELECTRIC GENERATING
STATION

**SEMIANNUAL
RADIOACTIVE
EFFLUENT
RELEASE REPORT**

FOR SECOND HALF, 1991

HOUSTON LIGHTING AND POWER COMPANY

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT ONE

LICENSE NO. NPF-76

AND

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT TWO

LICENSE NO. NPF-80

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

JULY 1, 1991 THROUGH DECEMBER 31, 1991

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EXECUTIVE SUMMARY

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The second half of 1991 Semiannual Radioactive Effluent Release Report illustrates that all effluent releases were well below applicable limits and were consistent with results from previous reporting periods. The radioactive waste processing systems were operated properly and have performed their intended functions.

This report summarizes the radioactive liquid and gaseous releases (effluents) from the South Texas Project Electric Generating Station for the second half of 1991. This report also includes an assessment of radiation doses due to radioactive liquid and gaseous effluents released from the station during 1991.

To protect the general public, guidelines and limits have been established governing the release of radioactivity in liquid and gaseous effluents. The Code of Federal Regulations, Title 10, Part 50, Appendix I provides guidelines for the Technical Specifications which are part of the license authorizing operation. The South Texas Project's Technical Specifications place restrictions on the release of radioactivity to the environment and the resulting dose to the public.

The radioactive waste treatment systems at the South Texas Project are designed to collect and process liquid and gaseous wastes which contain radioactivity. Radiological releases from the plant are continuously measured by installed plant radiation monitors which survey the unit vent for gaseous releases to the atmosphere, and the discharge line for liquid releases to the Main Cooling Reservoir (MCR). These monitors and associated sample analyses provide a means to very accurately determine the type and quantities of radioactive materials being released to the environment.

The dose to people in the surrounding area is calculated for each liquid and gaseous release. The dose due to radioactivity in gaseous effluents is calculated using parameters such as the amount of radioactivity released, the meteorological conditions at the time of release, the locations of important pathways and receptors (e.g., cow milk, vegetable gardens, and residences), and usage factors (e.g., inhalation, food consumption). The dose due to radioactivity released in liquid effluents is calculated using parameters such as the amount of radioactivity released, the total volume of radioactive liquid, the total volume of dilution water, and usage factors (e.g., fish consumption, shoreline exposure). Dose calculations for liquid effluent releases are based on offsite discharges from the MCR to the Colorado River and the Little Robbins Slough area. These calculations produce a conservative estimation of the dose since no offsite discharges were made from the MCR in 1991. Table I summarizes the dose due to radioactivity released in gaseous and liquid effluents during 1991.

TABLE 1

Maximum Doses to the Public Due to Radioactivity
Released in Gaseous and Liquid Effluents

| | 1991 Dose | Annual Limit Per Unit | Percent of Limit |
|--|--------------|-----------------------------|---------------------|
| Liquid Effluents | | | |
| Whole Body | 0.277 mrem | 3 mrem | 4.6% |
| Organ (Bone) | 1.081 mrem | 10 mrem | 5.4% |
| Gaseous Effluents | | | |
| Noble Gas | | | |
| Gamma (Air Dose) | 0.007 mrad | 10 mrad | 0.037% |
| Beta (Air Dose) | 0.012 mrad | 20 mrad | 0.029% |
| Iodine-131, Iodine-133, tritium, and particulates with half-lives > 8 days | 0.002 mrem | 15 mrem | 0.006% |

These doses are a small fraction of the limits established by the Nuclear Regulatory Commission in the South Texas Project Technical Specifications.

During the second half of 1991 reporting period:

- o No discharges were made from the Main Cooling Reservoir to the Colorado River.
- o No major design changes were made to the liquid, gaseous, or solid radioactive waste treatment systems.
- o Seven radioactive shipments of dry active waste and resin were made for processing/burial.
- o There were no changes made to the Radioactive Waste Process Control Program or Offsite Dose Calculation Manual.
- o The Land Use Census did not identify any new locations for dose calculations or environmental monitoring.

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1.0 Introduction

This Semiannual Radioactive Effluent Release Report for the period July 1, 1991, through December 31, 1991, is submitted in accordance with Appendix A of License NPF-76 and NPF-80, Technical Specifications.

A single submittal is made for both units which combines those sections that are common. Separate tables of releases and release totals are included where separate processing systems exist.

This report includes an annual summary of hourly meteorological measurements taken during each quarter. This data appears as tables of wind direction and wind speed by atmospheric stability class. Hourly meteorological data for batch releases are presented for the period of actual release. All assessments of radiation doses are performed in accordance with the Offsite Dose Calculation Manual (ODCM).

Liquid quarterly composites for Strontium-89 and Strontium-90 for the 4th quarter, 1991, will be updated in the next Semiannual Radioactive Effluent Release Report if appropriate.

2.0 Supplemental Information for Effluent and Waste Disposal

Unit Number 1

| | | |
|------------------------|--------|-------------------------------------|
| Type: | PWR | Houston Lighting & Power Co. |
| Docket No. | 50-498 | Power (MWT)- 3800 |
| Cooling Water Source: | | Initial Criticality-(March 8, 1988) |
| Main Cooling Reservoir | | |

Unit Number 2

| | | |
|------------------------|--------|--------------------------------------|
| Type: | PWR | Houston Lighting & Power Co. |
| Docket No. | 50-499 | Power (MWT)- 3800 |
| Cooling Water Source: | | Initial Criticality-(March 12, 1989) |
| Main Cooling Reservoir | | |

2.1 Regulatory Limits

2.1.1 Fission and activation gases

The air dose due to noble gases released in gaseous effluents, from each unit, to areas at and beyond the Site Boundary shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and
- b. During any calendar year: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.

2.1.2 Iodines and Particulates, half-lives > 8 days

The dose to a Member of the Public from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released, from each unit, to areas at and beyond the Site Boundary shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 7.5 mrems to any organ and,
- b. During any calendar year: Less than or equal to 15 mrems to any organ.

2.1.3 Liquid Effluents

The dose or dose commitment to a Member of the Public from radioactive materials in liquid effluents released, from each unit, to Unrestricted Areas shall be limited to:

- a. During any calendar quarter: Less than or equal to 1.5 mrems to the whole body and to less than or equal to 5 mrems to any organ, and
- b. During any calendar year: Less than or equal to 3 mrems to the whole body and to less than or equal to 10 mrems to any organ.

2.2 Maximum Permissible Concentrations

2.2.1 Gaseous Effluents

The dose rate due to radioactive materials released in gaseous effluents from the site to areas at and beyond the Site Boundary shall be limited to the following:

- a. For noble gases: Less than or equal to 500 mrems/yr to the whole body and less than or equal to 3000 mrems/yr to the skin and
- b. For Iodine-131, for Iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to 1500 mrems/yr to any organ.

2.2.2 Liquid Effluents

The concentration of radioactive material released in liquid effluents to Unrestricted Areas shall be limited to the concentrations specified in 10CFR Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases the concentration shall be limited to $2.0E-04$ micro curie/ml total activity.

2.3 Average Energy (MeV/Disintegration)

The Average Energy (or $E\text{-bar}$) shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration for the isotopes other than Iodines, with half-lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

$E\text{-bar}$ (MeV/Disintegration) 0.474 Unit 1

0.551 Unit 2

2.4 Measurement and Approximations of Total Activity

The following discussions detail the methods used to measure and approximate total activity for the following:

- a. Fission and Activation Gases
- b. Iodines
- c. Particulates
- d. Liquid Effluents

Tables A3-1 and A4-1 of the STPEGS Offsite Dose Calculation Manual (ODCM) give sampling frequencies and lower limit of detection requirements for the analysis of liquid and gaseous effluent streams.

2.4.1 Gaseous Effluents

2.4.1.1 Fission and Activation Gases

The following noble gases are considered in evaluating gaseous airborne discharges:

| | | |
|--------|---------|---------|
| Ar-41 | Kr-88 | Xe-133 |
| Kr-83m | Kr-89 | Xe-135m |
| Kr-85m | Kr-90 | Xe-135 |
| Kr-85 | Xe-131m | Xe-137 |
| Kr-87 | Xe-133m | Xe-138 |

2.4.1.2 Iodines and Particulates

The radioiodines and radioactive materials in particulate forms to be considered are:

| | | |
|-------|--------|-------|
| Cr-51 | Sb-124 | H-3 |
| Mn-54 | I-131 | Mo-99 |
| Fe-59 | I-133 | |
| Co-58 | Cs-134 | |
| Co-60 | Cs-136 | |
| Zn-65 | Cs-137 | |
| Sr-89 | Ba-140 | |
| Sr-90 | Ce-141 | |
| Zr-95 | Ce-144 | |

Other nuclides with
half-lives greater
than 8 days

2.4.1.3 Analytical Methods

a. Batch Gaseous Releases

Pre-release grab samples from the plant containment atmosphere, prior to issuance of weekly permits, and pre-release grab samples from the RCS Vacuum Degassing System are analyzed on a Gamma Spectroscopy System utilizing high purity germanium detectors (HPGe) for noble gas, iodine and particulate activity.

The radionuclide values obtained are used in conjunction with the gross noble gas release rate monitoring data collected by the radiation monitoring system to estimate the release rate of each radionuclide in the effluent streams.

b. Continuous Gaseous Releases

Periodic noble gas and tritium grab samples are taken from the continuous release points (i.e. the Unit Vent and the condenser air removal system exhaust, secondary steam leakage, and the MAB elevator machine room exhaust fan). Continuous sampling for particulates and iodine is also performed on the effluent streams. They are analyzed for gross alpha and gamma radionuclides, as described above for batch releases. Strontium-89 and Strontium-90 analysis is performed by an offsite laboratory.

2.4.2 Liquid Effluents

The radionuclides listed below are considered when evaluating liquid effluents:

| | | |
|-------|---------|----------------------|
| H3 | Y-90 | I-133 |
| Na-24 | Y-91m | I-134 |
| Cr-51 | Y-91 | I-135 |
| Mn-54 | Y-93 | Cs-134 |
| Mn-56 | Zr-95 | Cs-136 |
| Fe-55 | Zr-97 | Cs-137 |
| Fe-59 | Nb-95 | Cs-138 |
| Co-58 | Mo-99 | Ba-139 |
| Co-60 | Tc-99m | Ba-140 |
| Ni-65 | Tc-101 | Ba-141 |
| Cu-64 | Ru-105 | Ba-142 |
| Zn-65 | Ru-106 | La-140 |
| Zn-69 | Ag-110m | La-142 |
| Br-83 | Te-125m | Ce-141 |
| Br-84 | Te-127m | Ce-143 |
| Br-85 | Te-127 | Ce-144 |
| Rb-86 | Te-129m | Pr-143 |
| Rb-88 | Te-129 | Pr-144 |
| Rb-89 | Te-131m | Nd-147 |
| Sr-89 | Te-131 | W-187 |
| Sr-90 | Te-132 | Np-239 |
| Sr-91 | I-130 | .LIQ* |
| Sr-92 | I-131 | .ALPHA (Gross Alpha) |
| | I-132 | .Xe-133 |
| | | .Xe-135 |

*includes other gamma peaks that are identified

2.4.2.1 Analytical Methods

a. Liquid Releases

Liquid effluents that are processed by the liquid waste processing system are released as batches. Liquid effluents that are due to primary to secondary leakage or other plant operations are released as continuous releases. For batch releases, representative pre-release grab samples are taken and analyzed in accordance with Table A3-1 of the ODCM. For continuous releases, representative samples are collected weekly and analyzed. Radionuclide analyses are performed using Gamma Spectroscopy System. Aliquots of each pre-release batch sample and of representative samples for

continuous releases are composited in accordance with the requirements in Table A3-1 of the ODCM. Gross alpha determinations are made using a Gas-Flow Proportional Counting System. Tritium concentrations are determined using Liquid Scintillation Counting techniques. Dissolved and entrained gas concentrations are determined by counting grab samples on the Gamma Spectroscopy System. Strontium 89 and 90 and Iron 55 determinations are performed by an offsite laboratory.

The radionuclide concentrations obtained are used with the flow total for each batch release. The error associated with the flow total is small in relation to the counting uncertainty of the radionuclide concentration analysis. The average uncertainty associated with counting measurements is 5% or less at the 95% confidence level.

2.5 Batch Releases

Liquid and gaseous summaries are compiled from permits generated using the Nuclear Data Effluent Management System and plant procedures. Liquid batch releases are accounted for by individual permits. Batch times represent the actual period of release. Gaseous batch releases are accounted for by weekly permits. Batch times represent the time period the permit is open. Plant Operations may open and close ventilation isolation valves as necessary to control pressure or purge containment, therefore the actual duration of each release is less than indicated. Since the only Batch-type releases at STPEGS are containment building purges or pressure reliefs which are also monitored by the unit vent, the activity released in this mode is also reported in the continuous release totals.

| 2.5.1 Liquid (Unit 1) | Quarter 3 | Quarter 4 |
|---|-------------|-------------|
| a. Number of releases: | <u>94</u> | <u>66</u> |
| b. Total time period for releases (min): | <u>4983</u> | <u>3489</u> |
| c. Maximum time period for a release (min): | <u>61</u> | <u>59</u> |
| d. Average time period for a release (min): | <u>53</u> | <u>53</u> |
| e. Minimum time period for a release (min): | <u>26</u> | <u>22</u> |

| 2.5.2 Gaseous (Unit 1) | Quarter 3 | Quarter 4 |
|--|--------------|---------------|
| a. Number of releases: | <u>17</u> | <u>17</u> |
| b. Total time period for releases (min): | <u>90573</u> | <u>98912</u> |
| c. Maximum time period for a release (min): | <u>9527</u> | <u>9786</u> |
| d. Average time period for a release (min): | <u>5328</u> | <u>5818</u> |
| e. Minimum time period for a release (min): | <u>7</u> | <u>259</u> |
| 2.5.3 Liquid (Unit 2) | | |
| a. Number of releases: | <u>126</u> | <u>106</u> |
| b. Total time period for releases (min): | <u>6530</u> | <u>5434</u> |
| c. Maximum time period for a release (min): | <u>82</u> | <u>59</u> |
| d. Average time period for a release (min): | <u>52</u> | <u>51</u> |
| e. Minimum time period for a release (min): | <u>1</u> | <u>1</u> |
| 2.5.4 Gaseous (Unit 2) | | |
| a. Number of releases: | <u>13</u> | <u>38</u> |
| b. Total time period for releases (min): | <u>51506</u> | <u>119020</u> |
| c. Maximum time period for a release (min): | <u>9934</u> | <u>9525</u> |
| d. Average time period for a release (min): | <u>3962</u> | <u>3132</u> |
| e. Minimum time period for a release (min): | <u>29</u> | <u>29</u> |

| | | | |
|-------|-----------------------------------|------------------|------------------|
| 2.6 | Abnormal (Unplanned) Releases | Quarter 3 | Quarter 4 |
| 2.6.1 | Liquid (Unit 1) | | |
| a. | Number of releases: | <u>0</u> | <u>0</u> |
| b. | Total activity released (curies): | <u>0.000E+00</u> | <u>0.000E+00</u> |
| 2.6.2 | Gaseous (Unit 1) | | |
| a. | Number of releases: | <u>0</u> | <u>0</u> |
| b. | Total activity released (curies): | <u>0.000E+00</u> | <u>0.000E+00</u> |
| 2.6.3 | Liquid (Unit 2) | | |
| a. | Number of releases: | <u>0</u> | <u>0</u> |
| b. | Total activity released (curies): | <u>0.000E+00</u> | <u>0.000E+00</u> |
| 2.6.4 | Gaseous (Unit 2) | | |
| a. | Number of releases: | <u>0</u> | <u>0</u> |
| b. | Total activity released (curies): | <u>0.000E+00</u> | <u>0.000E+00</u> |

2.7 Estimate of Total Error

2.7.1 Liquid

- The maximum error associated with volume and flow measurements, based upon plant calibration practice, is estimated to be +/- 1.277%.
- The average uncertainty associated with counting measurements is 5% or less at the 95% confidence level.
- The error associated with dilution volume is estimated to be +/- 10%.

2.7.2 Gaseous

- a. The maximum error associated with monitor readings, sample flow, vent flow, sample collection, monitor calibration and laboratory procedures are collectively estimated to be:

| | |
|------------------------------|------|
| Fission and Activation Gases | +25% |
| Iodines | +25% |
| Particulates | +25% |
| Tritium | +25% |

- b. The average uncertainty associated with counting measurements is 5% or less at the 95% confidence level for fission and activation gases, iodines, particulates and tritium.

2.7.3 Solid Radioactive Waste

The error associated in determining the contents and volume of solid radwaste shipments is estimated to be +/- 5% significance levels and $\pm 1\%$, respectively.

2.8 Solid Waste Shipments

A total of seven shipments of radioactive dry active waste and resin were made during the reporting period. A summary of the data is provided in the Solid Waste and Irradiated Fuel Shipments Table.

2.9 Radiological Impact on Man (ref. Technical Specifications 6.9.1.4)

This data for the period January 1, 1991, through December 31, 1991, is provided in the Dose Accumulations and the Summary of Direct Radiation Tables.

2.10 Meteorological Data

The 1991 meteorological data is presented in the form of joint frequency tables. Each quarter contains eight tables, one for each stability class and one for all classes combined.

A second set of joint frequency tables is provided for time periods when the gaseous effluent release rate was significantly higher than normal. Typical gaseous release rates seldom exceed about 10 uCi/second so these tables contain the meteorological conditions during periods when the release rate for at least one of the two units exceeded 20 uCi/second. These tables are provided in place of meteorological data during "batch releases". The only gaseous batch releases at the STPEGS are containment purges and pressure reliefs which are discharged through the unit vent, a continuous discharge point. The releases corresponding to the time periods in these tables were related to containment pressure equalization and other routine plant evolutions which resulted in elevated release rates. Note that during the first six months of 1991, the release rate for Unit 1 or Unit 2 exceeded 20 uCi/second on only two occasions. Consequently, the joint frequency tables for "batch releases" for the first two quarters were combined.

2.11 Lower Limit of Detection (LLD)

The LLD (an a priori limit) is defined as the smallest concentration of radioactive material in a sample that will yield a net count, above system background, that will be detected with 95% probability, and only a 5% probability of falsely concluding that a blank observation represents a "real" signal.

2.12 Dose to MEMBERS OF THE PUBLIC from Direct Radiation

The Off-site Dose Calculation Manual (ODCM) requires calculating the direct radiation from plant structures as a component of the dose to a hypothetical, highest exposed member of the public due to plant operations. The ODCM allows measurements made near plant structures to be used in these calculations following suitable adjustments for distance and exposure time. In 1991 TLDs were placed along and within the fence to the protected areas of Units 1 and 2 of STPEGS. The results of the protected area perimeter measurements are shown in Appendix A. The net dose rate values in the table show what dose rate can be attributed to STPEGS operation in excess of the natural radiation dose rate which existed in the area of STPEGS prior to plant construction. The base natural background dose rate was calculated from 1986 site perimeter TLD data. Using the time a member of the public might be exposed, and the distance to the exposure location, doses to hypothetical members of the public can be estimated. The ODCM requires dose examination for three such individuals: a member of the public who drives past STPEGS while commuting to work, a member of the public who visits the STPEGS Visitor's Center, and a member of the public who tours the site outside the protected area fence.

In 1991 the highest exposed member of the public was a hypothetical individual who toured the site and spent 0.5 hours on the Heavy Haul Road behind Unit 2. The radiation dose to this individual was calculated to be 0.0007 mrem. This dose of 0.0007 mrem is small when compared to the Technical Specification limit of 15 mrem to any organ during a year. By comparison, the dose attributable to direct radiation arising from natural sources averages 61.6 mrem per year in the vicinity of STPEGS.

3.0 Technical Specifications Reporting Requirements

3.1 Radioactive Waste Treatment System Design Modification Description (ref. Technical Specifications 6.15)

No major design modifications were made to the liquid, gaseous, or solid radioactive waste treatment systems during this reporting period.

3.2 Inoperable Effluent Monitoring Instrumentation Explanation (ref. Technical Specifications 6.9.1.4)

Condenser Vacuum Pump Wide Range Gas Monitors process flow channels N1RA-RT-8027A and N2RA-RT-8027A were removed from service on November 1, 1988, at 0100. Since the problems with the monitors were not repaired within 30 days, the following is provided as an explanation.

The Condenser Vacuum Pump Wide Range Gas Monitors N1RA-RT-8027A and N2RA-RT-8027A have similar problems with the process fluid stream. In both cases, the actual process flowrate is less than the designed process flowrate. Plant Modifications 89-066 and 89-067 have been completed to reroute the condenser vacuum exhausts to the respective unit vent. Placing these exhaust paths in service is contingent upon USNRC approval of a change to Technical Specification 3.3.3.11.

3.3 Gas Storage Tank Curie Limit Violation Description (ref. Technical Specifications 6.9.1.4)

The RCS Vacuum Degassing System was not used during this reporting period. Therefore, the quantity of radioactive material in the RCS Vacuum Degassing System Storage Tanks did not exceed the limits set forth in Section 3.11.2.6 of Technical Specifications.

3.4 Unprotected Outdoor Tank Curie Limit Violation Description (ref. Technical Specifications 6.9.1.4)

There are no Unprotected Outdoor Tanks at STPEGS.

3.5 Abnormal (Unplanned) Release Description (ref. Technical Specifications 6.9.1.4)

No abnormal releases from STPEGS Unit 1 or Unit 2 to UNRESTRICTED AREAS occurred during this reporting period.

3.6 Radioactive Waste Process Control Program Changes (ref. Technical Specifications 6.13.2)

There were no changes to the Radioactive Waste Process Control Program (PCP) during this reporting period.

3.7 Offsite Dose Calculation Manual Change (ref. Technical Specifications 6.14.2.a)

No changes were made to the Offsite Dose Calculation Manual (ODCM) during this reporting period.

3.8 New Land Use Census Location(s) Identification (ref. Technical Specifications 3.12.2.a)

No new locations for dose calculations or environmental monitoring were established in 1991.

4.0 Revisions to Previous Reports

4.1 Inoperable Effluent Monitoring Instrumentation

All references to inoperable Condenser Vacuum Pump Wide Range Gas Monitors, Sections 3.2 of previous reports, should be corrected to show the instrumentation number as N1RA-RT-8027A or N2RA-RT-8027A, as appropriate.

4.2 Offsite Dose Calculation Manual Change

Pages B4-24uuu through B4-24cccc of Table B4-7 of the ODCM, Rev. 4, Individual Dose Factors for Gaseous Effluents, are vided in Appendix B. These pages were inadvertently omitted from the revised ODCM, Part B submitted in the Semiannual Radioactive Effluent Release Report, January 1 through June 30, 1991.

4.3 Gaseous Effluents for 1991

The Unit 1 and Unit 2 Gaseous Effluents for 1st and 2nd Quarters 1991 have been revised to reflect the gross alpha radioactivity analyses results for the second quarter. (Appendix C)

4.4 Liquid Effluents for 1991

The Unit 1 and Unit 2 Liquid Effluents for 1st and 2nd Quarters 1991 have been revised to reflect the Iron-55 analysis results for the second quarter. (Appendix D)

GASEOUS EFFLUENTS

FOR 1991

3rd and 4th Quarters

SITE: South Texas Project Electric Generating Station
UNIT: 1 YEAR: 1991

HOUSTON LIGHTING & POWER
SOUTH TEXAS PROJECT EMDUP DB
SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
ALL AIRBORNE EFFLUENTS

Unit: 1

Starting : 1-Jul-1991 Ending : 31-Dec-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 3 | QUARTER 4 | EST. TOT ERROR % |
|------------------------------------|---------|-----------|-----------|---------------------|
| ----- | | | | |
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 1.998E+01 | 3.603E+01 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 2.513E+00 | 4.532E+00 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 9.309E-04 | 1.678E-03 | |
| ----- | | | | |
| B. RADIOIODINES | | | | |
| ----- | | | | |
| 1. TOTAL IODINE-131 | CURIES | 2.220E-05 | 1.383E-04 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 2.793E-06 | 1.740E-05 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 3.070E-06 | 1.912E-05 | |
| ----- | | | | |
| C. PARTICULATES | | | | |
| ----- | | | | |
| 1. PARTICULATES(HALF-LIVES>8 DAYS) | CURIES | 1.504E-03 | 9.441E-05 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 1.892E-04 | 1.188E-05 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.079E-04 | 1.305E-05 | |
| 4. GROSS ALPHA RADIOACTIVITY | CURIES | 0.000E+00 | 0.000E+00 | |
| ----- | | | | |
| D. TRITIUM | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 3.360E+00 | 5.762E+00 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 4.227E-01 | 7.249E-01 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.348E-04 | 4.027E-04 | |
| ----- | | | | |

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL AIRBORNE GROUND LEVEL CONTINUOUS AND
 : BATCH RELEASES. TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : FISSION GASES, IODINES, AND PARTICULATES
 REPORTING PERIOD : QUARTER # 3 AND QUARTER # 4 YEAR 1991

| | | CONTINUOUS MODE | | BATCH MODE | |
|-------------------|--------|-----------------|-----------|------------|-----------|
| NUCLIDES RELEASED | UNIT | QUARTER 3 | QUARTER 4 | QUARTER 3 | QUARTER 4 |
| FISSION GASES | | | | | |
| AR-41 | CURIES | 3.35E-01 | 0.00E+00 | 8.72E-01 | 8.95E-01 |
| KR-85M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.65E-03 |
| XE-133 | CURIES | 1.39E+01 | 2.58E+01 | 4.52E+00 | 6.83E+00 |
| XE-133M | CURIES | 0.00E+00 | 0.00E+00 | 4.15E-02 | 6.77E-02 |
| XE-135 | CURIES | 2.54E-01 | 2.27E+00 | 3.33E-02 | 8.38E-02 |
| TOTAL FOR PERIOD | CURIES | 1.45E+01 | 2.81E+01 | 5.47E+00 | 7.88E+00 |
| IODINES | | | | | |
| I-131 | CURIES | 2.22E-05 | 1.26E-04 | 0.00E+00 | 1.22E-05 |
| I-133 | CURIES | 9.02E-05 | 1.45E-04 | 0.00E+00 | 6.22E-07 |
| TOTAL FOR PERIOD | CURIES | 1.12E-04 | 2.72E-04 | 0.00E+00 | 1.29E-05 |
| PARTICULATES | | | | | |
| CO-57 | CURIES | 4.62E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| CO-58 | CURIES | 1.29E-05 | 2.48E-06 | 0.00E+00 | 1.21E-06 |
| CO-60 | CURIES | 1.29E-03 | 8.39E-05 | 0.00E+00 | 0.00E+00 |
| CS-134 | CURIES | 1.54E-09 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| CS-137 | CURIES | 3.80E-09 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| MN-54 | CURIES | 1.90E-04 | 6.82E-06 | 0.00E+00 | 0.00E+00 |
| SB-125 | CURIES | 6.09E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 1.50E-03 | 9.32E-05 | 0.00E+00 | 1.21E-06 |
| OTHER | | | | | |
| H-3 | CURIES | 3.12E+00 | 5.62E+00 | 2.32E-01 | 1.36E-01 |
| TOTAL FOR PERIOD | CURIES | 3.12E+00 | 5.62E+00 | 2.32E-01 | 1.36E-01 |

SITE: South Texas Project Electric Generating Station
UNIT: 2 YEAR: 1991

HOUSTON LIGHTING & POWER
SOUTH TEXAS PROJECT EMDUP DB

SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
ALL AIRBORNE EFFLUENTS

Unit: 2

Starting : 1-Jul-1991 Ending : 31-Dec-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 3 | QUARTER 4 | EST. TOT ERROR % |
|------------------------------------|---------|-----------|-----------|---------------------|
| ----- | | | | |
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 2.708E+01 | 7.992E+00 | 25 |
| ----- | | | | |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 3.406E+00 | 1.005E+00 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.261E-03 | 3.724E-04 | |
| ----- | | | | |
| B. RADIOIODINES | | | | |
| ----- | | | | |
| 1. TOTAL IODINE-131 | CURIES | 5.427E-06 | 1.149E-05 | 25 |
| ----- | | | | |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 6.827E-07 | 1.446E-06 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 7.502E-07 | 1.589E-06 | |
| ----- | | | | |
| C. PARTICULATES | | | | |
| ----- | | | | |
| 1. PARTICULATES(HALF-LIVES>8 DAYS) | CURIES | 1.082E-05 | 2.013E-04 | 25 |
| ----- | | | | |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 1.377E-06 | 2.532E-05 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.513E-06 | 2.783E-05 | |
| ----- | | | | |
| 4. GROSS ALPHA RADIOACTIVITY | CURIES | 0.000E+00 | 0.000E+00 | |
| ----- | | | | |
| D. TRITIUM | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 1.389E+00 | 4.130E-01 | 25 |
| ----- | | | | |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 1.748E-01 | 5.196E-02 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 9.713E-05 | 2.886E-05 | |
| ----- | | | | |

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991 02/19/1992 16:29:07

REPORT CATEGORY : SEMIANNUAL AIRBORNE GROUND LEVEL CONTINUOUS AND
 : BATCH RELEASES. TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : FISSION GASES, IODINES, AND PARTICULATES
 REPORTING PERIOD : QUARTER # 3 AND QUARTER # 4 YEAR 1991

| | | CONTINUOUS MODE | | BATCH MODE | | |
|-------------------|--------|-----------------|-----------|------------|-----------|-----------|
| | | UNIT | QUARTER 3 | QUARTER 4 | QUARTER 3 | QUARTER 4 |
| NUCLIDES RELEASED | | | | | | |
| FISSION GASES | | | | | | |
| AR-41 | CURIES | 7.08E-02 | 0.00E+00 | 6.59E-01 | 4.03E-02 | |
| KR-85M | CURIES | 1.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| XE-131M | CURIES | 1.32E-02 | 0.00E+00 | 7.71E-03 | 0.00E+00 | |
| XE-133 | CURIES | 1.24E+01 | 5.78E+00 | 1.34E+01 | 2.16E+00 | |
| XE-133M | CURIES | 2.74E-02 | 0.00E+00 | 6.75E-02 | 0.00E+00 | |
| XE-135 | CURIES | 2.78E-01 | 0.00E+00 | 7.00E-02 | 0.00E+00 | |
| TOTAL FOR PERIOD | CURIES | 1.28E+01 | 5.78E+00 | 1.42E+01 | 2.20E+00 | |
| IODINES | | | | | | |
| I-131 | CURIES | 5.42E-06 | 1.15E-05 | 0.00E+00 | 0.00E+00 | |
| TOTAL FOR PERIOD | CURIES | 5.42E-06 | 1.15E-05 | 0.00E+00 | 0.00E+00 | |
| PARTICULATES | | | | | | |
| CO-57 | CURIES | 0.00E+00 | 4.02E-07 | 0.00E+00 | 0.00E+00 | |
| CO-58 | CURIES | 1.02E-05 | 1.34E-04 | 0.00E+00 | 1.43E-05 | |
| CO-60 | CURIES | 6.23E-07 | 2.28E-05 | 0.00E+00 | 0.00E+00 | |
| CR-51 | CURIES | 0.00E+00 | 2.55E-05 | 0.00E+00 | 0.00E+00 | |
| MN-54 | CURIES | 0.00E+00 | 2.85E-06 | 0.00E+00 | 0.00E+00 | |
| NB-95 | CURIES | 0.00E+00 | 1.23E-06 | 0.00E+00 | 0.00E+00 | |
| TOTAL FOR PERIOD | CURIES | 1.08E-05 | 1.87E-04 | 0.00E+00 | 1.43E-05 | |
| OTHER | | | | | | |
| H-3 | CURIES | 1.35E+00 | 2.76E-01 | 3.71E-02 | 1.36E-01 | |
| TOTAL FOR PERIOD | CURIES | 1.35E+00 | 2.76E-01 | 3.71E-02 | 1.36E-01 | |

LIQUID EFFLUENTS

FOR 1991

3rd and 4th Quarters

SITE: South Texas Project Electric Generating Station
UNIT: 1 YEAR: 1991

HOUSTON LIGHTING & POWER
SOUTH TEXAS PROJECT EMDUP DB

SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
ALL LIQUID EFFLUENTS

Unit: 1

Starting : 1-Jul-1991 Ending : 31-Dec-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 3 | QUARTER 4 | EST. TOT ERROR % |
|---|--------|-----------|-----------|---------------------|
| ----- | | | | |
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE (NOT INCLUDING TRITIUM, GASES, ALPHA) | CURIES | 6.435E-01 | 6.859E-01 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 7.470E-08 | 1.532E-07 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.126E-01 | 2.898E-01 | |
| ----- | | | | |
| B. TRITIUM | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 2.655E+02 | 2.064E+02 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 3.081E-05 | 4.610E-05 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.027E+00 | 1.537E+00 | |
| ----- | | | | |
| C. DISSOLVED AND ENTRAINED GASES | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 4.965E-02 | 1.779E-01 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 5.748E-09 | 3.957E-08 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.874E-03 | 1.978E-02 | |
| ----- | | | | |
| D. GROSS ALPHA RADIOACTIVITY | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 0.000E+00 | 0.000E+00 | 5 |
| ----- | | | | |
| E. WASTE VOL RELEASED(PRE-DILUTION) | LITERS | 2.140E+07 | 1.805E+07 | 1.3 |
| ----- | | | | |
| F. VOLUME OF DILUTION WATER USED | LITERS | 8.615E+09 | 4.477E+09 | 10 |
| ----- | | | | |

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL LIQUID CONTINUOUS AND BATCH RELEASES
 : TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : ALL RADIONUCLIDES
 REPORTING PERIOD : QUARTER # 3 AND QUARTER # 4 YEAR 1991

| | | CONTINUOUS RELEASES | | BATCH | RELEASES |
|------------------|--------|---------------------|-----------|-----------|-----------|
| NUCLIDE | UNIT | QUARTER 3 | QUARTER 4 | QUARTER 3 | QUARTER 4 |
| ALL NUCLIDES | | | | | |
| AG-110M | CURIES | 0.00E+00 | 0.00E+00 | 5.73E-03 | 6.47E-03 |
| BE-7 | CURIES | 0.00E+00 | 0.00E+00 | 3.35E-04 | 0.00E+00 |
| CE-144 | CURIES | 0.00E+00 | 0.00E+00 | 3.39E-05 | 0.00E+00 |
| CO-57 | CURIES | 0.00E+00 | 0.00E+00 | 1.49E-03 | 1.37E-03 |
| CO-58 | CURIES | 8.28E-07 | 0.00E+00 | 1.06E-01 | 5.11E-02 |
| CO-60 | CURIES | 1.35E-05 | 1.99E-06 | 1.14E-01 | 2.30E-01 |
| CR-51 | CURIES | 0.00E+00 | 0.00E+00 | 3.37E-03 | 3.36E-03 |
| CS-134 | CURIES | 0.00E+00 | 0.00E+00 | 1.84E-02 | 8.75E-03 |
| CS-137 | CURIES | 5.73E-06 | 1.09E-06 | 2.53E-02 | 1.56E-02 |
| FE-55 | CURIES | 0.00E+00 | 0.00E+00 | 3.30E-01 | 3.01E-01 |
| FE-59 | CURIES | 0.00E+00 | 0.00E+00 | 5.89E-04 | 2.27E-04 |
| H-3 | CURIES | 4.77E-02 | 2.48E-02 | 2.65E+02 | 2.06E+02 |
| I-131 | CURIES | 0.00E+00 | 0.00E+00 | 1.11E-04 | 4.91E-04 |
| I-133 | CURIES | 0.00E+00 | 0.00E+00 | 3.85E-06 | 3.53E-05 |
| KR-85M | CURIES | 0.00E+00 | 0.00E+00 | 2.07E-05 | 1.56E-05 |
| LA-140 | CURIES | 0.00E+00 | 0.00E+00 | 3.67E-05 | 9.81E-05 |
| MN-54 | CURIES | 1.08E-05 | 1.49E-06 | 2.33E-02 | 4.15E-02 |
| NA-24 | CURIES | 0.00E+00 | 0.00E+00 | 5.38E-04 | 0.00E+00 |
| NB-95 | CURIES | 0.00E+00 | 0.00E+00 | 7.90E-03 | 9.12E-03 |
| NB-97 | CURIES | 0.00E+00 | 0.00E+00 | 1.05E-04 | 4.42E-05 |
| SB-124 | CURIES | 0.00E+00 | 0.00E+00 | 1.79E-04 | 2.26E-04 |
| SB-125 | CURIES | 0.00E+00 | 0.00E+00 | 2.69E-03 | 9.81E-03 |
| SN-113 | CURIES | 0.00E+00 | 0.00E+00 | 2.68E-04 | 4.95E-04 |
| SR-92 | CURIES | 0.00E+00 | 0.00E+00 | 3.24E-06 | 0.00E+00 |
| XE-131M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.44E-03 |
| XE-133 | CURIES | 0.00E+00 | 0.00E+00 | 4.86E-02 | 1.74E-01 |
| XE-133M | CURIES | 0.00E+00 | 0.00E+00 | 1.54E-04 | 7.06E-04 |
| XE-135 | CURIES | 0.00E+00 | 0.00E+00 | 8.55E-04 | 7.73E-04 |
| ZN-65 | CURIES | 0.00E+00 | 0.00E+00 | 5.07E-04 | 2.20E-03 |
| ZR-95 | CURIES | 0.00E+00 | 0.00E+00 | 3.30E-03 | 3.60E-03 |
| ZR-97 | CURIES | 0.00E+00 | 0.00E+00 | 9.59E-05 | 1.07E-04 |
| TOTAL FOR PERIOD | CURIES | 4.77E-02 | 2.48E-02 | 2.66E+02 | 2.07E+02 |

SITE: South Texas Project Electric Generating Station
UNIT: 2 YEAR: 1991

HOUSTON LIGHTING & POWER
SOUTH TEXAS PROJECT EMDUP DB

SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
ALL LIQUID EFFLUENTS

Unit: 2

Starting : 1-Jul-1991 Ending : 31-Dec-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 3 | QUARTER 4 | EST. TOT ERRGR % |
|---|--------|-----------|-----------|---------------------|
| ----- | | | | |
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE (NOT INCLUDING TRITIUM, GASES, ALPHA) | CURIES | 1.706E-01 | 2.377E+00 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 1.597E-08 | 4.476E-07 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.664E-02 | 5.782E-01 | |
| ----- | | | | |
| B. TRITIUM | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 1.665E+02 | 9.219E+00 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 1.559E-05 | 1.736E-06 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 5.198E-01 | 5.786E-02 | |
| ----- | | | | |
| C. DISSOLVED AND ENTRAINED GASES | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 6.777E-01 | 8.661E-03 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 6.332E-08 | 1.626E-09 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 3.166E-02 | 8.134E-04 | |
| ----- | | | | |
| D. GROSS ALPHA RADIOACTIVITY | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 0.000E+00 | 0.000E+00 | 5 |
| ----- | | | | |
| E. WASTE VOL RELEASED(PRE-DILUTION) | LITERS | 1.908E+07 | 1.160E+07 | 1.3 |
| ----- | | | | |
| F. VOLUME OF DILUTION WATER USED | LITERS | 1.068E+10 | 5.311E+09 | 10 |
| ----- | | | | |

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL LIQUID CONTINUOUS AND BATCH RELEASES
 : TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : ALL RADIONUCLIDES
 REPORTING PERIOD : QUARTER # 3 AND QUARTER # 4 YEAR 1991

| | | CONTINUOUS RELEASES | | BATCH | RELEASES |
|------------------|--------|---------------------|-----------|-----------|-----------|
| | | QUARTER 3 | QUARTER 4 | QUARTER 3 | QUARTER 4 |
| NUCLIDE | UNIT | | | | |
| ALL NUCLIDES | | | | | |
| AG-110M | CURIES | 0.00E+00 | 0.00E+00 | 1.36E-04 | 1.42E-03 |
| CE-144 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.18E-05 |
| CO-57 | CURIES | 0.00E+00 | 0.00E+00 | 2.31E-04 | 3.25E-03 |
| CO-58 | CURIES | 0.00E+00 | 0.00E+00 | 3.96E-02 | 1.01E+00 |
| CO-60 | CURIES | 0.00E+00 | 0.00E+00 | 3.08E-02 | 1.78E-01 |
| CR-51 | CURIES | 0.00E+00 | 0.00E+00 | 1.33E-02 | 2.38E-01 |
| CS-134 | CURIES | 0.00E+00 | 0.00E+00 | 8.18E-04 | 3.53E-03 |
| CS-137 | CURIES | 0.00E+00 | 0.00E+00 | 2.52E-03 | 7.01E-03 |
| FE-55 | CURIES | 0.00E+00 | 0.00E+00 | 6.09E-02 | 6.31E-01 |
| FE-59 | CURIES | 0.00E+00 | 0.00E+00 | 5.06E-03 | 8.09E-02 |
| H-3 | CURIES | 3.14E-02 | 1.13E-02 | 1.67E+02 | 9.21E+00 |
| I-131 | CURIES | 0.00E+00 | 0.00E+00 | 7.41E-05 | 1.27E-03 |
| I-132 | CURIES | 0.00E+00 | 0.00E+00 | 3.23E-05 | 0.00E+00 |
| I-133 | CURIES | 0.00E+00 | 0.00E+00 | 6.47E-06 | 0.00E+00 |
| KR-85 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.28E-03 |
| KR-85M | CURIES | 0.00E+00 | 0.00E+00 | 5.51E-06 | 0.00E+00 |
| LA-140 | CURIES | 0.00E+00 | 0.00E+00 | 4.00E-06 | 4.57E-05 |
| MN-54 | CURIES | 0.00E+00 | 0.00E+00 | 5.94E-03 | 4.34E-02 |
| MO-99 | CURIES | 0.00E+00 | 0.00E+00 | 5.31E-06 | 0.00E+00 |
| NA-24 | CURIES | 0.00E+00 | 0.00E+00 | 1.34E-05 | 3.87E-06 |
| NB-95 | CURIES | 0.00E+00 | 0.00E+00 | 2.09E-03 | 3.88E-02 |
| NB-97 | CURIES | 0.00E+00 | 0.00E+00 | 5.48E-05 | 2.36E-04 |
| OTHER | CURIES | 0.00E+00 | 0.00E+00 | 1.03E-03 | 5.36E-04 |
| SB-124 | CURIES | 0.00E+00 | 0.00E+00 | 4.62E-03 | 8.49E-02 |
| SB-125 | CURIES | 0.00E+00 | 0.00E+00 | 2.12E-03 | 3.01E-02 |
| SC-46 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.63E-05 |
| SN-113 | CURIES | 0.00E+00 | 0.00E+00 | 2.06E-04 | 3.05E-03 |
| TC-99M | CURIES | 0.00E+00 | 0.00E+00 | 5.40E-06 | 0.00E+00 |
| TE-129M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-03 |
| TE-132 | CURIES | 0.00E+00 | 0.00E+00 | 3.07E-05 | 0.00E+00 |
| XE-131M | CURIES | 0.00E+00 | 0.00E+00 | 4.14E-03 | 0.00E+00 |
| XE-133 | CURIES | 0.00E+00 | 0.00E+00 | 6.60E-01 | 3.79E-04 |
| XE-133M | CURIES | 0.00E+00 | 0.00E+00 | 1.02E-02 | 0.00E+00 |
| XE-135 | CURIES | 0.00E+00 | 0.00E+00 | 2.49E-03 | 0.00E+00 |
| ZN-65 | CURIES | 0.00E+00 | 0.00E+00 | 1.02E-04 | 7.90E-04 |
| ZR-95 | CURIES | 0.00E+00 | 0.00E+00 | 8.87E-04 | 2.00E-02 |
| TOTAL FOR PERIOD | CURIES | 3.14E-02 | 1.13E-02 | 1.67E+02 | 1.16E+01 |

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

3rd and 4th Quarters, 1991

EFFLUENT AND WASTE DISPOSAL REPORT
FROM 07/01/91 0:00 TO 12/31/91 23:00
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFF SITE FOR BURIAL OR DISPOSAL

| | 1. TYPE OF WASTE | UNIT | 6 MONTH PERIOD | EST. TOTAL ERROR % |
|----|--|------|----------------|--------------------|
| A. | SPENT RESINS, FILTER SLUDGES, EVAPORATOR BOTTOMS, ETC. | M3 | 1.17 E+1 | + 1% |
| | | C1 | 1.66 E+1 | + 5% |
| B. | DRY COMPRESSIBLE WASTE, CONTAMINATED EQUIP., ETC.* | M3 | 2.920E+1 | + 1% |
| | | C1 | 2.263E+00 | + 5% |
| C. | IRRADIATED COMPONENTS, CONTROL RODS, ETC. | M3 | 0.000E+00 | N/A |
| | | C1 | 0.000E+00 | N/A |
| D. | OTHER | M3 | 0.000E+00 | N/A |
| | | C1 | 0.000E+00 | N/A |

* Five shipments of DAW sent for offsite volume reduction (2.945E+2m³, 1.92E+03mCi)

2. ESTIMATE OF MAJOR NUCLIDE COMPOSITION (BY TYPE OF WASTE)

| | | | |
|----|---|-------|---------|
| A. | 1 | Co58 | 38.864% |
| | 2 | Co60 | 27.617% |
| | 3 | Ni63 | 10.957% |
| | 4 | Fe55 | 8.923% |
| | 5 | Mn54 | 2.984% |
| | 6 | Cs137 | 2.511% |
| | 7 | Sb125 | 2.310% |
| | 8 | Cs134 | 1.171% |
| | 9 | Co57 | 1.048% |
| B. | 1 | Fe55 | 68.037% |
| | 2 | Co58 | 14.212% |
| | 3 | Co60 | 3.985% |
| | 4 | Ni63 | 3.385% |
| | 5 | Cr51 | 3.197% |
| | 6 | Zr95 | 1.843% |
| | 7 | Nb95 | 1.761% |
| | 8 | Mn54 | 1.547% |
| | 9 | Fe59 | 1.363% |
| C. | | N/A | N/A |
| D. | | N/A | N/A |

EFFLUENT AND WASTE DISPOSAL REPORT
 FROM 07/01/91 0:00 TO 12/31/91 23:00
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

3. SOLID WASTE DISPOSITION (NOT IRRADIATED FUEL)

| <u>NUMBER OF SHIPMENTS</u> | <u>MODE OF TRANSPORTATION</u> | <u>DESTINATION*</u> |
|----------------------------|-------------------------------|---|
| 7 | Truck | - Scientific Ecology Group, Inc. (SEG) 1560 Bear Creek Rd. Oak Ridge, TN |
| | | - Chem-Nuclear Systems (CNSI) Barnwell Waste Management Facility Osborne Road Barnwell, SC |
| | | - US Ecology (USEN) Beatty Street Beatty, NV |

* All shipments from STPEGS were either to SEG or CNSI. However, SEG buried STPEGS waste at both CNSI and USEN.

4. CLASS OF SOLID WASTE

AU, AS

5. TYPE OF CONTAINERS USED FOR SHIPMENT

Strong-tight, High Integrity Containers, Type A casks.

6. SOLIDIFICATION AGENT

N/A

B. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

| <u>NUMBER OF SHIPMENTS</u> | <u>MODE OF TRANSPORTATION</u> | <u>DESTINATION</u> |
|----------------------------|-------------------------------|--------------------|
|----------------------------|-------------------------------|--------------------|

--- NO SHIPMENTS MADE DURING THIS PERIOD ---

DOSE ACCUMULATIONS

FOR 1991

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

SUMMARY OF MAXIMUM INDIVIDUAL DOSES

TOTAL ACCUMULATION FOR PERIODS:

LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

AIR: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | ESTIMATED DOSE (MREM) | AGE GROUP | LOCATION DIST (M) | DIR (TOWARD) | % OF APPLICABLE LIMIT | LIMIT (MR) |
|--------------|-----------------------|-----------------------|-----------------------|-------------------|--------------|-----------------------|------------|
| LIQUID | TOTAL BODY | 1.94E-01 | TEEN | RECEPTOR 3 | | 6.5E+00 | 3.0 |
| LIQUID | BONE | 7.07E-01 | CHILD | RECEPTOR 1 | | 7.1E+00 | 10.0 |
| NOBLE GAS | AIR DOSE (GAMMA-MRAD) | 4.17E-03 | | 1720. | NW | 4.2E-02 | 10.0 |
| NOBLE GAS | AIR DOSE (BETA-MRAD) | 6.06E-03 | | 1720. | NW | 3.0E-02 | 20.0 |
| NOBLE GAS | TOTAL BODY | 1.53E-03 | ALL ⁽¹⁾ | 1720. | NW | 3.1E-02 | 5.0 |
| NOBLE GAS | TOTAL BODY | 4.72E-04 | ALL ⁽²⁾ | 4000. | WSW | 9.4E-03 | 5.0 |
| NOBLE GAS | SKIN | 3.24E-03 | ALL ⁽¹⁾ | 1720. | NW | 2.2E-02 | 15.0 |
| NOBLE GAS | SKIN | 1.04E-03 | ALL ⁽²⁾ | 4000. | WSW | 6.9E-03 | 15.0 |
| IODINE+ | THYROID | 3.33E-02 | INFANT ⁽¹⁾ | 1720. | NW | 2.2E-01 | 15.0 |
| PARTICULATES | | | | | | | |
| IODINE+ | GI-TRACT | 1.67E-03 | ADULT ⁽²⁾ | 5600. | NNW | 1.1E-02 | 15.0 |
| PARTICULATES | | | | | | | |

SUMMARY OF POPULATION DOSES

TOTAL ACCUMULATION FOR PERIODS:

LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | ESTIMATED POPULATION DOSE (PERSON-REM) | AVERAGE DOSE TO POPULATION (REM/PERSON) |
|----------|------------------|--|---|
| LIQUID | TOTAL BODY | 1.6E+00 | 2.6E-05 ⁽³⁾ |
| GASEOUS | TOTAL BODY | 6.9E-03 | 2.4E-08 ⁽⁴⁾ |

⁽¹⁾Doses were calculated for HYPOTHETICAL receptors at the site boundary.

⁽²⁾Highest dose for REAL individual or receptor.

⁽³⁾ Calculation based on a population of 152,000 for shore line exposure, 303,000 for SW invertebrate ingestion and 3,300 for SW sport fish ingestion.

⁽⁴⁾ Calculation based on a population of 299,000 within fifty (50) miles of STPEGS.

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991

SUMMARY OF MAXIMUM INDIVIDUAL DOSES
 TOTAL ACCUMULATION FOR PERIODS:
 LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00
 GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00
 AIR: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | ESTIMATED DOSE (MREM) | AGE GROUP | LOCATION DIST (M) | DIR (TOWARD) | % OF APPLICABLE LIMIT | LIMIT (MR) |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------|--------------|-----------------------|------------|
| LIQUID | TOTAL BODY | 8.25E-02 | TEEN | RECEPTOR 3 | | 2.7E+00 | 3.0 |
| LIQUID | GI-TRACT | 3.74E-01 | CHILD | RECEPTOR 1 | | 3.7E+00 | 10.0 |
| NOBLE GAS | AIR DOSE (GAMMA-MRAD) | 3.27E-03 | | 1720. | NW | 3.3E-02 | 10.0 |
| NOBLE GAS | AIR DOSE (RETA-MRAD) | 5.52E-03 | | 1720. | NW | 2.8E-02 | 20.0 |
| NOBLE GAS | TOTAL BODY | 1.20E-03 | ALL ⁽¹⁾ | 1720. | NW | 2.4E-02 | 5.0 |
| NOBLE GAS | TOTAL BODY | 1.72E-04 | ALL ⁽²⁾ | 4000. | WSW | 3.4E-03 | 5.0 |
| NOBLE GAS | SKIN | 2.66E-03 | ALL ⁽¹⁾ | 1720. | NW | 1.8E-02 | 15.0 |
| NOBLE GAS | SKIN | 3.49E-04 | ALL ⁽²⁾ | 4000. | WSW | 2.3E-03 | 15.0 |
| IODINE+ PARTICULATES | THYROID | 2.47E-03 | INFANT ⁽¹⁾ | 1720. | NW | 1.6E-02 | 15.0 |
| IODINE+ PARTICULATES | THYROID | 1.83E-04 | CHILD ⁽²⁾ | 4000. | WSW | 1.2E-03 | 15.0 |

SUMMARY OF POPULATION DOSES
 TOTAL ACCUMULATION FOR PERIODS:
 LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00
 GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | ESTIMATED POPULATION DOSE (PERSON-REM) | AVERAGE DOSE TO POPULATION (REM/PERSON) |
|----------|------------------|--|---|
| LIQUID | TOTAL BODY | 7.1E-01 | 1.2E-05 ⁽³⁾ |
| GASEOUS | TOTAL BODY | 8.4E-04 | 2.8E-09 ⁽⁴⁾ |

- ⁽¹⁾Doses were calculated for HYPOTHETICAL receptors at the site boundary.
⁽²⁾Highest dose for REAL individual or receptor.
⁽³⁾Calculation based on a population of 152,000 for shore line exposure, 303,000 for SW invertebrate ingestion and 3,300 for SW sport fish ingestion.
⁽⁴⁾Calculation based on a population of 299,000 within fifty (50) miles of STPEGS.

SITE: South Texas Project Electric Generating Station
 UNIT: 1 PLUS 2 YEAR: 1991

SUMMARY OF MAXIMUM INDIVIDUAL DOSES

TOTAL ACCUMULATION FOR PERIODS:

LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

AIR: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | UNIT 1 ESTIMATED DOSE (MREM) | UNIT 2 ESTIMATED DOSE (MREM) | TOTAL 1+2 ESTIMATED DOSE (MREM) | AGE GROUP | LOCATION DIST DIR (M) (TOWARD) |
|--------------|--------------------------|---------------------------------------|---------------------------------------|--|-----------------------|--------------------------------------|
| LIQUID | TOTAL BODY | 1.94E-01 | 8.25E-02 | 2.77E-01 | TEEN | RECEPTOR 3 |
| LIQUID | BONE | 7.07E-01 | 3.74E-01 | 1.08E+00 | CHILD | RECEPTOR 1 |
| NOBLE GAS | AIR DOSE (GAMMA-MRAD) | 4.17E-03 | 3.27E-03 | 7.44E-03 | ALL | 1720. NW |
| NOBLE GAS | AIR DOSE (BETA-MRAD) | 6.06E-03 | 5.52E-03 | 1.16E-02 | ALL | 1720. NW |
| NOBLE GAS | TOTAL BODY | 1.53E-03 | 1.20E-03 | 2.73E-03 | ALL ⁽¹⁾ | 1720. NW |
| NOBLE GAS | TOTAL BODY | 4.72E-04 | 1.72E-04 | 6.44E-04 | ALL ⁽²⁾ | 4000. WSW |
| NOBLE GAS | SKIN | 3.24E-03 | 2.66E-03 | 5.90E-03 | ALL ⁽¹⁾ | 1720. NW |
| NOBLE GAS | SKIN | 1.04E-03 | 7.49E-04 | 1.39E-03 | ALL ⁽²⁾ | 4000. WSW |
| IODINE+ | THYROID | 3.33E-02 | 2.47E-03 | 3.58E-02 | INFANT ⁽¹⁾ | 1720. NW |
| PARTICULATES | | | | | | |
| IODINE+ | THYROID | 1.57E-03 | 1.83E-04 | 1.75E-03 | CHILD ⁽²⁾ | 4000. WSW |
| PARTICULATES | | | | | | |

SUMMARY OF POPULATION DOSES

TOTAL ACCUMULATION FOR PERIODS:

LIQUID: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

GASEOUS: FROM 1/ 1/91 0:00 TO 12/31/91 23:00

| EFFLUENT | APPLICABLE ORGAN | TOTAL 1+2 ESTIMATED POPULATION DOSE (PERSON-REM) | TOTAL 1+2 AVERAGE DOSE TO POPULATION (REM/PERSON) |
|----------|------------------|---|--|
| LIQUID | TOTAL BODY | 2.4E+00 | 3.8E-05 ⁽³⁾ |
| GASEOUS | TOTAL BODY | 7.7E-03 | 2.6E-08 ⁽⁴⁾ |

⁽¹⁾Doses were calculated for HYPOTHETICAL receptors at the site boundary.

⁽²⁾Highest dose for REAL individual or receptor.

⁽³⁾ Calculation based on a population of 152,000 for shore line exposure, 303,000 for SW invertebrate ingestion and 3,300 for SW sport fish ingestion.

⁽⁴⁾ Calculation based on a population of 299,000 within fifty (50) miles of STPEGS.

JOINT FREQUENCY TABLES FOR 1991

First Quarter

DATE: 8/ 7/91 10:59

JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 3 | 10 | 6 | 0 | 0 | 0 | 19 | 12.2 | 11.0 |
| NNE | 0 | 0 | 3 | 5 | 4 | 1 | 0 | 0 | 13 | 8.3 | 11.1 |
| NE | 0 | 1 | 1 | 4 | 0 | 1 | 0 | 0 | 7 | 4.5 | 11.1 |
| ENE | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 4 | 2.6 | 11.3 |
| E | 0 | 0 | 2 | 2 | 3 | 0 | 0 | 0 | 7 | 4.5 | 10.4 |
| ESE | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 | 1.9 | 7.5 |
| SE | 0 | 1 | 3 | 2 | 5 | 0 | 0 | 0 | 11 | 7.1 | 10.6 |
| SSE | 0 | 0 | 0 | 2 | 18 | 6 | 0 | 0 | 26 | 16.7 | 15.8 |
| S | 0 | 0 | 0 | 1 | 7 | 6 | 0 | 0 | 14 | 9.0 | 17.3 |
| SSW | 0 | 3 | 1 | 7 | 8 | 2 | 2 | 0 | 23 | 14.7 | 13.0 |
| SW | 0 | 0 | 0 | 4 | 3 | 1 | 0 | 0 | 8 | 5.1 | 13.8 |
| WSW | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1.3 | 5.4 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 6.8 |
| WNW | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1.3 | 8.7 |
| NW | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 6 | 3.8 | 15.4 |
| NNW | 0 | 0 | 4 | 3 | 2 | 1 | 0 | 0 | 10 | 6.4 | 9.9 |
| TOTAL | 0 | 7 | 21 | 44 | 63 | 19 | 2 | 0 | 156 | 100.0 | |
| % | 0.0 | 4.5 | 13.5 | 28.2 | 40.4 | 12.2 | 1.3 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 12.7 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 10:59

JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.1 -18.5 - | 8.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|----------------|-----------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 8 | 9.5 | 14.5 |
| NNE | 0 | 0 | 3 | 2 | 7 | 0 | 0 | 0 | 12 | 14.3 | 11.5 |
| NE | 0 | 0 | 4 | 6 | 1 | 0 | 0 | 0 | 11 | 13.1 | 8.9 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 2.4 | 8.5 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 3.6 | 13.6 |
| SSE | 0 | 0 | 0 | 4 | 2 | 2 | 0 | 0 | 8 | 9.5 | 12.5 |
| S | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 4 | 4.8 | 10.2 |
| SSW | 0 | 0 | 0 | 5 | 2 | 0 | 1 | 0 | 8 | 9.5 | 12.7 |
| SW | 0 | 0 | 1 | 3 | 2 | 2 | 0 | 0 | 8 | 9.5 | 13.5 |
| WSW | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 3 | 3.6 | 14.5 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WNW | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 6 | 7.1 | 13.7 |
| NW | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 5 | 6.0 | 12.1 |
| NNW | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 6 | 7.1 | 16.9 |
| TOTAL | 0 | 0 | 10 | 29 | 38 | 6 | 1 | 0 | 84 | 100.0 | |
| % | 0.0 | 0.0 | 11.9 | 34.5 | 45.2 | 7.1 | 1.2 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 12.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 10:59

JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 1 | 3 | 3 | 1 | 1 | 0 | 9 | 7.0 | 14.4 |
| NNE | 0 | 0 | 3 | 4 | 10 | 1 | 0 | 0 | 18 | 14.0 | 12.5 |
| NE | 0 | 0 | 1 | 4 | 7 | 0 | 0 | 0 | 12 | 9.3 | 12.5 |
| ENE | 0 | 0 | 3 | 4 | 2 | 0 | 0 | 0 | 9 | 7.0 | 9.7 |
| E | 0 | 1 | 1 | 0 | 3 | 1 | 0 | 0 | 6 | 4.7 | 12.8 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 8 | 6.2 | 15.2 |
| SSE | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 8 | 6.2 | 15.8 |
| S | 0 | 0 | 0 | 3 | 4 | 2 | 0 | 0 | 9 | 7.0 | 14.4 |
| SSW | 0 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 11 | 8.5 | 8.3 |
| SW | 0 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 6 | 4.7 | 11.8 |
| WSW | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 3 | 2.3 | 12.2 |
| W | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0.8 | 13.2 |
| WNW | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 4 | 3.1 | 9.9 |
| NW | 0 | 0 | 1 | 3 | 5 | 0 | 0 | 0 | 9 | 7.0 | 12.8 |
| NNW | 0 | 0 | 1 | 2 | 11 | 2 | 0 | 0 | 16 | 12.4 | 15.2 |
| TOTAL | 0 | 1 | 19 | 34 | 64 | 10 | 1 | 0 | 129 | 100.0 | |
| % | 0.0 | 0.8 | 14.7 | 26.4 | 49.6 | 7.8 | 0.8 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 12.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 11: 0

JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 1 | 9 | 48 | 68 | 9 | 0 | 0 | 135 | 15.2 | 13.0 |
| NNE | 0 | 1 | 30 | 64 | 37 | 0 | 0 | 0 | 132 | 14.9 | 10.5 |
| NE | 0 | 7 | 14 | 44 | 12 | 2 | 0 | 0 | 79 | 8.9 | 9.5 |
| ENE | 0 | 1 | 19 | 42 | 16 | 0 | 0 | 0 | 78 | 8.8 | 9.9 |
| E | 0 | 5 | 16 | 38 | 33 | 10 | 0 | 0 | 102 | 11.5 | 11.8 |
| ESE | 0 | 0 | 13 | 30 | 22 | 0 | 0 | 0 | 65 | 7.3 | 10.8 |
| SE | 0 | 2 | 3 | 19 | 27 | 0 | 0 | 0 | 51 | 5.8 | 12.1 |
| SSE | 0 | 0 | 5 | 18 | 35 | 2 | 0 | 0 | 60 | 6.8 | 12.9 |
| S | 0 | 0 | 4 | 14 | 6 | 5 | 0 | 0 | 29 | 3.3 | 12.0 |
| SSW | 0 | 0 | 4 | 8 | 7 | 3 | 0 | 0 | 22 | 2.5 | 12.2 |
| SW | 0 | 1 | 1 | 3 | 4 | 2 | 0 | 0 | 11 | 1.2 | 12.4 |
| WSW | 0 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 7 | 0.8 | 9.5 |
| W | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0.2 | 8.3 |
| WNW | 0 | 0 | 2 | 5 | 1 | 0 | 0 | 0 | 8 | 0.9 | 8.5 |
| NW | 0 | 0 | 4 | 10 | 4 | 0 | 0 | 0 | 18 | 2.0 | 9.9 |
| NNW | 0 | 1 | 9 | 31 | 32 | 14 | 0 | 0 | 87 | 9.8 | 12.8 |
| TOTAL | 0 | 20 | 136 | 377 | 306 | 47 | 0 | 0 | 886 | 100.0 | |
| % | 0.0 | 2.3 | 15.3 | 42.6 | 34.5 | 5.3 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 11.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 11: 0

JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 2 | 21 | 14 | 6 | 0 | 0 | 0 | 43 | 9.0 | 8.0 |
| NNE | 0 | 3 | 10 | 21 | 3 | 0 | 0 | 0 | 37 | 7.7 | 8.6 |
| NE | 0 | 1 | 18 | 12 | 1 | 0 | 0 | 0 | 32 | 6.7 | 7.0 |
| ENE | 0 | 1 | 34 | 20 | 1 | 0 | 0 | 0 | 56 | 11.7 | 7.2 |
| E | 0 | 0 | 26 | 8 | 5 | 0 | 0 | 0 | 39 | 8.1 | 8.2 |
| ESE | 0 | 0 | 24 | 12 | 1 | 0 | 0 | 0 | 37 | 7.7 | 7.6 |
| SE | 0 | 2 | 7 | 10 | 3 | 1 | 0 | 0 | 23 | 4.8 | 8.6 |
| SSE | 0 | 3 | 8 | 17 | 18 | 5 | 1 | 0 | 52 | 10.9 | 12.2 |
| S | 0 | 3 | 14 | 23 | 15 | 3 | 0 | 0 | 58 | 12.1 | 10.7 |
| SSW | 0 | 1 | 7 | 11 | 9 | 1 | 0 | 0 | 29 | 6.1 | 10.9 |
| SW | 0 | 1 | 3 | 4 | 6 | 2 | 0 | 0 | 16 | 3.3 | 11.5 |
| WSW | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 6 | 1.3 | 8.0 |
| W | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 5 | 1.0 | 8.1 |
| WNW | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 0 | 8 | 1.7 | 6.6 |
| NW | 0 | 2 | 7 | 3 | 0 | 0 | 0 | 0 | 12 | 2.5 | 6.1 |
| NNW | 0 | 2 | 12 | 9 | 3 | 0 | 0 | 0 | 26 | 5.4 | 7.8 |
| TOTAL | 0 | 23 | 201 | 171 | 71 | 12 | 1 | 0 | 479 | 100.0 | |
| % | 0.0 | 4.8 | 42.0 | 35.7 | 14.8 | 2.5 | 0.2 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 8.9 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 11: 0

JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|-------|--------------|
| N | 0 | 7 | 19 | 3 | 0 | 0 | 0 | 0 | 29 | 14.6 | 5.2 |
| NNE | 0 | 4 | 9 | 7 | 0 | 0 | 0 | 0 | 20 | 10.1 | 6.3 |
| NE | 0 | 5 | 10 | 5 | 0 | 0 | 0 | 0 | 20 | 10.1 | 5.6 |
| ENE | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 12 | 6.1 | 5.3 |
| E | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 7 | 3.5 | 4.5 |
| ESE | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 10 | 5.1 | 4.6 |
| SE | 0 | 5 | 7 | 2 | 0 | 0 | 0 | 0 | 14 | 7.1 | 5.2 |
| SSE | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 10 | 5.1 | 4.1 |
| S | 0 | 3 | 8 | 1 | 0 | 0 | 0 | 0 | 12 | 6.1 | 4.7 |
| SSW | 0 | 0 | 8 | 1 | 1 | 0 | 0 | 0 | 10 | 5.1 | 7.1 |
| SW | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1.5 | 3.0 |
| WSW | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 1.0 | 10.9 |
| W | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 8 | 4.0 | 5.2 |
| WNW | 0 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 7 | 3.5 | 5.9 |
| NW | 0 | 4 | 8 | 3 | 1 | 0 | 0 | 0 | 16 | 8.1 | 6.0 |
| NNW | 0 | 3 | 15 | 0 | 0 | 0 | 0 | 0 | 18 | 9.1 | 4.9 |
| TOTAL | 0 | 46 | 126 | 23 | 3 | 0 | 0 | 0 | 198 | 100.0 | |
| % | 0.0 | 23.2 | 63.6 | 11.6 | 1.5 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 5.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 11: 0

JOINT FREQUENCY TABLE

STABILITY CLASS -G-

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 23 | 10.1 | 4.1 |
| NNE | 0 | 7 | 16 | 4 | 0 | 0 | 0 | 0 | 27 | 11.9 | 4.7 |
| NE | 0 | 9 | 19 | 3 | 0 | 0 | 0 | 0 | 31 | 13.7 | 5.0 |
| ENE | 0 | 12 | 18 | 1 | 0 | 0 | 0 | 0 | 31 | 13.7 | 4.0 |
| E | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 10 | 4.4 | 4.1 |
| ESE | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 10 | 4.4 | 4.8 |
| SE | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 10 | 4.4 | 4.3 |
| SSE | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 8 | 3.5 | 3.7 |
| S | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 2.2 | 4.0 |
| SSW | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 2.6 | 3.7 |
| SW | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1.3 | 2.3 |
| WSW | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1.3 | 2.7 |
| W | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 12 | 5.3 | 3.5 |
| WNW | 0 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 14 | 6.2 | 3.6 |
| NW | 0 | 5 | 11 | 0 | 0 | 0 | 0 | 0 | 16 | 7.0 | 4.2 |
| NNW | 0 | 4 | 12 | 2 | 0 | 0 | 0 | 0 | 18 | 7.9 | 5.1 |
| TOTAL | 0 | 79 | 137 | 11 | 0 | 0 | 0 | 0 | 227 | 100.0 | |
| % | 0.0 | 34.8 | 60.4 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 4.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

DATE: 8/ 7/91 11: 0

JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 18 | 68 | 79 | 90 | 10 | 1 | 0 | 266 | 12.3 | 10.5 |
| NNE | 0 | 15 | 74 | 107 | 61 | 2 | 0 | 0 | 259 | 12.0 | 9.5 |
| NE | 0 | 23 | 67 | 78 | 21 | 3 | 0 | 0 | 192 | 8.9 | 8.2 |
| ENE | 0 | 16 | 85 | 68 | 21 | 0 | 0 | 0 | 190 | 8.8 | 7.9 |
| E | 0 | 11 | 58 | 49 | 44 | 11 | 0 | 0 | 173 | 8.0 | 10.2 |
| ESE | 0 | 6 | 53 | 43 | 23 | 0 | 0 | 0 | 125 | 5.8 | 8.6 |
| SE | 0 | 12 | 28 | 33 | 46 | 1 | 0 | 0 | 120 | 5.6 | 10.1 |
| SSE | 0 | 8 | 26 | 41 | 80 | 16 | 1 | 0 | 172 | 8.0 | 12.3 |
| S | 0 | 8 | 30 | 44 | 33 | 16 | 0 | 0 | 131 | 6.1 | 11.2 |
| SSW | 0 | 7 | 26 | 40 | 27 | 6 | 3 | 0 | 109 | 5.0 | 10.7 |
| SW | 0 | 7 | 9 | 14 | 17 | 8 | 0 | 0 | 55 | 2.5 | 11.4 |
| WSW | 0 | 5 | 7 | 8 | 5 | 1 | 0 | 0 | 26 | 1.2 | 9.0 |
| W | 0 | 8 | 17 | 3 | 1 | 0 | 0 | 0 | 29 | 1.3 | 5.5 |
| WNW | 0 | 11 | 18 | 12 | 8 | 0 | 0 | 0 | 49 | 2.3 | 7.2 |
| NW | 0 | 11 | 31 | 23 | 16 | 1 | 0 | 0 | 82 | 3.8 | 8.3 |
| NNW | 0 | 10 | 53 | 47 | 52 | 19 | 0 | 0 | 181 | 8.4 | 10.7 |
| TOTAL | 0 | 176 | 650 | 689 | 545 | 94 | 5 | 0 | 2159 | 100.0 | |
| % | 0.0 | 8.2 | 30.1 | 31.9 | 25.2 | 4.4 | 0.2 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 9.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2159

TOTAL NUMBER OF HOURS FOR PERIOD= 2160

JOINT FREQUENCY TABLES FOR 1991

Second Quarter

DATE: 8/ 7/91 11: 2

JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 1 | 3 | 4 | 3 | 1 | 0 | 0 | 12 | 4.2 | 10.9 |
| NNE | 0 | 1 | 5 | 7 | 3 | 0 | 1 | 0 | 17 | 6.0 | 10.0 |
| NE | 0 | 4 | 8 | 12 | 0 | 0 | 0 | 0 | 24 | 8.4 | 7.0 |
| ENE | 0 | 2 | 8 | 2 | 2 | 0 | 0 | 0 | 14 | 4.9 | 6.6 |
| E | 0 | 2 | 5 | 7 | 8 | 0 | 0 | 0 | 22 | 7.7 | 10.4 |
| ESE | 0 | 1 | 1 | 7 | 17 | 0 | 0 | 0 | 26 | 9.1 | 12.6 |
| SE | 0 | 0 | 7 | 15 | 15 | 5 | 0 | 0 | 42 | 14.7 | 12.4 |
| SSE | 0 | 1 | 8 | 27 | 17 | 4 | 0 | 0 | 57 | 20.0 | 11.9 |
| S | 0 | 1 | 5 | 28 | 22 | 0 | 0 | 0 | 56 | 19.6 | 11.6 |
| SSW | 0 | 0 | 2 | 4 | 3 | 0 | 0 | 0 | 9 | 3.2 | 10.1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 4.8 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 1.4 |
| NNW | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 | 1.4 | 6.9 |
| TOTAL | 0 | 14 | 55 | 115 | 90 | 10 | 1 | 0 | 285 | 100.0 | |
| % | 0.0 | 4.9 | 19.3 | 40.4 | 31.6 | 3.5 | 0.4 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 2

JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0.7 | 11.6 |
| NNE | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 8 | 5.5 | 11.5 |
| NE | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 6 | 4.1 | 7.8 |
| ENE | 0 | 0 | 7 | 2 | 2 | 1 | 0 | 0 | 12 | 8.2 | 9.8 |
| E | 0 | 2 | 1 | 1 | 3 | 0 | 0 | 0 | 7 | 4.8 | 8.6 |
| ESE | 0 | 2 | 2 | 1 | 6 | 0 | 0 | 0 | 11 | 7.5 | 10.6 |
| SE | 0 | 0 | 4 | 4 | 9 | 0 | 0 | 0 | 17 | 11.6 | 11.4 |
| SSE | 0 | 0 | 3 | 20 | 13 | 1 | 0 | 0 | 37 | 25.3 | 11.7 |
| S | 0 | 0 | 3 | 19 | 11 | 0 | 0 | 0 | 33 | 22.6 | 10.5 |
| SSW | 0 | 0 | 2 | 4 | 1 | 1 | 0 | 0 | 8 | 5.5 | 10.3 |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | 5.6 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | 5.5 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.4 | 3.0 |
| NNW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1.4 | 6.2 |
| TOTAL | 0 | 6 | 28 | 62 | 47 | 3 | 0 | 0 | 146 | 100.0 | |

% 0.0 4.1 19.2 42.5 32.2 2.1 0.0 0.0 100.0

AVE SPEED FOR THIS TABLE= 10.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS=

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 2

JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 4/ 1/91 01:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|-------|--------------|
| N | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.5 | 4.3 |
| NNE | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 4 | 2.0 | 7.1 |
| NE | 0 | 2 | 3 | 1 | 3 | 0 | 0 | 0 | 9 | 4.5 | 8.4 |
| ENE | 0 | 2 | 3 | 4 | 3 | 1 | 0 | 0 | 13 | 6.4 | 9.9 |
| E | 0 | 0 | 2 | 7 | 1 | 0 | 0 | 0 | 10 | 5.0 | 9.9 |
| ESE | 0 | 0 | 1 | 5 | 8 | 0 | 0 | 0 | 14 | 6.9 | 12.4 |
| SE | 0 | 0 | 5 | 16 | 20 | 1 | 0 | 0 | 42 | 20.8 | 12.1 |
| SSE | 0 | 0 | 4 | 15 | 20 | 0 | 0 | 0 | 39 | 19.3 | 12.5 |
| S | 0 | 0 | 8 | 28 | 5 | 0 | 0 | 0 | 41 | 20.3 | 9.7 |
| SSW | 0 | 0 | 2 | 7 | 0 | 0 | 0 | 0 | 9 | 4.5 | 9.6 |
| SW | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 9 | 4.5 | 7.6 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0.5 | 8.1 |
| W | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1.0 | 4.6 |
| WNW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1.0 | 5.4 |
| NW | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 1.5 | 4.6 |
| NNW | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 1.5 | 6.1 |
| TOTAL | 0 | 7 | 42 | 90 | 61 | 2 | 0 | 0 | 202 | 100.0 | |
| % | 0.0 | 3.5 | 20.8 | 44.6 | 30.2 | 1.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 2

JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 4. 1/91 0100 TO 5/30/91 2300

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 2 | 9 | 11 | 3 | 0 | 0 | 0 | 28 | 3.6 | 8.4 |
| NNE | 0 | 3 | 6 | 19 | 8 | 0 | 0 | 0 | 36 | 4.6 | 9.7 |
| N/E | 0 | 3 | 20 | 23 | 6 | 2 | 1 | 0 | 55 | 7.1 | 9.3 |
| ENE | 0 | 0 | 20 | 13 | 4 | 0 | 0 | 0 | 37 | 4.8 | 8.1 |
| E | 0 | 4 | 24 | 28 | 25 | 0 | 0 | 0 | 81 | 10.4 | 9.8 |
| ESE | 0 | 5 | 23 | 31 | 30 | 2 | 0 | 0 | 91 | 11.7 | 10.4 |
| SE | 0 | 8 | 21 | 62 | 61 | 3 | 0 | 0 | 155 | 20.0 | 11.2 |
| SSE | 0 | 1 | 37 | 55 | 59 | 3 | 0 | 0 | 155 | 20.0 | 11.1 |
| S | 0 | 2 | 17 | 49 | 22 | 1 | 0 | 0 | 91 | 11.7 | 10.1 |
| SSW | 0 | 0 | 6 | 13 | 3 | 0 | 0 | 0 | 22 | 2.8 | 9.5 |
| SW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0.3 | 9.9 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | 5.4 |
| W | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0.5 | 4.8 |
| WNW | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 | 0.5 | 7.2 |
| NW | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 4 | 0.5 | 6.4 |
| NNW | 0 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 10 | 1.3 | 5.3 |
| TOTAL | 0 | 31 | 198 | 313 | 222 | 11 | 1 | 0 | 776 | 100.0 | |
| % | 0.0 | 4.0 | 25.5 | 40.3 | 28.6 | 1.4 | 0.1 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.1 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 2

JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | |
| N | 0 | 3 | 10 | 5 | 1 | 0 | 0 | 0 | 19 | 3.5 | 6.6 |
| NNE | 0 | 2 | 25 | 10 | 2 | 0 | 0 | 0 | 39 | 7.2 | 6.9 |
| NE | 0 | 7 | 44 | 7 | 1 | 0 | 0 | 0 | 59 | 10.9 | 5.9 |
| ENE | 0 | 7 | 33 | 10 | 2 | 0 | 0 | 0 | 52 | 9.6 | 6.3 |
| E | 0 | 6 | 26 | 10 | 8 | 0 | 0 | 0 | 50 | 9.2 | 7.3 |
| ESE | 0 | 2 | 24 | 27 | 7 | 0 | 0 | 0 | 60 | 11.0 | 8.5 |
| SE | 0 | 3 | 38 | 37 | 10 | 1 | 0 | 0 | 89 | 16.4 | 8.1 |
| SSE | 0 | 2 | 48 | 46 | 8 | 0 | 0 | 0 | 104 | 19.2 | 8.2 |
| S | 0 | 0 | 16 | 14 | 3 | 0 | 0 | 0 | 33 | 6.1 | 8.1 |
| SSW | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 8 | 1.5 | 6.1 |
| SW | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 0.7 | 5.8 |
| WSW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0.4 | 6.6 |
| W | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0.4 | 4.9 |
| WNW | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0.5 | 3.9 |
| NW | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | 1.5 | 3.4 |
| NNW | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 11 | 2.0 | 4.3 |
| TOTAL | 0 | 41 | 290 | 169 | 42 | 1 | 0 | 0 | 543 | 100.0 | |
| % | 0.0 | 7.6 | 53.4 | 31.1 | 7.7 | 0.2 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 7.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 3

JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 7 | 4.0 | 2.9 |
| NNE | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 2.3 | 4.6 |
| NE | 0 | 3 | 12 | 0 | 0 | 0 | 0 | 0 | 15 | 8.6 | 5.1 |
| ENE | 0 | 6 | 12 | 2 | 0 | 0 | 0 | 0 | 20 | 11.4 | 4.9 |
| E | 0 | 6 | 16 | 1 | 0 | 0 | 0 | 0 | 23 | 13.1 | 4.9 |
| ESE | 0 | 12 | 25 | 1 | 0 | 0 | 0 | 0 | 38 | 21.7 | 4.6 |
| SE | 0 | 5 | 41 | 0 | 0 | 0 | 0 | 0 | 46 | 26.3 | 4.6 |
| SSE | 0 | 3 | 11 | 0 | 0 | 0 | 0 | 0 | 14 | 8.0 | 4.6 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0.6 | 8.7 |
| 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 | 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 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 3.5 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 3.4 | 4.0 |
| TOTAL | 0 | 43 | 127 | 5 | 0 | 0 | 0 | 0 | 175 | 100.0 | |
| % | 0.0 | 24.6 | 72.6 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 4.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 3

JOINT FREQUENCY TABLE

STABILITY CLASS -G-

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9.4 | 2.6 |
| NNE | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | 15.1 | 3.0 |
| NE | 0 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 15 | 28.3 | 4.4 |
| ENE | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 7 | 13.2 | 3.5 |
| E | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 11.3 | 3.1 |
| ESE | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 11.3 | 3.4 |
| SE | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 5.7 | 6.3 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.9 | 1.9 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3.8 | 2.5 |
| TOTAL | 0 | 30 | 23 | 0 | 0 | 0 | 0 | 0 | 53 | 100.0 | |
| % | 0.0 | 56.6 | 43.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 3.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

DATE: 8/ 7/91 11: 3

JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| | | - 3.5 | - 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | |
| N | 0 | 15 | 26 | 24 | 7 | 1 | 0 | 0 | 73 | 3.3 | 7.4 |
| NNE | 0 | 12 | 46 | 41 | 16 | 0 | 1 | 0 | 116 | 5.3 | 8.2 |
| NE | 0 | 23 | 100 | 47 | 10 | 2 | 1 | 0 | 183 | 8.4 | 7.1 |
| ENE | 0 | 21 | 86 | 33 | 13 | 2 | 0 | 0 | 155 | 7.1 | 7.0 |
| E | 0 | 24 | 76 | 54 | 45 | 0 | 0 | 0 | 199 | 9.1 | 8.4 |
| ESE | 0 | 27 | 77 | 72 | 68 | 2 | 0 | 0 | 246 | 11.3 | 9.2 |
| SE | 0 | 16 | 119 | 134 | 115 | 10 | 0 | 0 | 394 | 18.1 | 9.9 |
| SSE | 0 | 7 | 111 | 163 | 117 | 8 | 0 | 0 | 406 | 18.6 | 10.4 |
| S | 0 | 3 | 49 | 139 | 63 | 1 | 0 | 0 | 255 | 11.7 | 10.1 |
| SSW | 0 | 0 | 18 | 30 | 7 | 1 | 0 | 0 | 56 | 2.6 | 9.2 |
| SW | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 16 | 0.7 | 7.3 |
| WSW | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 5 | 0.2 | 6.3 |
| W | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 10 | 0.5 | 4.5 |
| WNW | 0 | 2 | 6 | 2 | 0 | 0 | 0 | 0 | 10 | 0.5 | 5.5 |
| NW | 0 | 11 | 6 | 0 | 1 | 0 | 0 | 0 | 18 | 0.8 | 4.1 |
| NNW | 0 | 10 | 22 | 6 | 0 | 0 | 0 | 0 | 38 | 1.7 | 4.9 |
| TOTAL | 0 | 172 | 763 | 754 | 462 | 27 | 2 | 0 | 2180 | 100.0 | |
| % | 0.0 | 7.9 | 35.0 | 34.6 | 21.2 | 1.2 | 0.1 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 9.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 4

TOTAL NUMBER OF VALID HOURS= 2180

TOTAL NUMBER OF HOURS FOR PERIOD= 2184

JOINT FREQUENCY TABLES FOR 1991

Third Quarter

DATE: 1/15/92 14:57

JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ ~ 3.5 | 3.6 ~ 7.5 | 7.6 ~12.5 | 12.6 ~18.5 | 18.6 ~24.5 | 24.6 ~32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 2.7 | 8.5 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.8 | 3.3 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 7.5 |
| E | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 3 | 2.7 | 11.5 |
| ESE | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 2.7 | 10.9 |
| SE | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 6 | 5.4 | 9.2 |
| SSE | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 | 4.5 | 10.3 |
| S | 0 | 0 | 4 | 39 | 3 | 0 | 0 | 0 | 46 | 41.4 | 10.2 |
| SSW | 0 | 0 | 6 | 26 | 0 | 0 | 0 | 0 | 32 | 28.8 | 9.2 |
| SW | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 2.7 | 8.4 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 5.7 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 5.8 |
| NNW | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 5 | 4.5 | 8.7 |
| TOTAL | 0 | 3 | 19 | 83 | 6 | 0 | 0 | 0 | 111 | 100.0 | |
| % | 0.0 | 2.7 | 17.1 | 74.8 | 5.4 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 9.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:57

JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 2.0 | 4.7 |
| NNE | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 5 | 3.3 | 7.0 |
| NE | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 2.6 | 7.0 |
| ENE | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 2.0 | 5.5 |
| E | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 5 | 3.3 | 7.6 |
| ESE | 0 | 0 | 1 | 5 | 6 | 0 | 0 | 0 | 12 | 7.9 | 11.3 |
| SE | 0 | 0 | 2 | 13 | 0 | 0 | 0 | 0 | 15 | 9.9 | 9.4 |
| SSE | 0 | 0 | 4 | 20 | 0 | 0 | 0 | 0 | 24 | 15.9 | 9.7 |
| S | 0 | 0 | 5 | 40 | 3 | 0 | 0 | 0 | 48 | 31.8 | 10.0 |
| SSW | 0 | 0 | 7 | 11 | 0 | 0 | 0 | 0 | 18 | 11.9 | 8.0 |
| SW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1.3 | 7.6 |
| WSW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1.3 | 6.0 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | 6.2 |
| WNW | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 1.3 | 5.2 |
| NW | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 2.0 | 5.0 |
| NNW | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 2.6 | 7.0 |
| TOTAL | 0 | 3 | 43 | 95 | 10 | 0 | 0 | 0 | 151 | 100.0 | |
| % | 0.0 | 2.0 | 28.5 | 62.9 | 6.6 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 9.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:58

JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1.1 | 7.3 |
| NNE | 0 | 1 | 4 | 4 | 1 | 0 | 0 | 0 | 10 | 5.4 | 7.6 |
| NE | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 6 | 3.2 | 7.2 |
| ENE | 0 | 1 | 1 | 10 | 0 | 0 | 0 | 0 | 12 | 6.5 | 9.0 |
| E | 0 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 7 | 3.8 | 6.5 |
| ESE | 0 | 1 | 3 | 6 | 2 | 0 | 0 | 0 | 12 | 6.5 | 9.6 |
| SE | 0 | 1 | 5 | 20 | 2 | 0 | 0 | 0 | 28 | 15.1 | 9.4 |
| SSE | 0 | 0 | 6 | 25 | 0 | 0 | 0 | 0 | 31 | 16.7 | 9.6 |
| S | 0 | 0 | 11 | 27 | 1 | 0 | 0 | 0 | 39 | 21.0 | 9.0 |
| SSW | 0 | 1 | 8 | 8 | 0 | 0 | 0 | 0 | 17 | 9.1 | 7.3 |
| SW | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 6 | 3.2 | 6.9 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.5 | 7.2 |
| W | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 | 1.6 | 6.1 |
| WNW | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 6 | 3.2 | 6.2 |
| NW | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 2.2 | 4.5 |
| NNW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1.1 | 4.6 |
| TOTAL | 0 | 8 | 60 | 112 | 6 | 0 | 0 | 0 | 186 | 100.0 | |
| % | 0.0 | 4.3 | 32.3 | 60.2 | 3.2 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 8.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:58

JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 7/ 1/91 0100 TO 9/30/91 2300

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| | | - 3.5 | - 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | |
| N | 0 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 12 | 2.7 | 6.4 |
| NNE | 0 | 3 | 10 | 18 | 2 | 0 | 0 | 0 | 33 | 7.4 | 8.4 |
| NE | 0 | 0 | 14 | 11 | 0 | 0 | 0 | 0 | 25 | 5.6 | 7.4 |
| ENE | 0 | 6 | 18 | 16 | 0 | 0 | 0 | 0 | 40 | 9.0 | 6.7 |
| E | 0 | 4 | 13 | 8 | 0 | 0 | 0 | 0 | 25 | 5.6 | 6.5 |
| ESE | 0 | 4 | 11 | 24 | 0 | 0 | 0 | 0 | 39 | 8.7 | 7.8 |
| SE | 0 | 1 | 24 | 45 | 5 | 0 | 0 | 0 | 75 | 16.8 | 8.7 |
| SSE | 0 | 1 | 14 | 29 | 2 | 0 | 0 | 0 | 66 | 14.8 | 8.5 |
| S | 0 | 0 | 21 | 41 | 1 | 0 | 0 | 0 | 63 | 14.1 | 8.6 |
| SSW | 0 | 1 | 12 | 9 | 0 | 0 | 0 | 0 | 22 | 4.9 | 7.6 |
| SW | 0 | 1 | 6 | 4 | 0 | 0 | 0 | 0 | 11 | 2.5 | 7.1 |
| WSW | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 9 | 2.0 | 5.2 |
| W | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 6 | 1.3 | 5.8 |
| WNW | 0 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 9 | 2.0 | 4.6 |
| NW | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0.9 | 4.5 |
| NNW | 0 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 7 | 1.6 | 6.6 |
| TOTAL | 0 | 31 | 169 | 236 | 10 | 0 | 0 | 0 | 446 | 100.0 | |
| % | 0.0 | 7.0 | 37.9 | 52.9 | 2.2 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 7.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:58

JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 9 | 6 | 8 | 0 | 0 | 0 | 0 | 23 | 3.5 | 6.0 |
| NNE | 0 | 11 | 22 | 9 | 0 | 0 | 0 | 0 | 42 | 6.3 | 5.4 |
| NE | 0 | 13 | 42 | 3 | 0 | 0 | 0 | 0 | 58 | 8.8 | 4.9 |
| ENE | 0 | 9 | 21 | 3 | 0 | 0 | 0 | 0 | 33 | 5.0 | 5.1 |
| E | 0 | 10 | 32 | 2 | 0 | 0 | 0 | 0 | 44 | 6.6 | 5.2 |
| ESE | 0 | 3 | 33 | 9 | 0 | 0 | 0 | 0 | 45 | 6.8 | 5.9 |
| SE | 0 | 3 | 60 | 10 | 1 | 0 | 0 | 0 | 74 | 11.2 | 6.0 |
| SSE | 0 | 0 | 101 | 78 | 0 | 0 | 0 | 0 | 129 | 19.5 | 6.8 |
| S | 0 | 0 | 42 | 54 | 2 | 0 | 0 | 0 | 98 | 14.8 | 7.8 |
| SSW | 0 | 0 | 31 | 35 | 0 | 0 | 0 | 0 | 66 | 10.0 | 7.8 |
| SW | 0 | 1 | 7 | 9 | 0 | 0 | 0 | 0 | 17 | 2.6 | 7.6 |
| WSW | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 1.2 | 5.3 |
| W | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0.3 | 7.1 |
| WNW | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0.5 | 5.2 |
| NW | 0 | 5 | 6 | 2 | 0 | 0 | 0 | 0 | 13 | 2.0 | 4.2 |
| NNW | 0 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 7 | 1.1 | 6.6 |
| TOTAL | 0 | 65 | 417 | 177 | 3 | 0 | 0 | 0 | 662 | 100.0 | |
| % | 0.0 | 9.8 | 63.0 | 26.7 | 0.5 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 6.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:58

JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 7/ 1/91 0100 TO 9/30/91 2300

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 15 | 3.1 | 3.3 |
| NNE | 0 | 15 | 20 | 4 | 0 | 0 | 0 | 0 | 39 | 8.2 | 4.4 |
| NE | 0 | 26 | 30 | 1 | 0 | 0 | 0 | 0 | 57 | 11.9 | 4.0 |
| ENE | 0 | 23 | 21 | 1 | 0 | 0 | 0 | 0 | 45 | 9.4 | 3.8 |
| E | 0 | 25 | 20 | 1 | 0 | 0 | 0 | 0 | 46 | 9.6 | 3.7 |
| ESE | 0 | 28 | 34 | 1 | 0 | 0 | 0 | 0 | 63 | 13.2 | 3.8 |
| SE | 0 | 14 | 100 | 1 | 0 | 0 | 0 | 0 | 115 | 24.1 | 4.4 |
| SSE | 0 | 3 | 55 | 2 | 0 | 0 | 0 | 0 | 60 | 12.6 | 5.3 |
| S | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0.8 | 3.3 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SW | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | 0.8 | 4.5 |
| WSW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0.4 | 6.0 |
| W | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 1.3 | 4.0 |
| WNW | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 7 | 1.5 | 4.4 |
| NW | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1.5 | 3.3 |
| NNW | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | 1.7 | 3.5 |
| TOTAL | 0 | 165 | 300 | 13 | 0 | 0 | 0 | 0 | 478 | 100.0 | |
| % | 0.0 | 34.5 | 62.8 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 4.2 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:58

JOINT FREQUENCY TABLE

STABILITY CLASS -0-

FROM 7/ 1/91 01:00 TO 9/30/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 17 | 9.8 | 3.1 |
| NNE | 0 | 13 | 18 | 2 | 0 | 0 | 0 | 0 | 33 | 19.0 | 4.2 |
| NE | 0 | 19 | 25 | 0 | 0 | 0 | 0 | 0 | 44 | 25.3 | 3.9 |
| ENE | 0 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 12 | 6.9 | 3.5 |
| E | 0 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 20 | 11.5 | 3.2 |
| ESE | 0 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 15 | 8.6 | 3.1 |
| SE | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 7 | 4.0 | 3.4 |
| SSE | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.1 | 2.7 |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 3.2 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 2.5 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 3.6 |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 3.3 |
| NW | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 8 | 4.6 | 3.1 |
| NNW | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 12 | 6.9 | 3.6 |
| TOTAL | 0 | 100 | 72 | 2 | 0 | 0 | 0 | 0 | 174 | 100.0 | |
| % | 0.0 | 57.5 | 41.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 3.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 15:59

JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 7/ 1/91 0100 TO 9/30/91 2300

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 33 | 25 | 17 | 0 | 0 | 0 | 0 | 75 | 3.4 | 4.9 |
| NNE | 0 | 44 | 77 | 37 | 4 | 0 | 0 | 0 | 162 | 7.3 | 5.7 |
| NE | 0 | 60 | 118 | 18 | 0 | 0 | 0 | 0 | 196 | 8.9 | 4.8 |
| ENE | 0 | 49 | 67 | 30 | 0 | 0 | 0 | 0 | 146 | 6.6 | 5.4 |
| E | 0 | 55 | 76 | 18 | 1 | 0 | 0 | 0 | 150 | 6.8 | 5.0 |
| ESE | 0 | 47 | 87 | 46 | 9 | 0 | 0 | 0 | 189 | 8.6 | 6.0 |
| SE | 0 | 23 | 196 | 92 | 9 | 0 | 0 | 0 | 320 | 14.5 | 6.5 |
| SSE | 0 | 6 | 180 | 129 | 2 | 0 | 0 | 0 | 317 | 14.4 | 7.4 |
| S | 0 | 4 | 84 | 201 | 10 | 0 | 0 | 0 | 299 | 13.5 | 8.8 |
| SSW | 0 | 3 | 64 | 89 | 0 | 0 | 0 | 0 | 156 | 7.1 | 8.0 |
| SW | 0 | 4 | 20 | 19 | 0 | 0 | 0 | 0 | 43 | 1.9 | 7.1 |
| WSW | 0 | 1 | 20 | 2 | 0 | 0 | 0 | 0 | 23 | 1.0 | 5.5 |
| W | 0 | 4 | 12 | 3 | 0 | 0 | 0 | 0 | 19 | 0.9 | 5.3 |
| WNW | 0 | 8 | 16 | 4 | 0 | 0 | 0 | 0 | 28 | 1.3 | 4.9 |
| NW | 0 | 18 | 20 | 2 | 0 | 0 | 0 | 0 | 40 | 1.8 | 4.0 |
| NNW | 0 | 16 | 18 | 11 | 0 | 0 | 0 | 0 | 45 | 2.0 | 5.4 |
| TOTAL | 0 | 375 | 1080 | 718 | 35 | 0 | 0 | 0 | 2208 | 100.0 | |
| % | 0.0 | 17.0 | 48.9 | 32.5 | 1.6 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 6.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 2208

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

JOINT FREQUENCY TABLES FOR 1991

Fourth Quarter

DATE: 1/15/92 16: 7

JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 6 | 5.2 | 10.8 |
| NNE | 0 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 8 | 6.9 | 7.2 |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 4.6 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 5 | 4.3 | 6.7 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 12 | 4 | 0 | 0 | 0 | 16 | 13.8 | 11.5 |
| SSE | 0 | 0 | 1 | 17 | 6 | 1 | 0 | 0 | 25 | 21.6 | 11.9 |
| S | 0 | 0 | 0 | 14 | 17 | 0 | 0 | 0 | 31 | 26.7 | 13.1 |
| SSW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1.7 | 10.9 |
| SW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 2.6 | 11.2 |
| WSW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1.7 | 5.7 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 3.1 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 4.9 |
| NW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1.7 | 10.4 |
| NNW | 0 | 0 | 0 | 1 | 11 | 1 | 0 | 0 | 13 | 11.2 | 15.0 |
| TOTAL | 0 | 7 | 7 | 57 | 43 | 2 | 0 | 0 | 116 | 100.0 | |
| % | 0.0 | 6.0 | 6.0 | 49.1 | 37.1 | 1.7 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 11.5 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 7

JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 10/ 1/91 01:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 4.1 | 14.3 |
| NNE | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 | 4.1 | 7.9 |
| NE | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 4 | 4.1 | 9.4 |
| ENE | 0 | 0 | 3 | 4 | 2 | 0 | 0 | 0 | 9 | 9.3 | 9.0 |
| E | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 5 | 5.2 | 7.7 |
| ESE | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 4 | 4.1 | 9.2 |
| SE | 0 | 0 | 2 | 10 | 2 | 0 | 0 | 0 | 14 | 14.4 | 10.9 |
| SSE | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 0 | 12 | 12.4 | 10.9 |
| S | 0 | 0 | 0 | 12 | 6 | 0 | 0 | 0 | 18 | 18.6 | 11.8 |
| SSW | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 6 | 6.2 | 7.7 |
| SW | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 5 | 5.2 | 7.4 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.0 | 7.4 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 3.1 | 10.6 |
| NNW | 0 | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 8 | 8.2 | 13.7 |
| TOTAL | 0 | 1 | 20 | 52 | 23 | 1 | 0 | 0 | 97 | 100.0 | |
| % | 0.0 | 1.0 | 20.6 | 53.6 | 23.7 | 1.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 7

JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 0 | 7 | 7.1 | 9.1 |
| NNE | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 8 | 8.2 | 8.6 |
| NE | 0 | 0 | 2 | 4 | 2 | 0 | 0 | 0 | 8 | 8.2 | 9.7 |
| ENE | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 6 | 6.1 | 9.6 |
| E | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 5 | 5.1 | 8.7 |
| ESE | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 5 | 5.1 | 9.0 |
| SE | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 8 | 8.2 | 11.4 |
| SSE | 0 | 0 | 0 | 8 | 10 | 0 | 0 | 0 | 18 | 18.4 | 12.5 |
| S | 0 | 0 | 2 | 4 | 3 | 0 | 0 | 0 | 9 | 9.2 | 10.7 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 2.0 | 9.1 |
| SW | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1.0 | 10.3 |
| WSW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 2.0 | 8.4 |
| W | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 4.1 | 6.1 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.0 | 4.5 |
| NW | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 3.1 | 7.8 |
| NNW | 0 | 1 | 0 | 2 | 7 | 1 | 0 | 0 | 11 | 11.2 | 13.0 |
| TOTAL | 0 | 1 | 21 | 48 | 27 | 1 | 0 | 0 | 98 | 100.0 | |
| % | 0.0 | 1.0 | 21.4 | 49.0 | 27.6 | 1.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 8

JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 10/ 1/91 01:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|---------|---------|---------|---------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | - 7.5 - | -12.5 - | -18.5 - | -24.5 - | -32.5 | | | | |
| N | 0 | 1 | 7 | 58 | 36 | 0 | 0 | 0 | 102 | 13.5 | 11.4 |
| NNE | 0 | 0 | 23 | 42 | 19 | 0 | 0 | 0 | 84 | 11.1 | 10.0 |
| NE | 0 | 1 | 35 | 30 | 6 | 0 | 0 | 0 | 72 | 9.5 | 8.3 |
| ENE | 0 | 1 | 20 | 41 | 2 | 0 | 0 | 0 | 64 | 8.5 | 8.7 |
| E | 0 | 1 | 16 | 28 | 10 | 8 | 0 | 0 | 63 | 8.3 | 10.8 |
| ESE | 0 | 0 | 9 | 29 | 11 | 0 | 0 | 0 | 49 | 6.5 | 10.5 |
| SE | 0 | 0 | 4 | 52 | 25 | 4 | 0 | 0 | 85 | 11.2 | 11.7 |
| SSE | 0 | 0 | 2 | 31 | 44 | 5 | 0 | 0 | 82 | 10.8 | 13.4 |
| S | 0 | 1 | 6 | 10 | 12 | 1 | 0 | 0 | 30 | 4.0 | 11.3 |
| SSW | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 8 | 1.1 | 7.8 |
| SW | 0 | 1 | 5 | 5 | 0 | 0 | 0 | 0 | 11 | 1.5 | 6.9 |
| WSW | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 5 | 0.7 | 6.7 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | 6.2 |
| WNW | 0 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 10 | 1.3 | 6.4 |
| NW | 0 | 0 | 3 | 11 | 1 | 0 | 0 | 0 | 15 | 2.0 | 10.1 |
| NNW | 0 | 1 | 3 | 42 | 28 | 1 | 0 | 0 | 75 | 9.9 | 11.9 |
| TOTAL | 0 | 9 | 148 | 386 | 194 | 19 | 0 | 0 | 756 | 100.0 | |
| % | 0.0 | 1.2 | 19.6 | 51.1 | 25.7 | 2.5 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.7 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 8

JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|---------|---------|---------|---------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | - 7.5 - | -12.5 - | -18.5 - | -24.5 - | -32.5 | | | | |
| N | 0 | 2 | 20 | 15 | 2 | 0 | 0 | 0 | 39 | 6.0 | 7.8 |
| NNE | 0 | 2 | 30 | 38 | 3 | 0 | 0 | 0 | 73 | 11.3 | 7.8 |
| NE | 0 | 3 | 26 | 16 | 3 | 0 | 0 | 0 | 48 | 7.4 | 7.2 |
| ENE | 0 | 2 | 24 | 10 | 0 | 0 | 0 | 0 | 36 | 5.6 | 6.6 |
| E | 0 | 1 | 21 | 16 | 6 | 6 | 0 | 0 | 50 | 7.7 | 10.0 |
| ESE | 0 | 1 | 29 | 23 | 7 | 6 | 0 | 0 | 66 | 10.2 | 9.4 |
| SE | 0 | 1 | 37 | 78 | 14 | 0 | 0 | 0 | 130 | 20.1 | 9.3 |
| SSE | 0 | 1 | 9 | 55 | 15 | 0 | 0 | 0 | 80 | 12.4 | 10.2 |
| S | 0 | 0 | 14 | 14 | 1 | 0 | 0 | 0 | 29 | 4.5 | 7.6 |
| SSW | 0 | 0 | 14 | 9 | 0 | 0 | 0 | 0 | 23 | 3.6 | 7.2 |
| SW | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 8 | 1.2 | 8.0 |
| WSW | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 6 | 0.9 | 9.6 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.2 | 2.5 |
| WNW | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0.3 | 4.4 |
| NW | 0 | 3 | 12 | 4 | 1 | 0 | 0 | 0 | 20 | 3.1 | 6.7 |
| NNW | 0 | 2 | 10 | 21 | 3 | 0 | 0 | 0 | 36 | 5.6 | 8.8 |
| TOTAL | 0 | 20 | 250 | 309 | 56 | 12 | 0 | 0 | 647 | 100.0 | |
| % | 0.0 | 3.1 | 38.6 | 47.8 | 8.7 | 1.9 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 8.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 8

JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 3 | 11 | 1 | 0 | 0 | 0 | 0 | 15 | 7.1 | 4.6 |
| NNE | 0 | 0 | 17 | 5 | 0 | 0 | 0 | 0 | 22 | 10.4 | 6.2 |
| NE | 0 | 4 | 20 | 4 | 0 | 0 | 0 | 0 | 28 | 13.3 | 5.9 |
| ENE | 0 | 0 | 19 | 3 | 0 | 0 | 0 | 0 | 22 | 10.4 | 5.5 |
| E | 0 | 3 | 21 | 1 | 0 | 0 | 0 | 0 | 25 | 11.8 | 5.3 |
| ESE | 0 | 2 | 17 | 0 | 0 | 0 | 0 | 0 | 19 | 9.0 | 4.8 |
| SE | 0 | 1 | 19 | 0 | 1 | 0 | 0 | 0 | 21 | 10.0 | 6.0 |
| SSE | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 9 | 4.3 | 5.3 |
| S | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 2.4 | 4.4 |
| SSW | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 5 | 2.4 | 4.7 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0.9 | 3.4 |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.9 | 1.8 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| WNW | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 11 | 5.2 | 4.1 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 3.8 | 4.6 |
| NNW | 0 | 3 | 14 | 0 | 0 | 0 | 0 | 0 | 17 | 8.1 | 4.2 |
| TOTAL | 0 | 26 | 170 | 14 | 1 | 0 | 0 | 0 | 211 | 100.0 | |
| % | 0.0 | 12.3 | 80.6 | 6.6 | 0.5 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 5.2 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 8

JOINT FREQUENCY TABLE

STABILITY CLASS -0-

FROM 10/ 1/91 01:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 13 | 4.6 | 3.0 |
| NNE | 0 | 7 | 28 | 0 | 0 | 0 | 0 | 0 | 35 | 12.4 | 4.5 |
| NE | 0 | 17 | 50 | 2 | 0 | 0 | 0 | 0 | 69 | 24.5 | 4.6 |
| ENE | 0 | 16 | 27 | 0 | 0 | 0 | 0 | 0 | 43 | 15.2 | 4.0 |
| E | 0 | 12 | 20 | 0 | 0 | 0 | 0 | 0 | 32 | 11.3 | 4.3 |
| ESE | 0 | 5 | 16 | 0 | 0 | 0 | 0 | 0 | 21 | 7.4 | 4.5 |
| SE | 0 | 4 | 11 | 1 | 0 | 0 | 0 | 0 | 16 | 5.7 | 4.6 |
| SSE | 0 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 9 | 3.2 | 4.8 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 2.1 |
| SW | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.7 | 2.8 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 2.4 |
| W | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 1.8 | 5.6 |
| WNW | 0 | 3 | 14 | 0 | 0 | 0 | 0 | 0 | 17 | 6.0 | 4.3 |
| NW | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 9 | 3.2 | 3.6 |
| NNW | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 9 | 3.2 | 4.1 |
| TOTAL | 0 | 86 | 193 | 3 | 0 | 0 | 0 | 0 | 282 | 100.0 | |
| % | 0.0 | 30.5 | 68.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 4.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

DATE: 1/15/92 16: 8

JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 10/ 1/91 01:00 TO 12/31/91 23:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 - 12.5 | 12.6 - 18.5 | 18.6 - 24.5 | 24.6 - 32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|---------------|----------------|----------------|----------------|-------|-------|-------|--------------|
| N | 0 | 19 | 43 | 76 | 48 | 0 | 0 | 0 | 186 | 8.4 | 9.5 |
| NNE | 0 | 11 | 105 | 96 | 22 | 0 | 0 | 0 | 234 | 10.6 | 7.9 |
| NE | 0 | 25 | 137 | 56 | 12 | 0 | 0 | 0 | 230 | 10.4 | 6.7 |
| ENE | 0 | 19 | 94 | 62 | 5 | 0 | 0 | 0 | 180 | 8.2 | 6.8 |
| E | 0 | 20 | 81 | 54 | 16 | 14 | 0 | 0 | 185 | 8.4 | 8.4 |
| ESE | 0 | 8 | 74 | 56 | 20 | 6 | 0 | 0 | 164 | 7.4 | 8.5 |
| SE | 0 | 6 | 73 | 159 | 48 | 4 | 0 | 0 | 290 | 13.1 | 9.8 |
| SSE | 0 | 4 | 27 | 121 | 77 | 6 | 0 | 0 | 235 | 10.6 | 11.3 |
| S | 0 | 3 | 25 | 54 | 39 | 1 | 0 | 0 | 122 | 5.5 | 10.6 |
| SSW | 0 | 2 | 25 | 20 | 0 | 0 | 0 | 0 | 47 | 2.1 | 7.2 |
| SW | 0 | 4 | 12 | 15 | 1 | 0 | 0 | 0 | 32 | 1.4 | 7.3 |
| WSW | 0 | 4 | 7 | 7 | 1 | 0 | 0 | 0 | 19 | 0.9 | 7.0 |
| W | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 12 | 0.5 | 5.3 |
| WNW | 0 | 8 | 32 | 2 | 0 | 0 | 0 | 0 | 42 | 1.9 | 4.8 |
| NW | 0 | 7 | 29 | 22 | 2 | 0 | 0 | 0 | 60 | 2.7 | 7.2 |
| NNW | 0 | 8 | 35 | 69 | 53 | 4 | 0 | 0 | 169 | 7.7 | 10.4 |
| TOTAL | 0 | 150 | 809 | 869 | 344 | 35 | 0 | 0 | 2207 | 100.0 | |
| % | 0.0 | 6.8 | 36.7 | 39.4 | 15.6 | 1.6 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 8.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 1

TOTAL NUMBER OF VALID HOURS= 2207

TOTAL NUMBER OF HOURS FOR PERIOD= 2208

METEOROLOGICAL CONDITIONS DURING BATCH RELEASES

First and Second Quarters

DATE: 8/ 9/91 13:56

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00
FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 100.0 | 16.3 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 100.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 16.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:57

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00
FROM 2/ 2/91 11:00 TO 2/ 2/91 1:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 100.0 | 16.8 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 100.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 16.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:57

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 5/ 3/91 11:00 TO 5/ 3/91 14:00

FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| .. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ..C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:57

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00
FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|---------|---------|---------|---------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | - 7.5 - | -12.5 - | -18.5 - | -24.5 - | -32.5 | | | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 100.0 | 8.4 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSW | 0 | 0 | 0 | 1 | 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 100.0 | |
| % | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 8.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:57

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00
FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

AVE SPEED FOR THIS TABLE= 0.0 MPH
HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0
TOTAL NUMBER OF CALMS= 0
TOTAL NUMBER OF INVALID HOURS= 0
TOTAL NUMBER OF VALID HOURS= 3
TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:57

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00
FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-----|--------------|
| | - 3.5 | - 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

AVE SPEED FOR THIS TABLE= 0.0 MPH
HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0
TOTAL NUMBER OF CALMS= 0
TOTAL NUMBER OF INVALID HOURS= 0
TOTAL NUMBER OF VALID HOURS= 3
TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:58

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -0-

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00

FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

Ave SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

DATE: 8/ 9/91 13:58

BATCH RELEASES
JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 5/ 3/91 13:00 TO 5/ 3/91 14:00

FROM 2/ 2/91 11:00 TO 2/ 2/91 11:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ -- 3.5 - | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|-------------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 33.3 | 8.4 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 33.3 | 16.3 |
| SSE | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 33.3 | 16.8 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 3 | 100.0 | |
| % | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 13.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 3

TOTAL NUMBER OF HOURS FOR PERIOD= 3

METEOROLOGICAL CONDITIONS DURING BATCH RELEASES

Third Quarter

DATE: 1/17/92 11:28

BATCH RELEASES
JOINT FREQUENCY TABLE-----
STABILITY CLASS -A-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 100.0 | 11.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

TOTAL 0 0 0 1 0 0 0 0 1 100.0
 % 0.0 0.0 0.0 100.0 0.0 0.0 0.0 0.0 100.0

AVE SPEED FOR THIS TABLE= 11.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:29

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 25.0 | 12.5 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 25.0 | 11.4 |
| S | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 50.0 | 10.7 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

| | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|-------|
| TOTAL | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 100.0 |
|-------|---|---|---|---|---|---|---|---|---|-------|

| | | | | | | | | | |
|---|-----|-----|-----|-------|-----|-----|-----|-----|-------|
| % | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|---|-----|-----|-----|-------|-----|-----|-----|-----|-------|

AVE SPEED FOR THIS TABLE= 11.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:29

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|--------------|
| | - 3.5 | - 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 66.7 | 9.6 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 33.3 | 12.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 100.0 | |
| % | C.O | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.4 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:29

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -D-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 14.3 | 8.2 |
| SE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 14.3 | 6.3 |
| SSE | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 42.9 | 9.4 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 28.6 | 6.3 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 7 | 100.0 | |
| % | 0.0 | 0.0 | 42.9 | 57.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 7.9 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:29

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 17:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4.3 | 4.9 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4.3 | 4.6 |
| SE | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 17.4 | 6.8 |
| SSE | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 43.5 | 6.5 |
| S | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 5 | 21.7 | 7.7 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 8.7 | 7.6 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

TOTAL 0 0 18 5 0 0 0 0 0 23 100.0
 % 0.0 0.0 78.3 21.7 0.0 0.0 0.0 0.0 0.0 100.0

AVE SPEED FOR THIS TABLE= 6.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:30

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8.3 | 3.1 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4.2 | 4.4 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 16.7 | 3.8 |
| SE | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 41.7 | 4.4 |
| SSE | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 6 | 25.0 | 5.7 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 1 | 0 | 0 | 0 | 0 | 1 | 4.2 | 10.2 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

TOTAL 0 4 10 1 0 0 0 0 24 100.0
 % 0.0 16.7 79.2 4.2 0.0 0.0 0.0 0.0 100.0

AVE SPEED FOR THIS TABLE= 4.8 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:30

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -G-

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

TOTAL 0 0 0 0 0 0 0 0 0 0.0
 % 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

DATE: 1/17/92 11:30

BATCH RELEASES
JOINT FREQUENCY TABLE-----
ALL CLASSES COMBINED

FROM 7/23/91 13:00 TO 7/24/91 8:00
 FROM 8/13/91 0:00 TO 8/13/91 2:00
 FROM 8/14/91 3:00 TO 8/14/91 3:00
 FROM 8/17/91 21:00 TO 8/17/91 21:00
 FROM 8/26/91 15:00 TO 8/26/91 15:00
 FROM 9/ 2/91 0:00 TO 9/ 2/91 0:00
 FROM 9/ 3/91 0:00 TO 9/ 3/91 0:00
 FROM 9/ 6/91 2:00 TO 9/ 6/91 2:00
 FROM 9/ 7/91 0:00 TO 9/ 7/91 0:00
 FROM 9/ 8/91 12:00 TO 9/ 8/91 12:00
 FROM 9/ 9/91 4:00 TO 9/ 9/91 4:00
 FROM 9/10/91 0:00 TO 9/10/91 0:00
 FROM 9/11/91 12:00 TO 9/11/91 12:00
 FROM 9/14/91 4:00 TO 9/14/91 13:00
 FROM 9/14/91 20:00 TO 9/15/91 6:00
 FROM 9/15/91 22:00 TO 9/16/91 2:00
 FROM 9/17/91 8:00 TO 9/17/91 8:00
 FROM 9/24/91 17:00 TO 9/24/91 17:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 - 7.5 - | 7.6 -12.5 - | 12.6 -18.5 - | 18.6 -24.5 - | 24.6 -32.5 - | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|----------------|----------------|-----------------|-----------------|-----------------|-------|-------|------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.6 | 4.9 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3.2 | 3.1 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.6 | 4.4 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 7 | 11.3 | 5.8 |
| SE | 0 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 15 | 24.2 | 5.2 |
| SSE | 0 | 0 | 16 | 7 | 0 | 0 | 0 | 0 | 23 | 37.1 | 7.3 |
| S | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 8 | 12.9 | 9.0 |
| SSW | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 6.5 | 7.0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 1 | 0 | 0 | 0 | 0 | 1 | 1.6 | 10.2 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

| | | | | | | | | | | |
|-------|---|---|----|----|---|---|---|---|----|-------|
| TOTAL | 0 | 4 | 40 | 18 | 0 | 0 | 0 | 0 | 62 | 100.0 |
|-------|---|---|----|----|---|---|---|---|----|-------|

| | | | | | | | | | |
|---|-----|-----|------|------|-----|-----|-----|-----|-------|
| % | 0.0 | 6.5 | 64.5 | 29.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|---|-----|-----|------|------|-----|-----|-----|-----|-------|

AVE SPEED FOR THIS TABLE= 6.6 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 62

TOTAL NUMBER OF HOURS FOR PERIOD= 62

METEOROLOGICAL CONDITIONS DURING BATCH RELEASES

Fourth Quarter

DATE: 1/17/92 11:39

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -A-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:39

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -B-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:39

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -C-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 - | 3.6 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|------------------|------------|--------------|---------------|---------------|---------------|-------|-------|-----|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:39

BATCH RELEASES
JOIN' FREQUENCY TABLE

STABILITY CLASS -D-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (M) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|------------|------|---------|---------|---------|---------|---------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | - 7.5 - | -12.5 - | -18.5 - | -24.5 - | -32.5 | | | | |
| N | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 17.4 | 9.1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 13.0 | 19.6 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 | 30.4 | 9.1 |
| SSE | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 13.0 | 10.3 |
| S | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 4.3 | 14.3 |
| SSW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 8.7 | 11.0 |
| SW | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 4.3 | 7.9 |
| 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 8.7 | 10.3 |
| TOTAL | 0 | 0 | 0 | 19 | 2 | 2 | 0 | 0 | 23 | 100.0 | |
| % | 0.0 | 0.0 | 0.0 | 82.6 | 8.7 | 8.7 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 11.1 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:40

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -E-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 25.0 | 12.1 |
| S | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 25.0 | 12.8 |
| SSW | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 25.0 | 10.3 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 25.0 | 5.5 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 4 | 100.0 | |
| % | 0.0 | 0.0 | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.2 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:40

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -F-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|-----|-------|-------|-------|-------|-------|-------|-------|--------------|
| | | - 3.5 - | 7.5 | -12.5 | -18.5 | -24.5 | -32.5 | | | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 100.0 | 4.3 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

TOTAL 0 0 1 0 0 0 0 0 0 1 100.0
% 0.0 0.0 100.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0

AVE SPEED FOR THIS TABLE= 4.3 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:40

BATCH RELEASES
JOINT FREQUENCY TABLE

STABILITY CLASS -0-

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 1:00 TO 11/19/91 17:00
FROM 11/27/91 21:00 TO 11/27/91 23:00
FROM 12/ 1/91 1:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ | 3.6 | 7.6 | 12.6 | 18.6 | 24.6 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|---------|-----|-------|-------|-------|-------|-------|-------|-----|--------------|
| | | - 3.5 - | 7.5 | -12.5 | -18.5 | -24.6 | -32.5 | | | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 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 | 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | |
| % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

AVE SPEED FOR THIS TABLE= 0.0 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

DATE: 1/17/92 11:40

BATCH RELEASES
JOINT FREQUENCY TABLE

ALL CLASSES COMBINED

FROM 10/15/91 0:00 TO 10/15/91 1:00
FROM 11/19/91 16:00 TO 11/19/91 17:00
FROM 11/27/91 23:00 TO 11/27/91 23:00
FROM 12/ 1/91 7:00 TO 12/ 1/91 12:00
FROM 12/ 8/91 16:00 TO 12/ 9/91 5:00
FROM 12/31/91 11:00 TO 12/31/91 13:00

WIND SPEED (MPH)

| DIR (FROM) | CALM | CALM+ - 3.5 | 3.6 - 7.5 | 7.6 -12.5 | 12.6 -18.5 | 18.6 -24.5 | 24.6 -32.5 | 32.6+ | TOTAL | % | AVE SPEED |
|---------------|------|----------------|--------------|--------------|---------------|---------------|---------------|-------|-------|-------|--------------|
| N | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 14.3 | 9.1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| E | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 10.7 | 19.6 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| SE | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 | 25.0 | 9.1 |
| SSE | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 14.3 | 10.8 |
| S | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 7.1 | 13.6 |
| SSW | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 10.7 | 10.8 |
| SW | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3.6 | 7.9 |
| 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 | 0 | 0 | 0 | 0.0 | 0.0 |
| NW | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 7.1 | 4.9 |
| NNW | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 7.1 | 10.3 |
| TOTAL | 0 | 0 | 2 | 21 | 3 | 2 | 0 | 0 | 28 | 100.0 | |
| % | 0.0 | 0.0 | 7.1 | 75.0 | 10.7 | 7.1 | 0.0 | 0.0 | 100.0 | | |

AVE SPEED FOR THIS TABLE= 10.7 MPH

HOURS IN ABOVE TABLE WITH VARIABLE DIRECTION= 0

TOTAL NUMBER OF CALMS= 0

TOTAL NUMBER OF INVALID HOURS= 0

TOTAL NUMBER OF VALID HOURS= 28

TOTAL NUMBER OF HOURS FOR PERIOD= 28

Appendix A: Results of the Protected Area

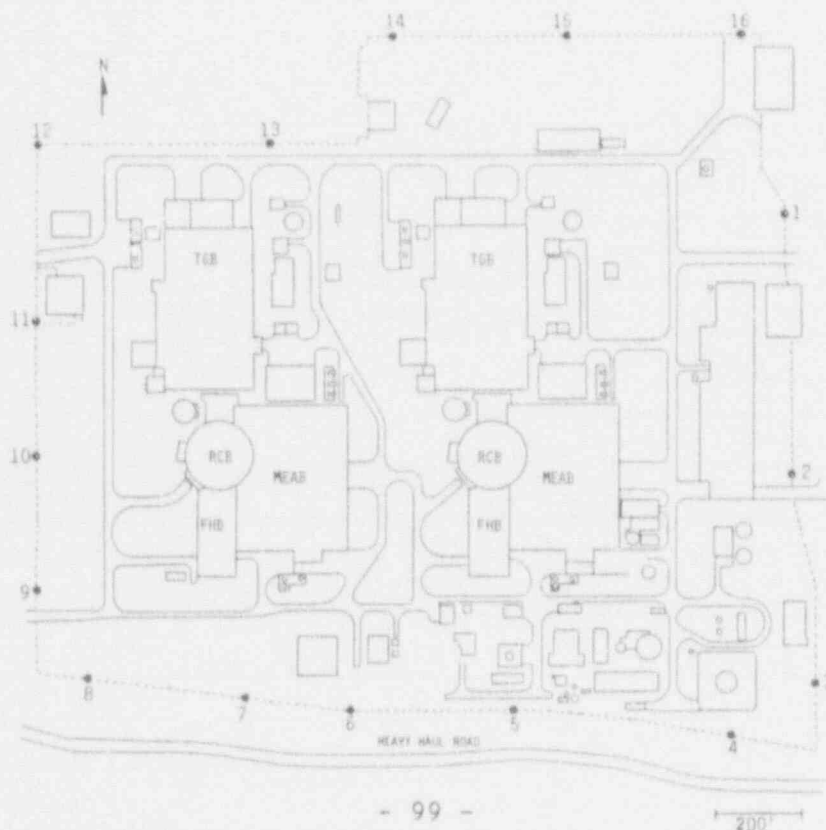
Direct Radiation Measurement Program

| 1991 STPEGS PROTECTED AREA PERIMETER TLD MONITORING STATIONS | | | | | |
|--|--|------------------------|------------------------|------------------------|---------------------------|
| Station Number | 1st qtr average (mrem) | 2nd qtr average (mrem) | 3rd qtr average (mrem) | 4th qtr average (mrem) | Average Quarter NET DOSE* |
| 1 | Perimeter TLD stations established during the third quarter. No data is available for these stations during the first and second quarters. | | 12.1 | 12.3 | ** |
| 2 | | | 12.4 | 12.9 | ** |
| 3 | | | 10.7 | 11.6 | ** |
| 4 | | | 11.3 | 12.3 | ** |
| 5 | | | 12.1 | 14.5 | ** |
| 6 | | | 15.2 | 21.7 | 3.05 |
| 7 | | | 12.7 | 21.0 | 1.45 |
| 8 | | | 11.5 | 13.7 | ** |
| 9 | | | 11.3 | 12.6 | ** |
| 10 | | | 11.1 | 12.1 | ** |
| 11 | | | 10.3 | 11.4 | ** |
| 12 | | | 10.8 | 11.4 | ** |
| 13 | | | 10.4 | 10.9 | ** |
| 14 | | | 10.3 | 11.0 | ** |
| 15 | | | 10.3 | 10.7 | ** |
| 16 | | | 10.3 | 11.2 | ** |

NOTES: *NET DOSE: the difference between the dose measured in 1991 and that measured in 1986 due to natural background;
[avg. std. qtr. dose] - 15.4 mrem background

**NET DOSE less than or equal to natural background.

Values normalized to 91 day quarter.



Appendix B: Offsite Dose Calculation Manual

Table B4-7 Individual Dose Factors

For Gaseous Effluents

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: H3

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.180E+01 | 4.180E+01 | 0.000E+00 | 4.180E+01 | 4.180E+01 | 4.180E+01 | 4.180E+01 | 0.000E+00 |
| TEEN | 4.780E+01 | 4.780E+01 | 0.000E+00 | 4.780E+01 | 4.780E+01 | 4.780E+01 | 4.780E+01 | 0.000E+00 |
| CHILD | 7.410E+01 | 7.410E+01 | 0.000E+00 | 7.410E+01 | 7.410E+01 | 7.410E+01 | 7.410E+01 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.040E+00 | 6.040E+00 | 0.000E+00 | 6.040E+00 | 6.040E+00 | 6.040E+00 | 6.040E+00 | 0.000E+00 |
| TEEN | 3.600E+00 | 3.600E+00 | 0.000E+00 | 3.600E+00 | 3.600E+00 | 3.600E+00 | 3.600E+00 | 0.000E+00 |
| CHILD | 4.350E+00 | 4.350E+00 | 0.000E+00 | 4.350E+00 | 4.350E+00 | 4.350E+00 | 4.350E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.420E+01 | 1.420E+01 | 0.000E+00 | 1.420E+01 | 1.420E+01 | 1.420E+01 | 1.420E+01 | 0.000E+00 |
| TEEN | 1.850E+01 | 1.850E+01 | 0.000E+00 | 1.850E+01 | 1.850E+01 | 1.850E+01 | 1.850E+01 | 0.000E+00 |
| CHILD | 2.930E+01 | 2.930E+01 | 0.000E+00 | 2.930E+01 | 2.930E+01 | 2.930E+01 | 2.930E+01 | 0.000E+00 |
| INFANT | 4.440E+01 | 4.440E+01 | 0.000E+00 | 4.440E+01 | 4.440E+01 | 4.440E+01 | 4.440E+01 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.900E+01 | 2.900E+01 | 0.000E+00 | 2.900E+01 | 2.900E+01 | 2.900E+01 | 2.900E+01 | 0.000E+00 |
| TEEN | 3.780E+01 | 3.780E+01 | 0.000E+00 | 3.780E+01 | 3.780E+01 | 3.780E+01 | 3.780E+01 | 0.000E+00 |
| CHILD | 5.970E+01 | 5.970E+01 | 0.000E+00 | 5.970E+01 | 5.970E+01 | 5.970E+01 | 5.970E+01 | 0.000E+00 |
| INFANT | 9.060E+01 | 9.060E+01 | 0.000E+00 | 9.060E+01 | 9.060E+01 | 9.060E+01 | 9.060E+01 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.010E+01 | 4.010E+01 | 0.000E+00 | 4.010E+01 | 4.010E+01 | 4.010E+01 | 4.010E+01 | 0.000E+00 |
| TEEN | 4.030E+01 | 4.030E+01 | 0.000E+00 | 4.030E+01 | 4.030E+01 | 4.030E+01 | 4.030E+01 | 0.000E+00 |
| CHILD | 3.570E+01 | 3.570E+01 | 0.000E+00 | 3.570E+01 | 3.570E+01 | 3.570E+01 | 3.570E+01 | 0.000E+00 |
| INFANT | 2.050E+01 | 2.050E+01 | 0.000E+00 | 2.050E+01 | 2.050E+01 | 2.050E+01 | 2.050E+01 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: C14

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.680E+03 | 5.680E+03 | 2.840E+04 | 5.680E+03 | 5.680E+03 | 5.680E+03 | 5.680E+03 | 0.000E+00 |
| TEEN | 9.220E+03 | 9.220E+03 | 4.610E+04 | 9.220E+03 | 9.220E+03 | 9.220E+03 | 9.220E+03 | 0.000E+00 |
| CHILD | 2.220E+04 | 2.220E+04 | 1.110E+05 | 2.220E+04 | 2.220E+04 | 2.220E+04 | 2.220E+04 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.110E+03 | 2.110E+03 | 1.060E+04 | 2.110E+03 | 2.110E+03 | 2.110E+03 | 2.110E+03 | 0.000E+00 |
| TEEN | 1.780E+03 | 1.780E+03 | 8.910E+03 | 1.780E+03 | 1.780E+03 | 1.780E+03 | 1.780E+03 | 0.000E+00 |
| CHILD | 3.350E+03 | 3.350E+03 | 1.680E+04 | 3.350E+03 | 3.350E+03 | 3.350E+03 | 3.350E+03 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.300E+03 | 2.300E+03 | 1.150E+04 | 2.300E+03 | 2.300E+03 | 2.300E+03 | 2.300E+03 | 0.000E+00 |
| TEEN | 4.250E+03 | 4.250E+03 | 2.120E+04 | 4.250E+03 | 4.250E+03 | 4.250E+03 | 4.250E+03 | 0.000E+00 |
| CHILD | 1.040E+04 | 1.040E+04 | 5.220E+04 | 1.040E+04 | 1.040E+04 | 1.040E+04 | 1.040E+04 | 0.000E+00 |
| INFANT | 2.180E+04 | 2.180E+04 | 1.020E+05 | 2.180E+04 | 2.180E+04 | 2.180E+04 | 2.180E+04 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.300E+03 | 2.300E+03 | 1.150E+04 | 2.300E+03 | 2.300E+03 | 2.300E+03 | 2.300E+03 | 0.000E+00 |
| TEEN | 4.250E+03 | 4.250E+03 | 2.120E+04 | 4.250E+03 | 4.250E+03 | 4.250E+03 | 4.250E+03 | 0.000E+00 |
| CHILD | 1.040E+04 | 1.040E+04 | 5.220E+04 | 1.040E+04 | 1.040E+04 | 1.040E+04 | 1.040E+04 | 0.000E+00 |
| INFANT | 2.180E+04 | 2.180E+04 | 1.020E+05 | 2.180E+04 | 2.180E+04 | 2.180E+04 | 2.180E+04 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.080E+02 | 1.080E+02 | 5.760E+02 | 1.080E+02 | 1.080E+02 | 1.080E+02 | 1.080E+02 | 0.000E+00 |
| TEEN | 1.540E+02 | 1.540E+02 | 8.240E+02 | 1.540E+02 | 1.540E+02 | 1.540E+02 | 1.540E+02 | 0.000E+00 |
| CHILD | 2.130E+02 | 2.130E+02 | 1.140E+03 | 2.130E+02 | 2.130E+02 | 2.130E+02 | 2.130E+02 | 0.000E+00 |
| INFANT | 1.680E+02 | 1.680E+02 | 8.390E+02 | 1.680E+02 | 1.680E+02 | 1.680E+02 | 1.680E+02 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: AR41

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 3.140E+02 |
| TEEN | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 3.140E+02 |
| CHILD | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 3.140E+02 |
| INFANT | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 3.140E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR83M

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 9.390E-02 | 4.750E-01 |
| TEEN | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.630E-03 | 1.680E-03 | 1.680E-03 | 9.390E-02 | 4.750E-01 |
| CHILD | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 9.390E-02 | 4.750E-01 |
| INFANT | 1.680E-03 | 1.680E-03 | 1.630E-03 | 1.680E-03 | 1.680E-03 | 1.680E-03 | 9.390E-02 | 4.750E-01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table E4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR85M

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.660E+01 | 7.660E+01 |
| TEEN | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.660E+01 | 7.660E+01 |
| CHILD | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.660E+01 | 7.660E+01 |
| INFANT | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.600E+01 | 2.660E+01 | 7.660E+01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR85

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 9.500E-01 | 4.290E+01 |
| TEEN | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 9.500E-01 | 4.290E+01 |
| CHILD | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 9.500E-01 | 4.290E+01 |
| INFANT | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 3.570E-01 | 9.500E-01 | 4.290E+01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR87

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.350E+02 | 4.600E+02 |
| TEEN | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.350E+02 | 4.600E+02 |
| CHILD | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.350E+02 | 4.600E+02 |
| INFANT | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.310E+02 | 1.350E+02 | 4.600E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR88

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.270E+02 | 4.500E+02 |
| TEEN | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.270E+02 | 4.500E+02 |
| CHILD | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.270E+02 | 4.500E+02 |
| INFANT | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.260E+02 | 3.270E+02 | 4.500E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR89

| PATHWAY: PLUME | | | | | | | | | |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.720E+02 | 7.460E+02 | |
| TEEN | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.720E+02 | 7.460E+02 | |
| CHILD | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.720E+02 | 7.460E+02 | |
| INFANT | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.680E+02 | 3.720E+02 | 7.460E+02 | |

| PATHWAY: GROUND | | | | | | | | | |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

| PATHWAY: VEGETABLE | | | | | | | | | |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

| PATHWAY: MEAT | | | | | | | | | |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

| PATHWAY: COW MILK | | | | | | | | | |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

| PATHWAY: GOAT MILK | | | | | | | | | |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

| PATHWAY: INHALATION | | | | | | | | | |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN | |
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: KR90

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.490E+02 | 6.330E+02 |
| TEEN | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.490E+02 | 6.330E+02 |
| CHILD | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.490E+02 | 6.330E+02 |
| INFANT | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.460E+02 | 3.490E+02 | 6.330E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: XE131M

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.380E+00 | 1.890E+01 |
| TEEN | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.380E+00 | 1.890E+01 |
| CHILD | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.380E+00 | 1.890E+01 |
| INFANT | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.030E+00 | 2.380E+00 | 1.890E+01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: ^{133}Xe

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 6.030E+00 | 3.960E+01 |
| TEEN | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 6.030E+00 | 3.960E+01 |
| CHILD | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 6.030E+00 | 3.960E+01 |
| INFANT | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 5.570E+00 | 6.030E+00 | 3.960E+01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: XE133

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.860E+00 | 1.840E+01 |
| TEEN | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.860E+00 | 1.840E+01 |
| CHILD | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.860E+00 | 1.840E+01 |
| INFANT | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.520E+00 | 6.860E+00 | 1.840E+01 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: XE135M

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.950E+01 | 1.050E+02 |
| TEEN | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.950E+01 | 1.050E+02 |
| CHILD | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.950E+01 | 1.050E+02 |
| INFANT | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.920E+01 | 6.950E+01 | 1.050E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: XE135

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.090E+01 | 1.060E+02 |
| TEEN | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.090E+01 | 1.060E+02 |
| CHILD | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.090E+01 | 1.060E+02 |
| INFANT | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.020E+01 | 4.090E+01 | 1.060E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: Xe137

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.540E+01 | 4.240E+02 |
| TEEN | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.540E+01 | 4.240E+02 |
| CHILD | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.540E+01 | 4.240E+02 |
| INFANT | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.150E+01 | 3.540E+01 | 4.240E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE, ^{135}Xe

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.980E+02 | 3.580E+02 |
| TEEN | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.980E+02 | 3.580E+02 |
| CHILD | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.980E+02 | 3.580E+02 |
| INFANT | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.960E+02 | 1.980E+02 | 3.580E+02 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CR51

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.690E+05 |
| TEEN | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.690E+05 |
| CHILD | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.690E+05 |
| INFANT | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.430E+05 | 1.690E+05 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.390E+03 | 3.500E+05 | 0.000E+00 | 0.000E+00 | 3.060E+02 | 8.310E+02 | 1.840E+03 | 0.000E+00 |
| TEEN | 1.850E+03 | 3.100E+05 | 0.000E+00 | 0.000E+00 | 4.050E+02 | 1.030E+03 | 2.640E+03 | 0.000E+00 |
| CHILD | 3.510E+03 | 1.860E+05 | 0.000E+00 | 0.000E+00 | 5.320E+02 | 1.950E+03 | 3.560E+03 | 0.000E+00 |
| INFANT | 3.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.910E+02 | 4.810E+04 | 0.000E+00 | 0.000E+00 | 4.210E+01 | 1.140E+02 | 2.540E+02 | 0.000E+00 |
| TEEN | 1.530E+02 | 2.570E+04 | 0.000E+00 | 0.000E+00 | 3.350E+01 | 8.490E+01 | 2.180E+02 | 0.000E+00 |
| CHILD | 2.380E+02 | 1.260E+04 | 0.000E+00 | 0.000E+00 | 3.610E+01 | 1.320E+02 | 2.420E+02 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 7.77E+02 | 1.950E+05 | 0.000E+00 | 0.000E+00 | 1.700E+02 | 4.620E+02 | 1.030E+03 | 0.000E+00 |
| TEEN | 4.330E+03 | 2.270E+05 | 0.000E+00 | 0.000E+00 | 2.960E+02 | 7.510E+02 | 1.930E+03 | 0.000E+00 |
| CHILD | 2.760E+03 | 1.460E+05 | 0.000E+00 | 0.000E+00 | 4.180E+02 | 1.530E+03 | 2.790E+03 | 0.000E+00 |
| INFANT | 4.370E+03 | 1.270E+05 | 0.000E+00 | 0.000E+00 | 6.220E+02 | 2.850E+03 | 5.540E+03 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 9.280E+01 | 2.330E+04 | 0.000E+00 | 0.000E+00 | 2.050E+01 | 5.550E+01 | 1.230E+02 | 0.000E+00 |
| TEEN | 1.620E+02 | 2.720E+04 | 0.000E+00 | 0.000E+00 | 3.550E+01 | 9.010E+01 | 2.310E+02 | 0.000E+00 |
| CHILD | 3.310E+02 | 1.750E+04 | 0.000E+00 | 0.000E+00 | 5.020E+01 | 1.840E+02 | 3.350E+02 | 0.000E+00 |
| INFANT | 5.240E+02 | 1.530E+04 | 0.000E+00 | 0.000E+00 | 7.470E+01 | 3.420E+02 | 6.650E+02 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.170E+00 | 1.050E+02 | 0.000E+00 | 0.000E+00 | 7.230E-01 | 1.890E+00 | 4.560E+02 | 0.000E+00 |
| TEEN | 4.290E+00 | 9.510E+01 | 0.000E+00 | 0.000E+00 | 9.740E-01 | 2.380E+00 | 6.640E+02 | 0.000E+00 |
| CHILD | 4.890E+00 | 3.440E+01 | 0.000E+00 | 0.000E+00 | 7.710E-01 | 2.710E+00 | 5.380E+02 | 0.000E+00 |
| INFANT | 2.840E+00 | 1.130E+01 | 0.000E+00 | 0.000E+00 | 4.190E-01 | 1.820E+00 | 4.070E+02 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: MN54

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.960E+07 |
| TEEN | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.960E+07 |
| CHILD | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.960E+07 |
| INFANT | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.230E+07 | 4.960E+07 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.770E+06 | 2.840E+07 | 0.000E+00 | 9.270E+06 | 2.760E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.670E+06 | 2.760E+07 | 0.000E+00 | 1.350E+07 | 4.010E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.240E+06 | 1.650E+07 | 0.000E+00 | 1.970E+07 | 5.520E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.230E+04 | 6.790E+05 | 0.000E+00 | 2.220E+05 | 6.600E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 3.350E+04 | 3.470E+05 | 0.000E+00 | 1.690E+05 | 5.040E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.150E+04 | 1.620E+05 | 0.000E+00 | 1.930E+05 | 5.420E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.880E+04 | 6.220E+05 | 0.000E+00 | 2.030E+05 | 6.050E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 6.710E+04 | 6.940E+05 | 0.000E+00 | 3.380E+05 | 1.010E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.350E+05 | 4.250E+05 | 0.000E+00 | 5.060E+05 | 1.420E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.130E+05 | 3.460E+05 | 0.000E+00 | 9.420E+05 | 2.090E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.650E+03 | 7.470E+04 | 0.000E+00 | 2.440E+04 | 7.250E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.050E+03 | 8.330E+04 | 0.000E+00 | 4.060E+04 | 1.210E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.620E+04 | 5.100E+04 | 0.000E+00 | 6.080E+04 | 1.700E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.560E+04 | 4.150E+04 | 0.000E+00 | 1.130E+05 | 2.500E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.000E+01 | 2.450E+03 | 0.000E+00 | 1.260E+03 | 3.120E+02 | 0.000E+00 | 4.440E+04 | 0.000E+00 |
| TEEN | 2.660E+02 | 2.120E+03 | 0.000E+00 | 1.620E+03 | 4.030E+02 | 0.000E+00 | 6.290E+04 | 0.000E+00 |
| CHILD | 3.010E+02 | 7.260E+02 | 0.000E+00 | 1.360E+03 | 3.180E+02 | 0.000E+00 | 5.000E+04 | 0.000E+00 |
| INFANT | 1.580E+02 | 2.240E+02 | 0.000E+00 | 8.030E+02 | 1.580E+02 | 0.000E+00 | 3.170E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: PES9

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 9.800E+06 |
| TEEN | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 9.800E+06 |
| CHILD | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 9.800E+06 |
| INFANT | 8.340E+06 | 8.310E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 8.340E+06 | 9.800E+06 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.360E+06 | 2.920E+07 | 3.730E+06 | 8.760E+06 | 0.000E+00 | 0.000E+00 | 2.450E+06 | 0.000E+00 |
| TEEN | 4.780E+06 | 2.930E+07 | 5.300E+06 | 1.240E+07 | 0.000E+00 | 0.000E+00 | 3.900E+06 | 0.000E+00 |
| CHILD | 9.470E+06 | 1.980E+07 | 1.170E+07 | 1.900E+07 | 0.000E+00 | 0.000E+00 | 5.510E+06 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.220E+06 | 5.410E+07 | 6.900E+06 | 1.620E+07 | 0.000E+00 | 0.000E+00 | 4.530E+06 | 0.000E+00 |
| TEEN | 4.970E+06 | 3.040E+07 | 5.510E+06 | 1.290E+07 | 0.000E+00 | 0.000E+00 | 4.060E+06 | 0.000E+00 |
| CHILD | 7.880E+06 | 1.650E+07 | 9.780E+06 | 1.580E+07 | 0.000E+00 | 0.000E+00 | 4.590E+06 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.950E+05 | 6.040E+06 | 7.710E+05 | 1.810E+06 | 0.000E+00 | 0.000E+00 | 5.070E+05 | 0.000E+00 |
| TEEN | 1.210E+06 | 7.430E+06 | 1.350E+06 | 3.140E+06 | 0.000E+00 | 0.000E+00 | 9.910E+05 | 0.000E+00 |
| CHILD | 2.520E+06 | 5.260E+06 | 3.120E+06 | 5.050E+06 | 0.000E+00 | 0.000E+00 | 1.460E+06 | 0.000E+00 |
| INFANT | 4.010E+06 | 4.860E+06 | 5.830E+06 | 1.020E+07 | 0.000E+00 | 0.000E+00 | 3.010E+06 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 9.040E+03 | 7.860E+04 | 1.000E+04 | 2.360E+04 | 0.000E+00 | 0.000E+00 | 6.590E+03 | 0.000E+00 |
| TEEN | 1.580E+04 | 9.660E+04 | 1.750E+04 | 4.090E+04 | 0.000E+00 | 0.000E+00 | 1.290E+04 | 0.000E+00 |
| CHILD | 3.270E+04 | 6.840E+04 | 4.060E+04 | 6.570E+04 | 0.000E+00 | 0.000E+00 | 1.900E+04 | 0.000E+00 |
| INFANT | 5.220E+04 | 6.320E+04 | 7.580E+04 | 1.320E+05 | 0.000E+00 | 0.000E+00 | 3.910E+04 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.350E+02 | 5.960E+03 | 3.730E+02 | 6.800E+02 | 0.000E+00 | 0.000E+00 | 3.220E+04 | 0.000E+00 |
| TEEN | 4.540E+02 | 5.660E+03 | 5.050E+02 | 1.170E+03 | 0.000E+00 | 0.000E+00 | 4.840E+04 | 0.000E+00 |
| CHILD | 5.290E+02 | 2.240E+03 | 6.560E+02 | 1.060E+03 | 0.000E+00 | 0.000E+00 | 4.020E+04 | 0.000E+00 |
| INFANT | 3.000E+02 | 7.860E+02 | 4.300E+02 | 7.460E+02 | 0.000E+00 | 0.000E+00 | 3.220E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: C058

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.360E+07 |
| TEEN | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.360E+07 |
| CHILD | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.360E+07 |
| INFANT | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.160E+07 | 1.360E+07 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.020E+06 | 1.830E+07 | 0.000E+00 | 9.020E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.950E+06 | 1.760E+07 | 0.000E+00 | 1.280E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.780E+06 | 1.100E+07 | 0.000E+00 | 1.890E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.030E+06 | 9.300E+06 | 0.000E+00 | 4.590E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.160E+05 | 4.880E+06 | 0.000E+00 | 3.540E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.270E+06 | 2.410E+06 | 0.000E+00 | 4.130E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.660E+05 | 2.410E+06 | 0.000E+00 | 1.170E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 4.610E+05 | 2.750E+06 | 0.000E+00 | 2.000E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 9.350E+05 | 1.780E+06 | 0.000E+00 | 3.050E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 1.520E+06 | 1.520E+06 | 0.000E+00 | 6.110E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.190E+04 | 2.890E+05 | 0.000E+00 | 1.420E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 5.530E+04 | 3.310E+05 | 0.000E+00 | 2.400E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.120E+05 | 2.140E+05 | 0.000E+00 | 3.660E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 1.830E+05 | 1.830E+05 | 0.000E+00 | 7.330E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.570E+01 | 3.370E+03 | 0.000E+00 | 5.020E+01 | 0.000E+00 | 0.000E+00 | 2.940E+04 | 0.000E+00 |
| TEEN | 8.800E+01 | 3.020E+03 | 0.000E+00 | 6.570E+01 | 0.000E+00 | 0.000E+00 | 4.260E+04 | 0.000E+00 |
| CHILD | 1.000E+02 | 1.090E+03 | 0.000E+00 | 5.670E+01 | 0.000E+00 | 0.000E+00 | 3.510E+04 | 0.000E+00 |
| INFANT | 5.770E+01 | 3.530E+02 | 0.000E+00 | 3.870E+01 | 0.000E+00 | 0.000E+00 | 2.460E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: C060

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 7.740E+08 |
| TEEN | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 7.740E+08 |
| CHILD | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 7.740E+08 |
| INFANT | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 6.580E+08 | 7.740E+08 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.110E+07 | 9.420E+07 | 0.000E+00 | 5.020E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.890E+07 | 9.720E+07 | 0.000E+00 | 7.460E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.350E+07 | 6.290E+07 | 0.000E+00 | 1.140E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.980E+06 | 3.390E+07 | 0.000E+00 | 1.800E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 3.150E+06 | 1.820E+07 | 0.000E+00 | 1.400E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 4.900E+06 | 9.200E+06 | 0.000E+00 | 1.660E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 8.680E+05 | 7.390E+06 | 0.000E+00 | 3.930E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.500E+06 | 8.680E+06 | 0.000E+00 | 6.660E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.050E+06 | 5.730E+06 | 0.000E+00 | 1.030E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 4.990E+06 | 5.030E+06 | 0.000E+00 | 2.110E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.040E+05 | 8.870E+05 | 0.000E+00 | 4.720E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.800E+05 | 1.040E+06 | 0.000E+00 | 8.000E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.660E+05 | 6.880E+05 | 0.000E+00 | 1.240E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 5.990E+05 | 6.030E+05 | 0.000E+00 | 2.540E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.690E+02 | 9.030E+03 | 0.000E+00 | 3.650E+02 | 0.000E+00 | 0.000E+00 | 1.890E+05 | 0.000E+00 |
| TEEN | 6.290E+02 | 8.220E+03 | 0.000E+00 | 4.790E+02 | 0.000E+00 | 0.000E+00 | 2.760E+05 | 0.000E+00 |
| CHILD | 7.180E+02 | 3.050E+03 | 0.000E+00 | 4.160E+02 | 0.000E+00 | 0.000E+00 | 2.240E+05 | 0.000E+00 |
| INFANT | 3.730E+02 | 1.010E+03 | 0.000E+00 | 2.540E+02 | 0.000E+00 | 0.000E+00 | 1.430E+05 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: Zn65

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.630E+07 |
| TEEN | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.630E+07 |
| CHILD | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.630E+07 |
| INFANT | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.290E+07 | 2.630E+07 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.740E+07 | 2.430E+07 | 1.210E+07 | 3.860E+07 | 2.580E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.620E+07 | 2.380E+07 | 1.620E+07 | 5.630E+07 | 3.600E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.150E+07 | 1.450E+07 | 3.110E+07 | 6.280E+07 | 5.220E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.390E+07 | 1.940E+07 | 9.700E+06 | 3.090E+07 | 2.060E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.100E+07 | 1.000E+07 | 6.820E+06 | 2.370E+07 | 1.520E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.700E+07 | 4.790E+06 | 1.020E+07 | 2.730E+07 | 1.720E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.380E+07 | 7.490E+07 | 3.740E+07 | 1.190E+08 | 7.960E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 9.300E+07 | 8.440E+07 | 5.740E+07 | 1.990E+08 | 1.280E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.870E+08 | 5.270E+07 | 1.130E+08 | 3.750E+08 | 1.890E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.390E+08 | 4.380E+08 | 1.510E+08 | 5.190E+08 | 2.520E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.450E+06 | 8.990E+06 | 4.490E+06 | 1.430E+07 | 9.550E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.120E+07 | 1.010E+07 | 6.890E+06 | 2.390E+07 | 1.530E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.240E+07 | 6.330E+06 | 1.350E+07 | 3.600E+07 | 2.270E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.870E+07 | 5.260E+07 | 1.620E+07 | 6.230E+07 | 3.020E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.480E+03 | 1.690E+03 | 1.030E+03 | 3.270E+03 | 2.190E+03 | 0.000E+00 | 2.740E+04 | 0.000E+00 |
| TEEN | 1.980E+03 | 1.480E+03 | 1.220E+03 | 4.240E+03 | 2.740E+03 | 0.000E+00 | 3.930E+04 | 0.000E+00 |
| CHILD | 2.230E+03 | 5.170E+02 | 1.350E+03 | 3.590E+03 | 2.260E+03 | 0.000E+00 | 3.160E+04 | 0.000E+00 |
| INFANT | 9.850E+02 | 1.630E+03 | 6.120E+02 | 1.980E+03 | 1.030E+03 | 0.000E+00 | 2.050E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: SR89

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 7.680E+02 |
| TEEN | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 7.680E+02 |
| CHILD | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 7.680E+02 |
| INFANT | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 6.620E+02 | 7.680E+02 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 8.770E+06 | 4.900E+07 | 3.060E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.330E+07 | 5.530E+07 | 4.640E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.150E+07 | 4.270E+07 | 1.100E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.410E+05 | 1.340E+06 | 8.380E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.030E+05 | 8.430E+05 | 7.080E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.820E+05 | 5.180E+05 | 1.340E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.160E+06 | 6.470E+06 | 4.030E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.130E+06 | 8.850E+06 | 7.430E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.250E+06 | 7.120E+06 | 1.840E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 1.000E+07 | 7.170E+06 | 3.500E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.430E+06 | 1.360E+07 | 8.470E+07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 4.470E+06 | 1.860E+07 | 1.560E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.100E+07 | 1.500E+07 | 3.860E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.110E+07 | 1.510E+07 | 7.340E+08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.760E+02 | 1.110E+04 | 9.640E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.440E+04 | 0.000E+00 |
| TEEN | 3.960E+02 | 1.180E+04 | 1.380E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.660E+04 | 0.000E+00 |
| CHILD | 5.470E+02 | 5.300E+03 | 1.900E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.840E+04 | 0.000E+00 |
| INFANT | 3.620E+02 | 2.030E+03 | 1.260E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.440E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: SR90

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.280E+10 | 1.510E+09 | 5.230E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.600E+10 | 1.820E+09 | 6.490E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.730E+10 | 1.450E+09 | 1.080E+11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.810E+08 | 4.470E+07 | 1.550E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.480E+08 | 2.820E+07 | 1.000E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.290E+08 | 1.750E+07 | 1.300E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.430E+09 | 1.690E+08 | 5.840E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.040E+09 | 2.320E+08 | 8.250E+09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 3.530E+09 | 1.880E+08 | 1.390E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 3.860E+09 | 1.890E+08 | 1.520E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.010E+09 | 3.540E+08 | 1.230E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 4.280E+09 | 4.860E+08 | 1.730E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 7.420E+09 | 3.940E+08 | 2.930E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 8.110E+09 | 3.980E+08 | 3.190E+10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.930E+05 | 2.290E+04 | 3.140E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.040E+05 | 0.000E+00 |
| TEEN | 2.120E+05 | 2.420E+04 | 3.420E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.220E+05 | 0.000E+00 |
| CHILD | 2.040E+05 | 1.090E+04 | 3.200E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.680E+05 | 0.000E+00 |
| INFANT | 8.210E+04 | 4.150E+03 | 1.300E+06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.560E+05 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: ZR95

PATHWAY: FLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 8.670E+06 |
| TEEN | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 8.670E+06 |
| CHILD | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 8.670E+06 |
| INFANT | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 7.480E+06 | 8.670E+06 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 7.480E+03 | 3.500E+07 | 3.450E+04 | 1.110E+04 | 1.730E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.100E+04 | 3.680E+07 | 5.050E+04 | 1.590E+04 | 2.340E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.210E+04 | 2.600E+07 | 1.130E+05 | 2.490E+04 | 3.560E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.030E+04 | 4.820E+07 | 4.740E+04 | 1.520E+04 | 2.390E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.240E+03 | 2.770E+07 | 3.800E+04 | 1.200E+04 | 1.760E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.320E+04 | 1.550E+07 | 6.740E+04 | 1.480E+04 | 2.120E+04 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.180E+00 | 2.430E+04 | 2.390E+01 | 7.660E+00 | 1.200E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 9.060E+00 | 3.040E+04 | 4.180E+01 | 1.320E+01 | 1.940E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.900E+01 | 2.220E+04 | 9.700E+01 | 2.130E+01 | 3.050E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.980E+01 | 2.090E+04 | 1.720E+02 | 4.200E+01 | 4.520E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.220E-01 | 2.910E+03 | 2.870E+00 | 9.190E-01 | 1.440E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.090E+00 | 3.650E+03 | 5.010E+00 | 1.580E+00 | 2.320E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.280E+00 | 2.670E+03 | 1.160E+01 | 2.560E+00 | 3.660E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 3.570E+00 | 2.510E+03 | 2.070E+01 | 5.040E+00 | 5.430E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 7.380E+02 | 4.770E+03 | 3.400E+03 | 1.090E+03 | 1.720E+03 | 0.000E+00 | 5.600E+04 | 0.000E+00 |
| TEEN | 9.990E+02 | 4.720E+03 | 4.620E+03 | 1.450E+03 | 2.140E+03 | 0.000E+00 | 8.520E+04 | 0.000E+00 |
| CHILD | 1.170E+03 | 1.940E+03 | 6.020E+03 | 1.330E+03 | 1.890E+03 | 0.000E+00 | 7.070E+04 | 0.000E+00 |
| INFANT | 6.440E+02 | 6.880E+02 | 3.660E+03 | 8.830E+02 | 9.850E+02 | 0.000E+00 | 5.550E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: SR124

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CS134

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.440E+08 |
| TEEN | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.440E+08 |
| CHILD | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.440E+08 |
| INFANT | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.090E+08 | 2.440E+08 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.730E+08 | 5.830E+06 | 1.400E+08 | 3.330E+08 | 1.080E+08 | 0.000E+00 | 3.580E+07 | 0.000E+00 |
| TEEN | 2.330E+08 | 6.240E+06 | 2.130E+08 | 5.020E+08 | 1.590E+08 | 0.000E+00 | 6.090E+07 | 0.000E+00 |
| CHILD | 1.670E+08 | 4.260E+06 | 4.810E+08 | 7.900E+08 | 2.450E+08 | 0.000E+00 | 8.790E+07 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.080E+07 | 6.590E+05 | 1.580E+07 | 3.770E+07 | 1.220E+07 | 0.000E+00 | 4.050E+06 | 0.000E+00 |
| TEEN | 1.370E+07 | 3.680E+05 | 1.260E+07 | 2.960E+07 | 9.410E+06 | 0.000E+00 | 3.590E+06 | 0.000E+00 |
| CHILD | 7.680E+06 | 1.960E+05 | 2.220E+07 | 3.640E+07 | 1.130E+07 | 0.000E+00 | 4.050E+06 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.650E+08 | 5.670E+06 | 1.360E+08 | 3.240E+08 | 1.050E+08 | 0.000E+00 | 3.480E+07 | 0.000E+00 |
| TEEN | 2.580E+08 | 6.920E+06 | 2.360E+08 | 5.560E+08 | 1.770E+08 | 0.000E+00 | 6.750E+07 | 0.000E+00 |
| CHILD | 1.890E+08 | 4.820E+06 | 5.450E+08 | 8.940E+08 | 2.770E+08 | 0.000E+00 | 9.940E+07 | 0.000E+00 |
| INFANT | 1.650E+08 | 4.450E+06 | 8.780E+08 | 1.640E+09 | 4.210E+08 | 0.000E+00 | 1.730E+08 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 7.940E+08 | 1.703E+07 | 4.080E+08 | 9.710E+08 | 3.140E+08 | 0.000E+00 | 1.040E+08 | 0.000E+00 |
| TEEN | 7.740E+08 | 2.070E+07 | 7.090E+08 | 1.670E+09 | 5.300E+08 | 0.000E+00 | 2.020E+08 | 0.000E+00 |
| CHILD | 5.660E+08 | 1.450E+07 | 1.630E+09 | 2.680E+09 | 8.310E+08 | 0.000E+00 | 2.980E+08 | 0.000E+00 |
| INFANT | 4.960E+08 | 1.330E+07 | 2.630E+09 | 4.910E+09 | 1.260E+09 | 0.000E+00 | 5.180E+08 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.310E+04 | 3.300E+02 | 1.180E+04 | 2.690E+04 | 9.100E+03 | 0.000E+00 | 3.090E+03 | 0.000E+00 |
| TEEN | 1.740E+04 | 3.090E+02 | 1.590E+04 | 3.580E+04 | 1.190E+04 | 0.000E+00 | 4.640E+03 | 0.000E+00 |
| CHILD | 7.120E+03 | 1.220E+02 | 2.060E+04 | 3.210E+04 | 1.050E+04 | 0.000E+00 | 3.840E+03 | 0.000E+00 |
| INFANT | 2.360E+03 | 4.230E+01 | 1.260E+04 | 2.230E+04 | 6.040E+03 | 0.000E+00 | 2.530E+03 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CS136

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 5.210E+06 |
| TEEN | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 5.210E+06 |
| CHILD | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 5.210E+06 |
| INFANT | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 4.600E+06 | 5.210E+06 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.660E+06 | 5.770E+05 | 1.290E+06 | 5.080E+06 | 2.830E+06 | 0.000E+00 | 3.880E+05 | 0.000E+00 |
| TEEN | 3.480E+06 | 4.170E+05 | 1.320E+06 | 5.190E+06 | 2.820E+06 | 0.000E+00 | 4.450E+05 | 0.000E+00 |
| CHILD | 4.410E+06 | 2.400E+05 | 2.480E+06 | 6.820E+06 | 3.630E+06 | 0.000E+00 | 5.420E+05 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 9.890E+05 | 1.560E+05 | 3.480E+05 | 1.370E+06 | 7.640E+05 | 0.000E+00 | 1.050E+05 | 0.000E+00 |
| TEEN | 7.170E+05 | 8.590E+04 | 2.710E+05 | 1.070E+06 | 5.810E+05 | 0.000E+00 | 9.160E+04 | 0.000E+00 |
| CHILD | 8.330E+05 | 4.520E+04 | 4.680E+05 | 1.290E+06 | 6.850E+05 | 0.000E+00 | 1.020E+05 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.160E+07 | 3.410E+06 | 7.610E+06 | 3.000E+07 | 1.670E+07 | 0.000E+00 | 2.290E+06 | 0.000E+00 |
| TEEN | 3.420E+07 | 4.100E+06 | 1.300E+07 | 5.100E+07 | 2.770E+07 | 0.000E+00 | 4.370E+06 | 0.000E+00 |
| CHILD | 5.200E+07 | 2.820E+06 | 2.920E+07 | 8.040E+07 | 4.280E+07 | 0.000E+00 | 6.380E+06 | 0.000E+00 |
| INFANT | 6.270E+07 | 2.550E+06 | 5.710E+07 | 1.680E+08 | 6.690E+07 | 0.000E+00 | 1.370E+07 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.490E+07 | 1.020E+07 | 2.280E+07 | 9.010E+07 | 5.010E+07 | 0.000E+00 | 6.870E+06 | 0.000E+00 |
| TEEN | 1.030E+08 | 1.230E+07 | 3.890E+07 | 1.530E+08 | 8.320E+07 | 0.000E+00 | 1.310E+07 | 0.000E+00 |
| CHILD | 1.560E+08 | 8.470E+06 | 8.770E+07 | 2.410E+08 | 1.280E+08 | 0.000E+00 | 1.910E+07 | 0.000E+00 |
| INFANT | 1.880E+08 | 7.650E+06 | 1.710E+08 | 5.040E+08 | 2.010E+08 | 0.000E+00 | 4.110E+07 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.500E+03 | 3.700E+02 | 1.240E+03 | 4.640E+03 | 2.710E+03 | 0.000E+00 | 3.800E+02 | 0.000E+00 |
| TEEN | 4.340E+03 | 3.450E+02 | 1.630E+03 | 6.140E+03 | 3.500E+03 | 0.000E+00 | 5.630E+02 | 0.000E+00 |
| CHILD | 3.680E+03 | 1.330E+02 | 2.060E+03 | 5.420E+03 | 3.030E+03 | 0.000E+00 | 4.610E+02 | 0.000E+00 |
| INFANT | 1.680E+03 | 4.530E+01 | 1.530E+03 | 4.260E+03 | 1.790E+03 | 0.000E+00 | 3.730E+02 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CS137

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.670E+08 |
| TEEN | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.670E+08 |
| CHILD | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.670E+08 |
| INFANT | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.150E+08 | 3.670E+08 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.960E+08 | 5.790E+06 | 2.190E+08 | 2.990E+08 | 1.020E+08 | 0.000E+00 | 3.380E+07 | 0.000E+00 |
| TEEN | 1.620E+08 | 6.600E+06 | 3.490E+08 | 4.640E+08 | 1.580E+08 | 0.000E+00 | 6.130E+07 | 0.000E+00 |
| CHILD | 1.160E+08 | 4.930E+06 | 8.230E+08 | 7.860E+08 | 2.570E+08 | 0.000E+00 | 9.240E+07 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.990E+07 | 5.880E+05 | 2.220E+07 | 3.040E+07 | 1.030E+07 | 0.000E+00 | 3.430E+06 | 0.000E+00 |
| TEEN | 8.540E+06 | 3.490E+05 | 1.840E+07 | 2.450E+07 | 8.350E+06 | 0.000E+00 | 3.240E+06 | 0.000E+00 |
| CHILD | 4.800E+06 | 2.030E+05 | 3.390E+07 | 3.250E+07 | 1.060E+07 | 0.000E+00 | 3.810E+06 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.680E+08 | 4.970E+06 | 1.880E+08 | 2.570E+08 | 8.720E+07 | 0.000E+00 | 2.900E+07 | 0.000E+00 |
| TEEN | 1.580E+08 | 6.450E+06 | 3.410E+08 | 4.530E+08 | 1.540E+08 | 0.000E+00 | 5.990E+07 | 0.000E+00 |
| CHILD | 1.160E+08 | 4.920E+06 | 8.210E+08 | 7.860E+08 | 2.560E+08 | 0.000E+00 | 9.210E+07 | 0.000E+00 |
| INFANT | 1.090E+08 | 4.790E+06 | 1.310E+09 | 1.530E+09 | 4.120E+08 | 0.000E+00 | 1.670E+08 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.050E+08 | 1.490E+07 | 5.640E+08 | 7.710E+08 | 2.620E+08 | 0.000E+00 | 8.700E+07 | 0.000E+00 |
| TEEN | 4.740E+08 | 1.930E+07 | 1.020E+09 | 1.360E+09 | 4.630E+08 | 0.000E+00 | 1.800E+08 | 0.000E+00 |
| CHILD | 3.480E+08 | 1.480E+07 | 2.460E+09 | 2.360E+09 | 7.680E+08 | 0.000E+00 | 2.760E+08 | 0.000E+00 |
| INFANT | 3.260E+08 | 1.440E+07 | 3.930E+09 | 4.600E+09 | 1.230E+09 | 0.000E+00 | 5.000E+08 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.360E+04 | 2.660E+02 | 1.520E+04 | 1.970E+04 | 7.050E+03 | 0.000E+00 | 2.380E+03 | 0.000E+00 |
| TEEN | 9.870E+03 | 2.690E+02 | 2.130E+04 | 2.690E+04 | 9.640E+03 | 0.000E+00 | 3.830E+03 | 0.000E+00 |
| CHILD | 4.070E+03 | 1.150E+02 | 2.870E+04 | 2.620E+04 | 8.950E+03 | 0.000E+00 | 3.300E+03 | 0.000E+00 |
| INFANT | 1.440E+03 | 4.230E+01 | 1.740E+04 | 1.940E+04 | 5.460E+03 | 0.000E+00 | 2.260E+03 | 0.000E+00 |

Table BA-7 Contd - 2d

NDIV/DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: BA140

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 7.160E+05 |
| TEEN | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 7.160E+05 |
| CHILD | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 7.160E+05 |
| INFANT | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 6.270E+05 | 7.160E+05 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.540E+05 | 7.990E+05 | 3.880E+06 | 4.870E+03 | 1.660E+03 | 0.000E+00 | 2.790E+03 | 0.000E+00 |
| TEEN | 2.690E+05 | 6.430E+06 | 4.170E+06 | 5.110E+03 | 1.730E+03 | 0.000E+00 | 3.430E+03 | 0.000E+00 |
| CHILD | 4.870E+05 | 4.230E+06 | 8.350E+06 | 7.310E+03 | 2.380E+03 | 0.000E+00 | 4.360E+03 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.460E+04 | 1.710E+06 | 8.700E+05 | 1.050E+03 | 3.560E+02 | 0.000E+00 | 5.990E+02 | 0.000E+00 |
| TEEN | 4.440E+04 | 1.060E+06 | 6.880E+05 | 8.440E+02 | 2.860E+02 | 0.000E+00 | 5.670E+02 | 0.000E+00 |
| CHILD | 7.420E+04 | 6.440E+05 | 1.270E+06 | 1.110E+03 | 3.620E+02 | 0.000E+00 | 6.640E+02 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.100E+04 | 1.600E+06 | 7.790E+05 | 9.780E+02 | 3.330E+02 | 0.000E+00 | 5.600E+02 | 0.000E+00 |
| TEEN | 9.060E+04 | 2.170E+06 | 1.410E+06 | 1.720E+03 | 5.840E+02 | 0.000E+00 | 1.160E+03 | 0.000E+00 |
| CHILD | 1.980E+05 | 1.720E+06 | 3.390E+06 | 2.970E+03 | 9.680E+02 | 0.000E+00 | 1.770E+03 | 0.000E+00 |
| INFANT | 3.600E+05 | 1.720E+06 | 6.980E+06 | 6.980E+03 | 1.660E+03 | 0.000E+00 | 4.290E+03 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.120E+03 | 1.920E+05 | 9.350E+04 | 1.170E+02 | 3.990E+01 | 0.000E+00 | 6.720E+01 | 0.000E+00 |
| TEEN | 1.090E+04 | 2.600E+05 | 1.690E+05 | 2.070E+02 | 7.010E+01 | 0.000E+00 | 1.390E+02 | 0.000E+00 |
| CHILD | 2.380E+04 | 2.060E+05 | 4.070E+05 | 3.570E+02 | 1.160E+02 | 0.000E+00 | 2.130E+02 | 0.000E+00 |
| INFANT | 4.320E+04 | 2.060E+05 | 8.380E+05 | 8.380E+02 | 1.990E+02 | 0.000E+00 | 5.150E+02 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 8.140E+01 | 6.920E+03 | 1.240E+03 | 1.550E+00 | 5.300E-01 | 0.000E+00 | 4.030E+01 | 0.000E+00 |
| TEEN | 1.120E+02 | 7.250E+03 | 1.730E+03 | 2.130E+00 | 7.230E-01 | 0.000E+00 | 6.440E+01 | 0.000E+00 |
| CHILD | 1.370E+02 | 3.230E+03 | 2.350E+03 | 2.050E+00 | 6.700E-01 | 0.000E+00 | 5.520E+01 | 0.000E+00 |
| INFANT | 9.190E+01 | 1.220E+03 | 1.780E+03 | 1.780E+00 | 4.260E-01 | 0.000E+00 | 5.060E+01 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CE141

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.700E+05 |
| TEEN | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.700E+05 |
| CHILD | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.700E+05 |
| INFANT | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.170E+05 | 4.700E+05 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.500E+02 | 1.520E+07 | 5.860E+07 | 3.970E+03 | 1.840E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 6.450E+02 | 1.610E+07 | 8.410E+03 | 5.620E+03 | 2.640E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.440E+03 | 1.210E+07 | 1.950E+04 | 9.730E+03 | 4.270E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.870E+01 | 9.690E+05 | 3.750E+02 | 2.530E+02 | 1.180E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.410E+01 | 6.010E+05 | 3.150E+02 | 2.100E+02 | 9.890E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 4.390E+01 | 3.690E+05 | 5.920E+02 | 2.950E+02 | 1.300E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 9.910E+00 | 3.340E+05 | 1.290E+02 | 8.740E+01 | 4.060E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.920E+01 | 4.520E+05 | 2.370E+02 | 1.580E+02 | 7.450E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 4.320E+01 | 3.630E+05 | 5.830E+02 | 2.910E+02 | 1.280E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 8.300E+01 | 3.640E+05 | 1.160E+03 | 7.050E+02 | 2.170E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.190E+00 | 4.010E+04 | 1.550E+01 | 1.050E+01 | 4.870E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.180E+00 | 5.430E+04 | 2.840E+01 | 1.900E+01 | 8.930E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 5.180E+00 | 4.360E+04 | 7.000E+01 | 3.490E+01 | 1.530E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 9.960E+00 | 4.370E+04 | 1.390E+02 | 8.460E+01 | 2.610E+01 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.840E+01 | 3.800E+03 | 6.310E+02 | 4.290E+02 | 1.990E+02 | 0.000E+00 | 1.150E+04 | 0.000E+00 |
| TEEN | 6.870E+01 | 4.010E+03 | 9.000E+02 | 6.010E+02 | 2.810E+02 | 0.000E+00 | 1.950E+04 | 0.000E+00 |
| CHILD | 9.180E+01 | 1.790E+03 | 1.240E+03 | 6.190E+02 | 2.710E+02 | 0.000E+00 | 1.720E+04 | 0.000E+00 |
| INFANT | 6.300E+01 | 6.830E+02 | 8.790E+02 | 5.280E+02 | 1.660E+02 | 0.000E+00 | 1.640E+04 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: CE144

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.450E+06 |
| TEEN | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.450E+06 |
| CHILD | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.450E+06 |
| INFANT | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.120E+06 | 2.450E+06 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.090E+04 | 3.210E+08 | 9.480E+05 | 3.960E+05 | 2.350E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.170E+04 | 3.820E+08 | 1.520E+06 | 6.290E+05 | 3.760E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.950E+05 | 2.990E+08 | 3.660E+06 | 1.150E+06 | 6.360E+05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.870E+03 | 1.180E+07 | 3.480E+04 | 1.460E+04 | 8.640E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.580E+03 | 7.380E+06 | 2.940E+04 | 1.210E+04 | 7.260E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.950E+03 | 4.520E+06 | 5.530E+04 | 1.740E+04 | 9.610E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.590E+02 | 2.890E+06 | 8.550E+03 | 5.570E+03 | 2.120E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.460E+02 | 3.960E+06 | 1.570E+04 | 6.510E+03 | 3.890E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.070E+03 | 3.170E+06 | 3.880E+04 | 1.220E+04 | 6.730E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 3.110E+03 | 3.190E+06 | 5.560E+04 | 2.280E+04 | 9.200E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.510E+01 | 3.470E+05 | 1.030E+03 | 4.290E+02 | 2.540E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.010E+02 | 4.750E+05 | 1.890E+03 | 7.810E+02 | 4.670E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.480E+02 | 3.810E+05 | 4.660E+03 | 1.460E+03 | 8.080E+02 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 3.740E+02 | 3.830E+05 | 6.670E+03 | 2.730E+03 | 1.100E+03 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 5.830E+03 | 2.590E+04 | 1.090E+05 | 4.540E+04 | 2.690E+04 | 0.000E+00 | 2.460E+05 | 0.000E+00 |
| TEEN | 8.320E+03 | 2.740E+04 | 1.550E+05 | 6.420E+04 | 3.830E+04 | 0.000E+00 | 4.240E+05 | 0.000E+00 |
| CHILD | 1.150E+04 | 1.230E+04 | 2.150E+05 | 6.710E+04 | 3.720E+04 | 0.000E+00 | 3.790E+05 | 0.000E+00 |
| INFANT | 5.590E+03 | 4.700E+03 | 1.010E+05 | 3.840E+04 | 1.700E+04 | 0.000E+00 | 3.120E+05 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: 1131

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 3.190E+05 |
| TEEN | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 3.190E+05 |
| CHILD | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 3.190E+05 |
| INFANT | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 2.630E+05 | 3.190E+05 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.000E+06 | 4.630E+05 | 1.230E+06 | 1.750E+06 | 3.010E+06 | 5.750E+06 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.770E+05 | 3.230E+05 | 1.170E+06 | 1.630E+06 | 2.810E+06 | 4.770E+06 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.240E+06 | 1.940E+05 | 2.170E+06 | 2.180E+06 | 3.580E+06 | 7.220E+06 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.320E+05 | 6.070E+04 | 1.610E+05 | 2.300E+05 | 3.940E+05 | 7.540E+07 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.010E+05 | 3.700E+04 | 1.340E+05 | 1.870E+05 | 3.220E+05 | 5.460E+07 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.420E+05 | 2.220E+04 | 2.480E+05 | 2.490E+05 | 4.090E+05 | 8.240E+07 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.630E+06 | 1.670E+06 | 4.420E+06 | 6.330E+06 | 1.080E+07 | 2.070E+09 | 0.000E+00 | 0.000E+00 |
| TEEN | 6.040E+06 | 2.220E+06 | 8.020E+06 | 1.120E+07 | 1.930E+07 | 3.280E+09 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.110E+07 | 1.740E+06 | 1.950E+07 | 1.960E+07 | 3.210E+07 | 6.470E+09 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.100E+07 | 1.710E+06 | 4.060E+07 | 4.790E+07 | 5.590E+07 | 1.570E+10 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 4.350E+06 | 2.000E+06 | 5.310E+06 | 7.590E+06 | 1.300E+07 | 2.490E+09 | 0.000E+00 | 0.000E+00 |
| TEEN | 7.240E+06 | 2.670E+06 | 9.630E+06 | 1.350E+07 | 2.320E+07 | 3.930E+09 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.330E+07 | 2.090E+06 | 2.340E+07 | 2.350E+07 | 3.860E+07 | 7.770E+09 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.530E+07 | 2.050E+06 | 4.880E+07 | 5.740E+07 | 6.710E+07 | 1.890E+10 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 6.490E+02 | 1.990E+02 | 7.990E+02 | 1.130E+03 | 1.940E+03 | 3.780E+05 | 0.000E+00 | 0.000E+00 |
| TEEN | 8.370E+02 | 2.060E+02 | 1.120E+03 | 1.560E+03 | 2.660E+03 | 4.640E+05 | 0.000E+00 | 0.000E+00 |
| CHILD | 8.640E+02 | 9.010E+01 | 1.520E+03 | 1.520E+03 | 2.500E+03 | 5.150E+05 | 0.000E+00 | 0.000E+00 |
| INFANT | 6.210E+02 | 3.360E+01 | 1.200E+03 | 1.410E+03 | 1.640E+03 | 4.700E+05 | 0.000E+00 | 0.000E+00 |

Table B4-7 Continued

INDIVIDUAL DOSE FACTORS FOR GASEOUS EFFLUENTS -- FOR ISOTOPE: I133

PATHWAY: PLUME

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: GROUND

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 4.560E+04 |
| TEEN | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 4.560E+04 |
| CHILD | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 4.560E+04 |
| INFANT | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 3.750E+04 | 4.560E+04 |

PATHWAY: VEGETABLE

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.680E+04 | 4.960E+04 | 3.180E+04 | 5.520E+04 | 9.640E+04 | 8.120E+06 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.530E+04 | 3.790E+04 | 2.950E+04 | 5.000E+04 | 8.780E+04 | 6.990E+06 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.520E+04 | 2.680E+04 | 5.380E+04 | 6.650E+04 | 1.110E+05 | 1.240E+07 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: MEAT

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.050E-03 | 8.990E-03 | 5.750E-03 | 1.000E-02 | 1.740E-02 | 1.470E+00 | 0.000E+00 | 0.000E+00 |
| TEEN | 2.490E-03 | 6.170E-03 | 4.810E-03 | 8.160E-03 | 1.430E-02 | 1.140E+00 | 0.000E+00 | 0.000E+00 |
| CHILD | 4.180E-03 | 4.450E-03 | 8.930E-03 | 1.100E-02 | 1.840E-02 | 2.050E+00 | 0.000E+00 | 0.000E+00 |
| INFANT | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

PATHWAY: COW MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.140E+04 | 9.270E+04 | 5.930E+04 | 1.030E+05 | 1.800E+05 | 1.520E+07 | 0.000E+00 | 0.000E+00 |
| TEEN | 5.600E+04 | 1.390E+05 | 1.080E+05 | 1.840E+05 | 3.220E+05 | 2.560E+07 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.230E+05 | 1.310E+05 | 2.630E+05 | 3.250E+05 | 5.420E+05 | 6.040E+07 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.370E+05 | 1.370E+05 | 5.550E+05 | 8.090E+05 | 9.510E+05 | 1.470E+08 | 0.000E+00 | 0.000E+00 |

PATHWAY: GOAT MILK

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 3.770E+04 | 1.110E+05 | 7.110E+04 | 1.240E+05 | 2.160E+05 | 1.820E+07 | 0.000E+00 | 0.000E+00 |
| TEEN | 6.720E+04 | 1.670E+05 | 1.300E+05 | 2.200E+05 | 3.870E+05 | 3.080E+07 | 0.000E+00 | 0.000E+00 |
| CHILD | 1.480E+05 | 1.570E+05 | 3.160E+05 | 3.900E+05 | 6.510E+05 | 7.250E+07 | 0.000E+00 | 0.000E+00 |
| INFANT | 2.840E+05 | 1.640E+05 | 6.670E+05 | 9.710E+05 | 1.140E+06 | 1.770E+08 | 0.000E+00 | 0.000E+00 |

PATHWAY: INHALATION

| | T. BODY | GI | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ADULT | 1.430E+02 | 2.810E+02 | 2.740E+02 | 4.690E+02 | 8.150E+02 | 6.820E+04 | 0.000E+00 | 0.000E+00 |
| TEEN | 1.970E+02 | 3.270E+02 | 3.850E+02 | 6.490E+02 | 1.140E+03 | 9.260E+04 | 0.000E+00 | 0.000E+00 |
| CHILD | 2.440E+02 | 1.740E+02 | 5.250E+02 | 6.440E+02 | 1.070E+03 | 1.220E+05 | 0.000E+00 | 0.000E+00 |
| INFANT | 1.780E+02 | 6.830E+01 | 4.200E+02 | 6.080E+02 | 7.100E+02 | 1.130E+05 | 0.000E+00 | 0.000E+00 |

Appendix C: Revised Gaseous Effluents
For 1991
1st and 2nd Quarters

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

HOUSTON LIGHTING & POWER
 SOUTH TEXAS PROJECT EMS DB
 SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
 ALL AIRBORNE EFFLUENTS

Unit: 1

Starting : 1-Jan-1991 Ending : 30-Jun-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 1 | QUARTER 2 | EST. TOT ERROR % |
|------------------------------------|---------|-----------|-----------|---------------------|
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| 1. TOTAL RELEASE | CURIES | 1.687E+01 | 1.275E+01 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 2.170E+00 | 1.621E+00 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 8.039E-04 | 6.007E-04 | |
| B. RADIOIODINES | | | | |
| 1. TOTAL IODINE-131 | CURIES | 0.000E+00 | 6.258E-06 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 0.000E+00 | 7.959E-07 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 0.000E+00 | 8.747E-07 | |
| C. PARTICULATES | | | | |
| 1. PARTICULATES(HALF-LIVES>8 DAYS) | CURIES | 6.593E-05 | 4.431E-05 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 8.478E-06 | 5.635E-06 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 9.317E-06 | 6.193E-06 | |
| 4. GROSS ALPHA RADIOACTIVITY | CURIES | 1.840E-06 | 7.640E-07 | |
| D. TRITIUM | | | | |
| 1. TOTAL RELEASE | CURIES | 2.194E+00 | 9.116E+00 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 2.808E-01 | 1.159E+00 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.560E-04 | 6.441E-04 | |

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL AIRBORNE GROUND LEVEL CONTINUOUS AND
 : BATCH RELEASES. TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : FISSION GASES, IODINES, AND PARTICULATES
 REPORTING PERIOD : QUARTER # 1 AND QUARTER # 2 YEAR 1991

| | | CONTINUOUS MODE | | BATCH MODE | |
|-------------------|--------|-----------------|-----------|------------|-----------|
| NUCLIDES RELEASED | UNIT | QUARTER 1 | QUARTER 2 | QUARTER 1 | QUARTER 2 |
| FISSION GASES | | | | | |
| AR-41 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-01 |
| KR-85M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-04 |
| XE-133 | CURIES | 1.68E+01 | 1.25E+01 | 8.48E-03 | 9.50E-02 |
| XE-135 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-03 |
| TOTAL FOR PERIOD | CURIES | 1.68E+01 | 1.25E+01 | 8.48E-03 | 2.45E-01 |
| IODINES | | | | | |
| I-131 | CURIES | 0.00E+00 | 6.25E-06 | 0.00E+00 | 0.00E+00 |
| I-133 | CURIES | 0.00E+00 | 3.68E-05 | 0.00E+00 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 0.00E+00 | 4.30E-05 | 0.00E+00 | 0.00E+00 |
| PARTICULATES | | | | | |
| BR-82 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.42E-05 |
| CO-58 | CURIES | 3.12E-05 | 4.69E-06 | 0.00E+00 | 0.00E+00 |
| CO-60 | CURIES | 1.44E-05 | 1.37E-05 | 0.00E+00 | 0.00E+00 |
| CR-51 | CURIES | 1.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| MN-54 | CURIES | 3.45E-06 | 1.10E-06 | 0.00E+00 | 0.00E+00 |
| NB-95 | CURIES | 2.25E-06 | 5.79E-07 | 0.00E+00 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 6.59E-05 | 2.00E-05 | 0.00E+00 | 2.42E-05 |
| OTHER | | | | | |
| H-3 | CURIES | 1.98E+00 | 9.08E+00 | 1.97E-01 | 3.19E-02 |
| TOTAL FOR PERIOD | CURIES | 1.98E+00 | 9.08E+00 | 1.97E-01 | 3.19E-02 |

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991

HOUSTON LIGHTING & POWER
 SOUTH TEXAS PROJECT EMTRAIN DB
 SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
 ALL AIRBORNE EFFLUENTS
 Unit: 2

Starting : 1-Jan-1991 Ending : 30-Jun-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 1 | QUARTER 2 | EST. TOT ERROR % |
|------------------------------------|---------|-----------|-----------|---------------------|
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| 1. TOTAL RELEASE | CURIES | 4.901E+00 | 6.889E+00 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 6.303E-01 | 8.762E-01 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.334E-04 | 3.245E-04 | |
| B. RADIOIODINES | | | | |
| 1. TOTAL IODINE-131 | CURIES | 0.000E+00 | 4.462E-08 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 0.000E+00 | 5.676E-09 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 0.000E+00 | 6.237E-09 | |
| C. PARTICULATES | | | | |
| 1. PARTICULATES(HALF-LIVES>8 DAYS) | CURIES | 1.829E-04 | 1.546E-04 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 2.352E-05 | 1.966E-05 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.584E-05 | 2.161E-05 | |
| 4. GROSS ALPHA RADIOACTIVITY | CURIES | 3.470E-06 | 6.935E-07 | |
| D. TRITIUM | | | | |
| 1. TOTAL RELEASE | CURIES | 5.394E-01 | 1.459E-01 | 25 |
| 2. AVERAGE RELEASE RATE FOR PERIOD | uCi/Sec | 6.936E-02 | 1.856E-02 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 3.853E-05 | 1.031E-05 | |

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL AIRBORNE GROUND LEVEL CONTINUOUS AND
 : BATCH RELEASES. TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : FISSION GASES, IODINES, AND PARTICULATES
 REPORTING PERIOD : QUARTER # 1 AND QUARTER # 2 YEAR 1991

| | | CONTINUOUS MODE | | BATCH MODE | |
|-------------------|--------|-----------------|-----------|------------|-----------|
| NUCLIDES RELEASED | UNIT | QUARTER 1 | QUARTER 2 | QUARTER 1 | QUARTER 2 |
| FISSION GASES | | | | | |
| AR-41 | CURIES | 1.06E-01 | 2.54E-01 | 6.19E-01 | 5.82E-01 |
| XE-131M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.98E-03 |
| XE-133 | CURIES | 4.01E+00 | 4.78E+00 | 1.61E-01 | 1.25E+00 |
| XE-133M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.53E-04 |
| XE-135 | CURIES | 0.00E+00 | 1.75E-04 | 4.45E-04 | 5.53E-03 |
| TOTAL FOR PERIOD | CURIES | 4.12E+00 | 5.04E+00 | 7.81E-01 | 1.84E+00 |
| IODINES | | | | | |
| I-131 | CURIES | 0.00E+00 | 4.46E-08 | 0.00E+00 | 0.00E+00 |
| I-133 | CURIES | 0.00E+00 | 3.71E-08 | 0.00E+00 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 0.00E+00 | 8.17E-08 | 0.00E+00 | 0.00E+00 |
| PARTICULATES | | | | | |
| BE-7 | CURIES | 3.00E-05 | 8.46E-06 | 0.00E+00 | 0.00E+00 |
| BR-82 | CURIES | 1.03E-04 | 8.80E-05 | 4.58E-05 | 5.51E-05 |
| CO-58 | CURIES | 2.80E-06 | 2.00E-06 | 0.00E+00 | 0.00E+00 |
| CO-60 | CURIES | 0.00E+00 | 9.02E-07 | 4.21E-07 | 0.00E+00 |
| CS-137 | CURIES | 0.00E+00 | 3.37E-09 | 0.00E+00 | 0.00E+00 |
| TE-132 | CURIES | 0.00E+00 | 8.88E-10 | 0.00E+00 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 1.36E-04 | 9.94E-05 | 4.62E-05 | 5.51E-05 |
| OTHER | | | | | |
| H-3 | CURIES | 4.78E-01 | 7.57E-02 | 6.04E-02 | 7.02E-02 |
| TOTAL FOR PERIOD | CURIES | 4.78E-01 | 7.57E-02 | 6.04E-02 | 7.02E-02 |

Appendix D: Revised Liquid Effluents

For 1991

1st and 2nd Quarters

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

HOUSTON LIGHTING & POWER
 SOUTH TEXAS PROJECT EMS DB

SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
 ALL LIQUID EFFLUENTS

Unit: 1

Starting : 1-Jan-1991 Ending : 30-Jun-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 1 | QUARTER 2 | EST. TOT ERROR % |
|---|--------|-----------|-----------|---------------------|
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| 1. TOTAL RELEASE (NOT INCLUDING TRITIUM, GASES, ALPHA) | CURIES | 2.562E+00 | 2.128E+00 | 5 |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 8.970E-07 | 2.864E-07 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 9.327E-01 | 3.663E-01 | |
| B. TRITIUM | | | | |
| 1. TOTAL RELEASE | CURIES | 2.305E+01 | 1.256E+02 | 5 |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 8.070E-06 | 1.690E-05 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.690E-01 | 5.633E-01 | |
| C. DISSOLVED AND ENTRAINED GASES | | | | |
| 1. TOTAL RELEASE | CURIES | 1.667E-04 | 2.992E-02 | 5 |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 5.829E-11 | 4.024E-09 | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 2.914E-05 | 2.012E-03 | |
| D. GROSS ALPHA RADIOACTIVITY | | | | |
| 1. TOTAL RELEASE | CURIES | 0.000E+00 | 0.000E+00 | 5 |
| E. WASTE VOL RELEASED(PRE-DILUTION) | LITERS | 4.281E+06 | 4.163E+06 | 1.3 |
| F. VOLUME OF DILUTION WATER USED | LITERS | 2.856E+09 | 7.430E+09 | 10 |

SITE: South Texas Project Electric Generating Station
 UNIT: 1 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL LIQUID CONTINUOUS AND BATCH RELEASES
 : TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : ALL RADIONUCLIDES
 REPORTING PERIOD : QUARTER # 1 AND QUARTER # 2 YEAR 1991

| | | CONTINUOUS RELEASES | | BATCH | RELEASES |
|------------------|--------|---------------------|-----------|-----------|-----------|
| NUCLIDE | UNIT | QUARTER 1 | QUARTER 2 | QUARTER 1 | QUARTER 2 |
| ALL NUCLIDES | | | | | |
| AG-110M | CURIES | 0.00E+00 | 0.00E+00 | 8.03E-03 | 2.39E-02 |
| CO-57 | CURIES | 0.00E+00 | 0.00E+00 | 3.88E-03 | 3.29E-03 |
| CO-58 | CURIES | 4.15E-06 | 0.00E+00 | 8.08E-01 | 3.67E-01 |
| CO-60 | CURIES | 1.69E-05 | 0.00E+00 | 2.66E-01 | 4.04E-01 |
| CR-51 | CURIES | 0.00E+00 | 0.00E+00 | 2.95E-01 | 8.99E-02 |
| CS-134 | CURIES | 0.00E+00 | 0.00E+00 | 1.47E-02 | 2.47E-02 |
| CS-137 | CURIES | 2.87E-06 | 0.00E+00 | 2.21E-02 | 3.24E-02 |
| FE-55 | CURIES | 0.00E+00 | 0.00E+00 | 8.63E-01 | 9.40E-01 |
| FE-59 | CURIES | 0.00E+00 | 0.00E+00 | 3.39E-02 | 1.34E-02 |
| H-3 | CURIES | 8.81E-05 | 0.00E+00 | 2.30E+01 | 1.26E+02 |
| LA-140 | CURIES | 0.00E+00 | 0.00E+00 | 2.36E-06 | 1.42E-04 |
| MN-54 | CURIES | 6.76E-06 | 0.00E+00 | 6.81E-02 | 8.81E-02 |
| NA-24 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.67E-06 |
| NB-95 | CURIES | 0.00E+00 | 0.00E+00 | 7.85E-02 | 7.96E-02 |
| NB-97 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.02E-05 |
| OTHER | CURIES | 0.00E+00 | 0.00E+00 | 6.74E-05 | 9.40E-04 |
| SB-124 | CURIES | 0.00E+00 | 0.00E+00 | 2.76E-02 | 3.31E-03 |
| SB-125 | CURIES | 0.00E+00 | 0.00E+00 | 2.54E-02 | 1.04E-02 |
| SC-46 | CURIES | 0.00E+00 | 0.00E+00 | 5.78E-04 | 1.79E-04 |
| SN-113 | CURIES | 0.00E+00 | 0.00E+00 | 2.81E-03 | 2.72E-03 |
| XE-133 | CURIES | 0.00E+00 | 0.00E+00 | 1.66E-04 | 2.94E-02 |
| XE-135 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.66E-04 |
| ZN-65 | CURIES | 0.00E+00 | 0.00E+00 | 4.85E-03 | 6.35E-03 |
| ZR-95 | CURIES | 0.00E+00 | 0.00E+00 | 3.91E-02 | 3.74E-02 |
| ZR-97 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.55E-04 |
| TOTAL FOR PERIOD | CURIES | 1.19E-04 | 0.00E+00 | 2.56E+01 | 1.28E+02 |

SITE: South Texas Project Electric Generating Station
UNIT: 2 YEAR: 1991

HOUSTON LIGHTING & POWER
SOUTH TEXAS PROJECT EMTRAIN DB

SEMIANNUAL SUMMATION OF ALL RELEASES BY QUARTER
ALL LIQUID EFFLUENTS
Unit: 2

Starting : 1-Jan-1991 Ending : 30-Jun-1991

| TYPE OF EFFLUENT | UNITS | QUARTER 1 | QUARTER 2 | EST. TOT ERROR % |
|---|--------|-----------|-----------|---------------------|
| ----- | | | | |
| A. FISSION & ACTIVATION PRODUCTS | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE (NOT INCLUDING TRITIUM, GASES, ALPHA) | CURIES | 8.715E-01 | 5.665E-01 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 2.042E-07 | 7.060E-08 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 3.395E-01 | 5.390E-02 | |
| ----- | | | | |
| B. TRITIUM | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 1.470E+02 | 1.458E+02 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 3.445E-05 | 1.817E-05 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 1.148E+00 | 6.056E-01 | |
| ----- | | | | |
| C. DISSOLVED AND ENTRAINED GASES | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 4.370E-02 | 1.212E-01 | 5 |
| ----- | | | | |
| 2. AVERAGE DILUTED CONCENTRATION DURING PERIOD | uCi/ML | 1.019E-08 | 1.507E-08 | |
| ----- | | | | |
| 3. PERCENT OF APPLICABLE LIMIT | % | 5.096E-03 | 7.534E-03 | |
| ----- | | | | |
| D. GROSS ALPHA RADIOACTIVITY | | | | |
| ----- | | | | |
| 1. TOTAL RELEASE | CURIES | 0.000E+00 | 0.000E+00 | 5 |
| ----- | | | | |
| E. WASTE VOL RELEASED(PRE-DILUTION) | LITERS | 1.890E+07 | 1.774E+07 | 1.3 |
| ----- | | | | |
| F. VOLUME OF DILUTION WATER USED | LITERS | 4.268E+09 | 8.025E+09 | 10 |
| ----- | | | | |

SITE: South Texas Project Electric Generating Station
 UNIT: 2 YEAR: 1991

REPORT CATEGORY : SEMIANNUAL LIQUID CONTINUOUS AND BATCH RELEASES
 : TOTALS FOR EACH NUCLIDE RELEASED.
 TYPE OF ACTIVITY : ALL RADIONUCLIDES
 REPORTING PERIOD : QUARTER # 1 AND QUARTER # 2 YEAR 1991

| | | CONTINUOUS RELEASES | | BATCH | RELEASES |
|------------------|--------|---------------------|-----------|-----------|-----------|
| NUCLIDE | UNIT | QUARTER 1 | QUARTER 2 | QUARTER 1 | QUARTER 2 |
| ALL NUCLIDES | | | | | |
| AG-110M | CURIES | 0.00E+00 | 0.00E+00 | 3.88E-03 | 6.15E-05 |
| BE-7 | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.71E-05 |
| CE-144 | CURIES | 0.00E+00 | 0.00E+00 | 4.49E-02 | 3.87E-05 |
| CO-57 | CURIES | 0.00E+00 | 0.00E+00 | 1.22E-03 | 6.51E-04 |
| CO-58 | CURIES | 0.00E+00 | 1.08E-05 | 2.40E-01 | 6.69E-02 |
| CO-60 | CURIES | 0.00E+00 | 2.76E-05 | 1.35E-01 | 7.72E-02 |
| CR-51 | CURIES | 0.00E+00 | 0.00E+00 | 5.03E-02 | 3.59E-03 |
| CS-137 | CURIES | 0.00E+00 | 8.93E-07 | 7.20E-05 | 3.83E-05 |
| FE-55 | CURIES | 0.00E+00 | 0.00E+00 | 2.39E-01 | 3.76E-01 |
| FE-59 | CURIES | 0.00E+00 | 0.00E+00 | 3.33E-02 | 3.93E-03 |
| H-3 | CURIES | 3.33E-02 | 4.27E-02 | 1.47E+02 | 1.46E+02 |
| LA-140 | CURIES | 0.00E+00 | 0.00E+00 | 2.18E-05 | 5.72E-06 |
| MN-54 | CURIES | 0.00E+00 | 4.40E-06 | 3.40E-02 | 1.65E-02 |
| NB-95 | CURIES | 0.00E+00 | 4.09E-07 | 5.25E-02 | 1.17E-02 |
| NB-97 | CURIES | 0.00E+00 | 0.00E+00 | 9.92E-05 | 2.24E-04 |
| OTHER | CURIES | 0.00E+00 | 0.00E+00 | 7.25E-04 | 0.00E+00 |
| SB-124 | CURIES | 0.00E+00 | 0.00E+00 | 1.02E-03 | 6.06E-05 |
| SB-125 | CURIES | 0.00E+00 | 0.00E+00 | 4.06E-03 | 1.93E-03 |
| SC-46 | CURIES | 0.00E+00 | 0.00E+00 | 6.44E-04 | 9.13E-05 |
| SN-113 | CURIES | 0.00E+00 | 0.00E+00 | 1.99E-03 | 6.19E-04 |
| XE-131M | CURIES | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.00E-03 |
| XE-133 | CURIES | 0.00E+00 | 0.00E+00 | 4.31E-02 | 1.19E-01 |
| XE-133M | CURIES | 0.00E+00 | 0.00E+00 | 2.22E-04 | 7.59E-04 |
| XE-135 | CURIES | 0.00E+00 | 0.00E+00 | 3.55E-04 | 5.69E-05 |
| ZN-65 | CURIES | 0.00E+00 | 0.00E+00 | 2.49E-03 | 1.12E-03 |
| ZR-95 | CURIES | 0.00E+00 | 0.00E+00 | 2.65E-02 | 5.62E-03 |
| ZR-97 | CURIES | 0.00E+00 | 0.00E+00 | 6.72E-05 | 0.00E+00 |
| TOTAL FOR PERIOD | CURIES | 3.33E-02 | 4.28E-02 | 1.48E+02 | 1.46E+02 |