Docket No: 50-010
50-237
50-249

# DRESDEN NUCLEAR POWER STATION
# UNITS 1, 2 and 3

## Annual Radiological
## Environmental Operating Report

1 January Through 31 December 2006

**Prepared By**

Teledyne Brown Engineering
Environmental Services

Exelon SM

Nuclear

Dresden Nuclear Power Station
Morris, IL 60450

**May 2007**

# Table Of Contents

Appendices

Figures

## I. Summary and Conclusions

This report on the Radiological Environmental Monitoring Program conducted for the Dresden Nuclear Power Station (DNPS) by Exelon covers the period 1 January 2006 through 31 December 2006. During that time period, 2,005 analyses were performed on 1,586 samples. In assessing all the data gathered for this report it was concluded that the operation of DNPS had no adverse radiological impact on the environment.

Surface water samples were analyzed for concentrations of gross beta, tritium and gamma emitting nuclides. Ground water samples were analyzed for concentrations of tritium and gamma emitting nuclides. No anthropogenic gamma emitting nuclides were detected. Gross beta and tritium activities detected were consistent with those detected in previous years. Installation of a compositor (D-57) resulted in the detection of tritium upstream of the station on the Kankakee River.

Fish (commercially and recreationally important species) and sediment samples were analyzed for concentrations of gamma emitting nuclides. No fission or activation products were detected in fish. Sediment samples had Cesium-137 concentrations consistent with levels observed in previous years. No plant-produced fission or activation products were found in sediment.

Air particulate samples were analyzed for concentrations of gross beta and gamma emitting nuclides. Gross beta results at the indicator locations were consistent with those at the control location. No fission or activation products were detected.

High sensitivity I-131 analyses were performed on weekly air samples. All results were less than the minimum detectable activity.

Cow milk samples were analyzed for concentrations of I-131 and gamma emitting nuclides. All I-131 results were below the minimum detectable activity. Concentrations of naturally occurring K-40 were found. No fission or activation products were found.

Food product samples were analyzed for concentrations of gamma emitting nuclides. No fission or activation products were detected.

Environmental gamma radiation measurements were performed quarterly using thermoluminescent dosimeters. Levels detected were consistent with those observed in previous years.

Intentionally left blank

## II. Introduction

The Dresden Nuclear Power Station (DNPS), consisting of one retired reactor and two operating 912 MWe boiling water reactors owned and operated by Exelon Corporation, is located in Grundy County, Illinois. Unit No. 1 went critical in 1960 and was retired in 1978. Unit No. 2 went critical on 16 June 1970. Unit No. 3 went critical on 02 November 1971. The site is located in northern Illinois, approximately 12 miles southwest of Joliet, Illinois at the confluence of the Des Plaines and Kankakee Rivers where they form the Illinois River.

This report covers those analyses performed by Teledyne Brown Engineering (TBE) Global Dosimetry, and Environmental Inc. Midwest Laboratory (EIML) on samples collected during the period 1 January 2006 through 31 December 2006.

### A. Objective of the Radiological Environmental Monitoring Program (REMP)

The objectives of the REMP are to:

1. Provide data on measurable levels of radiation and radioactive materials in the site environs.

2. Evaluate the relationship between quantities of radioactive material released from the plant and resultant radiation doses to individuals from principal pathways of exposure.

### B. Implementation of the Objectives

The implementation of the objectives is accomplished by:

1. Identifying significant exposure pathways.

2. Establishing baseline radiological data of media within those pathways.

3. Continuously monitoring those media before and during Station operation to assess Station radiological effects (if any) on man and the environment.

## III. Program Description

### A. Sample Collection

Samples for the DNPS REMP were collected for Exelon Nuclear by EIML. This section describes the general collection methods used by EIML to

obtain environmental samples for the DNPS REMP in 2006. Sample locations and descriptions can be found in Table B–1 and Figures B–1 and B-2, Appendix B. The collection methods used by EIML are listed in Table B-2.

Aquatic Environment

The aquatic environment was evaluated by performing radiological analyses on samples of surface water, ground water, fish, and sediment. Samples were collected from four surface water locations (D-51, D-52, D-54 and D-57) and composited for analysis. Control locations were D-52, D-54, and D-57. Samples were collected quarterly from two well water locations (D-23 and D-35). All samples were collected in new unused plastic bottles, which were rinsed at least twice with source water prior to collection. Fish samples comprising the flesh of largemouth bass, smallmouth buffalo, channel catfish, freshwater drum and carp were collected semiannually at two locations, D-28 and D-46 (Control). Sediment samples composed of recently deposited substrate were collected at one location semiannually, D-27.

Atmospheric Environment

The atmospheric environment was evaluated by performing radiological analyses on samples of air particulate, airborne iodine, milk, and food products. Airborne iodine and particulate samples were collected at fourteen locations (D-01, D-02, D-03, D-04, D-07, D-08, D-10, D-12, D-13, D-14, D-45, D-53, D-55 and D-56). The control location was D-12. Airborne iodine and particulate samples were obtained at each location, using a vacuum pump with charcoal and glass fiber filters attached. The pumps were run continuously and sampled air at the rate of approximately one cubic foot per minute. The air filters and air iodine samples were replaced weekly and sent to the laboratory for analysis.

Milk samples were collected biweekly at one control location (D-25) from May through October, and monthly from November through April. There are no milking animals within 10 km of the site. All samples were collected in new unused two gallon plastic bottles from the bulk tank at each location, preserved with sodium bisulfite, and shipped promptly to the laboratory.

Food products were collected annually in September at five locations (D-Control, D-Quad 1, D-Quad 2, D-Quad 3, and D-Quad 4). The control location was D-Control. Various types of samples were collected and placed in new unused plastic bags, and sent to the laboratory for analysis.

Ambient Gamma Radiation

Direct radiation measurements were made using $CaF_2$ and LiF thermoluminescent dosimeters (TLD). Each location consisted of 2 TLD sets. The TLD locations were placed on and around the DNPS site as follows:

An inner ring consisting of 16 locations (D-101, D-102, D-103, D-104, D-105, D-106, D-107, D-108, D-109, D-110, D-111, D-112A, D-113, D-114, D-115 and D-116) at or near the site boundary.

An outer ring consisting of 16 locations (D-201, D-202, D-203, D-204, D-205, D-206, D-207, D-208, D-209, D-210, D-211, D-212, D-213, D-214, D-215 and D-216) approximately 5 to 10 km from the site.

An other set consisting of TLDs at the 11 air sampler locations (D-01, D-02, D-03, D-04, D-07, D-08, D-10, D-13, D-14, D-45, D-53, D-55, and D-56).

The balance of one location (D-12) representing the control area.

Two TLDs – each comprised of two $CaF_2$ and two LiF thermoluminescent phosphors enclosed in plastic – were placed at each location. The TLDs were exchanged quarterly and sent to Global Dosimetry for analysis.

B. Sample Analysis

This section describes the general analytical methodologies used by TBE and EIML to analyze the environmental samples for radioactivity for the DNPS REMP in 2006. The analytical procedures used by the laboratories are listed in Table B-2.

In order to achieve the stated objectives, the current program includes the following analyses:

1. Concentrations of beta emitters in surface water and air particulates.

2. Concentrations of gamma emitters in ground and surface water, air particulates, milk, fish, sediment and vegetation.

3. Concentrations of tritium in ground and surface water.

4. Concentrations of I-131 in air and milk.

5. Ambient gamma radiation levels at various site environs.

C. Data Interpretation

For the purpose of this report, Dresden Nuclear Power Station was considered operational at initial criticality. In addition, data were compared to previous years' operational data for consistency and trending. Several factors were important in the interpretation of the data:

1. Lower Limit of Detection and Minimum Detectable Concentration

The lower limit of detection (LLD) was defined as the smallest concentration of radioactive material in a sample that would yield a net count (above background) that would be detected with only a 5% probability of falsely concluding that a blank observation represents a "real" signal. The LLD was intended as a before the fact estimate of a system (including instrumentation, procedure and sample type) and not as an after the fact criteria for the presence of activity. All analyses were designed to achieve the required DNPS detection capabilities for environmental sample analysis.

The minimum detectable concentration (MDC) is calculated the same as the LLD with the exception that the measurement is an after the fact estimate of the presence of activity.

2. Net Activity Calculation and Reporting of Results

Net activity for a sample was calculated by subtracting background activity from the sample activity. Since the REMP measures extremely small changes in radioactivity in the environment, background variations may result in sample activity being lower than the background activity effecting a negative number. An MDC was reported in all cases where positive activity was not detected.

Gamma spectroscopy results for each type of sample were grouped as follows:

For ground and surface water 12 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140, and La-140 were reported.

For fish nine nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Nb/Zr-95, Cs-134, Cs-137 and Ba/La-140 were reported.

For sediment nine nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-95, Nb/Zr-95, Cs-134, Cs-137 and Ba/La-140 were reported.
For air particulate nine nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Nb/Zr-95, Cs-134, Cs-137 and Ba/La-140 were reported.

For milk 10 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Nb/Zr-95, Cs-134, Cs-137, Ba-140 and La-140 were reported.

For vegetation 11 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Nb/Zr-95, I-131, Cs-134, Cs-137, Ba-140 and La-140 were reported.

Means and standard deviations of the results were calculated. The standard deviations represent the variability of measured results for different samples rather than single analysis uncertainty.

D. Program Exceptions

For 2006 the DNPS REMP had a sample recovery rate in excess of 99%. Sample anomalies and missed samples are listed in the tables below:

Table D-1 LISTING OF SAMPLE ANOMALIES

| Sample Type | Location Code | Collection Date | Reason |
|---|---|---|---|
| AP/I | D-12 | 03/03/06 – 03/10/06 | Low timer readings of 151.4 hours and 159.9 hours due to electric utility working near sampler location |
| AP/I | D-01, D-04 | 04/14/06 | Low timer readings of 161.9 on both due to lightning strike affecting power supply |
| AP/I | D-02 | 05/12/06 | Low timer reading of 162.1 hours; cause was unknown |
| AP/I | D-04 | 05/12/06 | Run time indicator failed; sample volume was estimated assuming continuous sample collection |
| AP/I | D-10 | 05/12/06 | Low timer reading of 167.2 hours; cause was unknown |

Table D-1 LISTING OF SAMPLE ANOMALIES (cont'd)

| Sample Type | Location Code | Collection Date | Reason |
|---|---|---|---|
| AP/I | D-56 | 07/28/06 | Low timer reading of 65.1 hours due to recent installation of new sampler on 07/25/06 |
| AP/I | D-04 | 08/04/06 | Run time indicator failed; sample volume was estimated assuming continuous sample collection |
| AP/I | D-53 | 08/04/06 | Low timer reading of 154.7 hours; cause was unknown |
| AP/I | D-12 | 12/01/06 | Low timer reading of 166.9 hours due to electric utility working near sampler location |

Table D-2 LISTING OF MISSED SAMPLES

| Sample Type | Location Code | Collection Date | Reason |
|---|---|---|---|
| M | D-25 (control) | 06/30/06 | I-131 LLD was not met due to analytical error |
| I | D-56 | 07/28/06 | I-131 LLD missed due to low sample volume; new station only had 4 days of air collection. |

Each program exception was reviewed to understand the causes of the program exception. Sampling and maintenance errors were reviewed with the personnel involved to prevent recurrence. Occasional equipment breakdowns and power outages were unavoidable.

The overall sample recovery rate indicates that the appropriate procedures and equipment are in place to assure reliable program implementation.

E. Program Changes

Surface water station D-57 was added on 07/24/06.

Air particulate, air iodine and TLD stations D-55 and D-56 were added on 12/30/05 and 07/25/06, respectively.
Location D-23 sampling frequency was administratively increased in March in order to monitor elevated tritium levels at that location.

## IV. Results and Discussion

### A. Aquatic Environment

#### 1. Surface Water

Samples were taken weekly and composited for analysis at four locations (D-51, D-52, D-54 and D-57). Of these locations only D-51 located downstream, could be affected by Dresden's effluent releases. The following analyses were performed:

Gross Beta

Monthly composites from all locations were analyzed for concentrations of gross beta (Table C–I.1, Appendix C). The values ranged from <3.0 to 9.8 pCi/l. Concentrations detected were consistent with those detected in previous years (Figures C–1 and C–2, Appendix C).

Tritium

Quarterly composites from all locations were analyzed for tritium activity (Table C–I.2, Appendix C). Indicator values ranged from <185 to 236 pCi/L. Control values ranged from <181 to 968 pCi/L. Concentrations detected were consistent with those detected in previous years (Figures C–3 and C–4, Appendix C).

Gamma Spectrometry

Monthly composites from all locations were analyzed for gamma emitting nuclides (Table C–I.3, Appendix C). No nuclides were detected, and all required LLDs were met.

#### 2. Ground Water

Quarterly grab samples were collected at two locations (D-23 and D-35). These locations could be affected by Dresden's effluent releases and by sources upstream on the Kankakee River. The following analyses were performed:

Tritium

All samples were analyzed for tritium activity (Table C–II.1, Appendix C). D-35 values ranged from <131 to <174 pCi/L. D-23 values ranged from 340 to 729 pCi/L. Concentrations detected were consistent with those detected in previous years (Figure C–5, Appendix C).

Gamma Spectrometry

All samples were analyzed for gamma emitting nuclides (Table C–II.2, Appendix C). No nuclides were detected, and all required LLDs were met.

3. Fish

Fish samples comprised of largemouth bass, smallmouth buffalo, channel catfish, freshwater drum and carp were collected at two locations (D-28 and D-46) semiannually. Location D-28 could be affected by Dresden's effluent releases. The following analysis was performed:

Gamma Spectrometry

The edible portion of fish samples from both locations was analyzed for gamma emitting nuclides (Table C–III.1, Appendix C). Naturally occurring K-40 was found at all stations and ranged from 2,660 to 3,790 pCi/kg wet. No fission or activation products were detected.

4. Sediment

Aquatic sediment samples were collected at one location (D-27) semiannually. This downstream location could be affected by Dresden's effluent releases. The following analysis was performed:

Gamma Spectrometry

Sediment samples from the location were analyzed for gamma emitting nuclides (Table C–IV.1, Appendix C). Cesium-137 was detected in all samples.

Concentrations of the fission product Cs-137 was found in both

samples at concentrations of 142 and 86 pCi/kg dry. The activity detected was consistent with those detected in previous years and is likely due to fallout from above-ground nuclear weapons testing. No other fission or activation products were detected.

5. Dredging Spoils

According to the Army Corps of Engineers in September 2006, no dredging was performed within one mile of Dresden Station in the past year. Therefore, no sampling of dredging spoils was performed.

B. Atmospheric Environment

1. Airborne

a. Air Particulates

Continuous air particulate samples were collected from 14 locations on a weekly basis. The 14 locations were separated into four groups: On-site samplers (D-01, D-02, D-03), Near-field samplers within 4 km of the site (D-04, D-07, D-45, D-53 and D-56), Far-field samplers between 4 and 10 km from the site (D-08, D-10, D-13, D-14 and D-55) and the Control sampler between 10 and 30 km from the site (D-12). The following analyses were performed:

Gross Beta

Weekly samples were analyzed for concentrations of beta emitters (Table C–V.1 and C–V.2, Appendix C).

Detectable gross beta activity was observed at all locations. Comparison of results among the four groups aid in determining the effects, if any, resulting from the operation of DNPS. The results from the On-Site locations ranged from <5 to 35 E–3 pCi/$m^3$ with a mean of 18 E–3 pCi/$m^3$. The results from the Near-Field locations ranged from <5 to 36 E–3 pCi/$m^3$ with a mean of 19 E–3 pCi/$m^3$. The results from the Far-Field locations ranged from 6 to 39 E–3 pCi/$m^3$ with a mean of 19 E–3 pCi/$m^3$. The results from the Control location ranged from 6 to 35 E–3 pCi/$m^3$ with a mean of 19 E–3 pCi/$m^3$. Comparison of the 2006 air particulate data with previous years data indicate no effects from the operation of DNPS. In addition a comparison of the weekly

mean values for 2006 indicate no notable differences among the four groups (Figures C–6 through C-12, Appendix C).

Gamma Spectrometry

Samples were composited quarterly and analyzed for gamma emitting nuclides (Table C–V.3, Appendix C). Naturally occurring Be-7 due to cosmic ray activity was detected in 40 of 54 samples and ranged from 6 to 125 E–3 $pCi/m^3$. No other nuclides were detected, and all required LLDs were met.

b. Airborne Iodine

Continuous air samples were collected from 14 locations (D-01, D-02, D-03, D-04, D-07, D-08, D-10, D-12, D-13, D-14, D-45, D-53, D-55 and D-56) and analyzed weekly for I-131 (Table C–VI.1, Appendix C). No nuclides were detected. The I-131 LLD was missed on one sample. See the Program Exceptions section III.D for the explanation.

2. Terrestrial

a. Milk

Samples were collected from one location (D-25) biweekly May through October and monthly November through April. The following analyses were performed:

Iodine-131

Milk samples from the location were analyzed for concentrations of I-131 (Table C–VII.1, Appendix C). No nuclides were detected. The I-131 LLD was missed on one sample. See the Program Exceptions section III.D for the explanation.

Gamma Spectrometry

Each milk sample was analyzed for concentrations of gamma emitting nuclides (Table C–VII.2, Appendix C).

Naturally occurring K-40 activity was found in all nineteen samples. The activities ranged from 1,140 to 1,400 pCi/l.

No other nuclides were detected, and all required LLDs were met.

b. Food Products

Food product samples were collected at five locations (D-Control, D-Quad 1, D-Quad 2, D-Quad 3 and D-Quad 4) when available. Four locations, (D-Quad 1, D-Quad 2, D-Quad 3 and D-Quad 4) could be affected by Dresden's effluent releases. The following analysis was performed:

Gamma Spectrometry

Samples from all locations were analyzed for gamma emitting nuclides (Table C–VIII.1, Appendix C). No nuclides were detected, and all required LLDs were met.

C. Ambient Gamma Radiation

Ambient gamma radiation levels were measured utilizing Global Dosimetry 110 Environmental ($CaF_2$ and LiF) thermoluminescent dosimeters. Forty-six TLD locations were established around the site. Results of TLD measurements are listed in Tables C–IX.1 to C–IX.3, Appendix C.

Most TLD measurements were below 30 mR/quarter, with a range of 16 to 33 mR/quarter. A comparison of the Inner Ring, Outer Ring, and Other locations' data to the Control Location data, indicate that the ambient gamma radiation levels from the Control location (D-12-01, D-12-02) were comparable.

D. Land Use Survey

A Land Use Survey conducted on 30 August 2006 around the Dresden Nuclear Power Station (DNPS) was performed by EIML for Exelon Nuclear to comply with Section 12.5.2 of the Dresden Offsite Dose Calculation Manual (ODCM). The purpose of the survey was to document the nearest resident or industrial facility, milk producing animal, and livestock in each of the sixteen 22 ½ degree sectors within 10 km around the site. There were no changes required to the DNPS REMP as a result of this survey. The results of this survey are summarized below.

| Distance in Miles from the DNPS Reactor Buildings | | | |
|---|---|---|---|
| Sector | Residence Miles | Livestock Miles | Milk Farm Miles |
| A N | 1.5 | 1.4 | - |
| B NNE | 0.8 | 6.0 | - |
| C NE | 0.8 | 5.8 | - |
| D ENE | 0.7 | - | - |
| E E | 1.1 | - | - |
| F ESE | 1.0 | - | - |
| G SE | 0.6 | - | - |
| H SSE | 0.5 | - | - |
| J S | 0.5 | - | 16.0 |
| K SSW | 3.3 | - | - |
| L SW | 3.6 | - | 11.4 |
| M WSW | 5.8 | - | - |
| N W | 3.5 | 0.5 | - |
| P WNW | 3.7 | 0.5 | - |
| Q NW | 2.6 | 0.5 | - |
| R NNW | 0.8 | 1.0 | - |

E. Errata Data

There was no errata data discovered in 2006.

F. Summary of Results – Inter-Laboratory Comparison Program

The primary laboratory analyzed Performance Evaluation (PE) samples of air particulate, air iodine, milk, soil, vegetation and water matrices (Appendix D). The PE samples, supplied by Analytics Inc., Environmental Resource Associates (ERA) and DOE's Mixed Analyte Performance Evaluation Program (MAPEP), were evaluated against the following pre-set acceptance criteria:

1. Analytics Evaluation Criteria

   Analytics' evaluation report provides a ratio of laboratory results and Analytics' known value. Since flag values are not assigned by Analytics, TBE-ES evaluates the reported ratios based on internal QC requirements, which are based on the DOE MAPEP criteria.

2. ERA Evaluation Criteria

   ERA's evaluation report provides an acceptance range for control and warning limits with associated flag values. ERA's acceptance limits are established per the USEPA, NELAC, state specific PT program requirements or ERA's SOP for the Generation of

Performance Acceptance Limits, as applicable. The acceptance limits are either determined by a regression equation specific to each analyte or a fixed percentage limit promulgated under the appropriate regulatory document.

3. DOE Evaluation Criteria

   MAPEP's evaluation report provides an acceptance range with associated flag values.

   The MAPEP defines three levels of performance: Acceptable (flag = "A"), Acceptable with Warning (flag = "W"), and Not Acceptable (flag = "N"). Performance is considered acceptable when a mean result for the specified analyte is ± 20% of the reference value. Performance is acceptable with warning when a mean result falls in the range from ±20% to ±30% of the reference value (i.e., 20% < bias < 30%). If the bias is greater than 30%, the results are deemed not acceptable.

For the primary laboratory, 24 out of 28 analytes met the specified acceptance criteria. Four samples did not meet the specified acceptance criteria for the following reasons:

1. Teledyne Brown Engineering's MAPEP Series 15 January 2006 soil Cs-134 was evaluated as a false positive, although TBE considered the result a non-detect due to the peak not being identified by the gamma software. MAPEP suggests the Bi-214 is not being differentiated from the Cs-134 peak. When the ratio of activity to uncertainty exceeds 3, TBE will use a key line analysis rather than a weighted mean analysis when evaluating MAPEP non-detects.

2. Teledyne Brown Engineering's MAPEP Series 15 January 2006 Sr-90 in vegetation result of 2.22 Bq/kg exceeded the upper acceptance range of 2.029 Bq/kg. The samples were analyzed in triplicate and the results averaged. One high result of 2.43 Bq/kg biased the submitted results on the high side. TBE was unable to determine the cause for the higher result. The Sr-90 in vegetation results for MAPEP Series 14 and MAPEP Series 16 were acceptable. No client samples were analyzed during the MAPEP Series 14 time period.

3. Teledyne Brown Engineering's MAPEP Series 15 January 2006 Pu-238 and Pu-239/240 in vegetation result of 2.22 Bq/kg failed the required acceptance ranges. TBE was evaluating the current preparation method for vegetation samples, which proved

insufficient for the analyses. TBE does not perform isotopic Pu on client's vegetation samples.

For the secondary laboratory, 21 out of 28 analytes met the specified acceptance criteria. Four samples did not meet the specified acceptance criteria for the following reasons:

1. Environmental Inc.'s ERA November 2006 water I-131 result of 28.4 pCi/L exceeded the upper control limit of 27.3 pCi/L. The reported result was an average of three analyses, results ranged from 25.36 pCi/L to 29.23 pCi/L. A fourth analysis was performed, with a result of 24.89 pCi/L.

2. Environmental Inc.'s MAPEP January 2006 vegetation Pu-238 result of 0.08 Bq/sample exceeded the lower control limit of 0.10 Bq/sample due to incomplete dissolution of the sample.

3. Environmental Inc.'s MAPEP January 2006 air particulate Pu-238 result of 0.03 Bq/sample exceeded the lower control limit of 0.05 Bq/sample due to incomplete dissolution of the sample.

4. Environmental Inc.'s MAPEP January 2006 soil Pu-238, Pu-239/240, U-233/234 and U-238 results of 14.6, 14.6, 13.5 and 15.4 Bq/kg, respectively, exceeded the lower control limits of 42.81, 32.09, 25.9 and 27.2 Bq/kg, respectively, due to incomplete dissolution of the sample.

The Inter-Laboratory Comparison Program provides evidence of "in control" counting systems and methods, and that the laboratories are producing accurate and reliable data.

Intentionally left blank

# APPENDIX A

# RADIOLOGICAL ENVIRONMENTAL MONITORING REPORT SUMMARY

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN — **DOCKET NUMBER:** 50-010, 50-237 & 50-249

**LOCATION OF FACILITY:** MORRIS, IL — **REPORTING PERIOD:** 1ST QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (*LLD*) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED *MEASUREMENTS* |
|---|---|---|---|---|---|---|---|---|
| SURFACE WATER (PCI/LITER) | GR-B | 9 | 4 | 7.2<br>(3/3)<br>( 6.4/ 8.6) | 5.0<br>(6/6)<br>( 3.9/ 8.0) | 7.2<br>(3/3)<br>( 6.4/ 8.6) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | H-3 | 3 | 2000 | 190<br>(0/1)<br>(<190) | 190<br>(0/2)<br>(<188/<192) | 192<br>(0/1)<br>(<192) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | GAMMA | 9 | | | | | | |
| | MN-54 | | 15 | 3<br>(0/3)<br>(<3/<4) | 3<br>(0/6)<br>(<2/<4) | 4<br>(0/3)<br>(<3/<4) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CO-58 | | 15 | 4<br>(0/3)<br>(<3/<4) | 4<br>(0/6)<br>(<3/<5) | 4<br>(0/3)<br>(<3/<5) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | FE-59 | | 30 | 8<br>(0/3)<br>(<6/<10) | 8<br>(0/6)<br>(<6/<10) | 8<br>(0/3)<br>(<7/<10) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CO-60 | | 15 | 4<br>(0/3)<br>(<3/<4) | 4<br>(0/6)<br>(<3/<4) | 4<br>(0/3)<br>(<3/<4) | D-54 CONTROL<br>KANKAKEE RIVER - UPSTREAM<br>8.7 MILES SE OF SITE | 0 |
| | ZN-65 | | 30 | 8<br>(0/3)<br>(<6/<11) | 8<br>(0/6)<br>(<6/<11) | 8<br>(0/3)<br>(<6/<11) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | NB-95 | | 15 | 4<br>(0/3)<br>(<3/<5) | 4<br>(0/6)<br>(<3/<4) | 4<br>(0/3)<br>(<3/<4) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 1ST QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| SURFACE WATER (PCI/LITER) | ZR-95 | | 30 | 7<br>(0/3)<br>(<5/<8) | 7<br>(0/6)<br>(<5/<8) | 7<br>(0/3)<br>(<6/<8) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | I-131 | | 15 | 13<br>(0/3)<br>(<12/<15) | 14<br>(0/6)<br>(<13/<15) | 14<br>(0/3)<br>(<14/<15) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CS-134 | | 15 | 4<br>(0/3)<br>(<3/<5) | 4<br>(0/6)<br>(<3/<5) | 4<br>(0/3)<br>(<3/<5) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CS-137 | | 18 | 3<br>(0/3)<br>(<3/<4) | 4<br>(0/6)<br>(<3/<5) | 4<br>(0/3)<br>(<3/<5) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | BA-140 | | 60 | 28<br>(0/3)<br>(<23/<30) | 28<br>(0/6)<br>(<25/<31) | 29<br>(0/3)<br>(<27/<31) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | LA-140 | | 15 | 9<br>(0/3)<br>(<7/<11) | 9<br>(0/6)<br>(<8/<11) | 10<br>(0/3)<br>(<9/<11) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| GROUND WATER (PCI/LITER) | H-3 | 3 | 2000 | 521<br>(2/3)<br>(<161/722) | N/A | 701<br>(2/2)<br>(680/722) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | GAMMA | 3 | | | | | | |
| | MN-54 | | 15 | 8<br>(0/3)<br>(<7/<9) | N/A | 9<br>(0/1)<br>(<9) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN
**LOCATION OF FACILITY:** MORRIS, IL
**DOCKET NUMBER:** 50-010, 50-237 & 50-249
**REPORTING PERIOD:** 1ST QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| GROUND WATER (PCI/LITER) | CO-58 | | 15 | 8<br>(0/3)<br>(<6/<9) | N/A | 8<br>(0/2)<br>(<6/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | FE-59 | | 30 | 16<br>(0/3)<br>(<14/<18) | N/A | 18<br>(0/1)<br>(<18) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | CO-60 | | 15 | 8<br>(0/3)<br>(<7/<9) | N/A | 9<br>(0/1)<br>(<9) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | ZN-65 | | 30 | 21<br>(0/3)<br>(<17/<23) | N/A | 23<br>(0/1)<br>(<23) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | NB-95 | | 15 | 9<br>(0/3)<br>(<8/<10) | N/A | 9<br>(0/1)<br>(<9) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | ZR-95 | | 30 | 14<br>(0/3)<br>(<11/<18) | N/A | 14<br>(0/2)<br>(<11/<18) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | I-131 | | 15 | 12<br>(0/3)<br>(<11/<13) | N/A | 13<br>(0/1)<br>(<13) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 15 | 11<br>(0/3)<br>(<9/<13) | N/A | 11<br>(0/2)<br>(<9/<13) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 1ST QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| GROUND WATER (PCI/LITER) | CS-137 | | 18 | 8 (0/3) (<7/<9) | N/A | 9 (0/1) (<9) | D-35 INDICATOR DRESDEN LOCK AND DAM 0.8 MILES NW OF SITE | 0 |
| | BA-140 | | 60 | 37 (0/3) (<30/<41) | N/A | 41 (0/1) (<41) | D-35 INDICATOR DRESDEN LOCK AND DAM 0.8 MILES NW OF SITE | 0 |
| | LA-140 | | 15 | 12 (0/3) (<11/<14) | N/A | 14 (0/1) (<14) | D-35 INDICATOR DRESDEN LOCK AND DAM 0.8 MILES NW OF SITE | 0 |
| AIR PARTICULATE (E-3 PCI/CU.METER) | GR-B | 169 | 10 | 18 (156/156) (9/28) | 18 (13/13) (10/28) | 19 (13/13) (13/26) | D-07 INDICATOR CLAY PRODUCTS 2.6 MILES S OF SITE | 0 |
| | GAMMA | 13 | | | | | | |
| | MN-54 | | N/A | 6.0 (0/12) (< 4.0/< 8.1) | 6.7 (0/1) (< 6.7) | 8.1 (0/1) (< 8.1) | D-04 INDICATOR COLLINS ROAD 0.8 MILES W OF SITE | 0 |
| | CO-58 | | N/A | 8.3 (0/12) (< 3.5/<11.3) | 13.1 (0/1) (<13.1) | 13.1 (0/1) (<13.1) | D-12 CONTROL LISBON 10.5 MILES NW OF SITE | 0 |
| | FE-59 | | N/A | 29.9 (0/12) (<23.7/<37.6) | 34.1 (0/1) (<34.1) | 37.6 (0/1) (<37.6) | D-07 INDICATOR CLAY PRODUCTS 2.6 MILES S OF SITE | 0 |
| | CO-60 | | N/A | 5.0 (0/12) (< 2.3/< 8.0) | 3.2 (0/1) (< 3.2) | 8.0 (0/1) (< 8.0) | D-07 INDICATOR CLAY PRODUCTS 2.6 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| **NAME OF FACILITY:** **DRESDEN** | | | | | **DOCKET NUMBER:** | **50-010, 50-237 & 50-249** | | |
|---|---|---|---|---|---|---|---|---|
| **LOCATION OF FACILITY:** **MORRIS, IL** | | | | | **REPORTING PERIOD:** | **1ST QUARTER 2006** | | |
| | | | | **INDICATOR LOCATIONS** | **CONTROL LOCATION** | **LOCATION WITH HIGHEST ANNUAL MEAN** | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| AIR PARTICULATE (E-3 PCI/CU.METER) | ZN-65 | | N/A | 15 (0/12) (<11.3/<20.2) | 14.8 (0/1) (<14.8) | 20.2 (0/1) (<20.2) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | ZRNB-95 | | N/A | 10.9 (0/12) (< 7.0/<13.7) | 9.1 (0/1) (< 9.1) | 13.7 (0/1) (<13.7) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |
| | CS-134 | | 50 | 6.3 (0/12) (< 5.6/< 7.6) | 5.5 (0/1) (< 5.5) | 7.6 (0/1) (< 7.6) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | CS-137 | | 60 | 5.3 (0/12) (< 4.5/< 7.6) | 4.8 (0/1) (< 4.8) | 7.6 (0/1) (< 7.6) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | BALA140 | | N/A | 354.6 (0/12) (<217/<481) | 356 (0/1) (<356) | 481 (0/1) (<481) | D-03 INDICATOR ONSITE 3 0.4 MILES S OF SITE | 0 |
| AIR IODINE (E-3 PCI/CU.METER) | GAMMA I-131 | 169 | 70 | 36 (0/156) (<16/<50) | 37 (0/13) (<25/<53) | 39 (0/13) (<27/<47) | D-45 INDICATOR MCKINLEY WOODS ROAD 1.7 MILES ENE OF SITE | 0 |
| MILK (PCI/LITER) | I-131 | 3 | 1 | N/A | 0.5 (0/3) (< 0.4/< 0.6) | 0.5 (0/3) (< 0.4/< 0.6) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 1ST QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK | GAMMA | 3 | | | | | | |
| (PCI/LITER) | MN-54 | | N/A | N/A | 8<br>(0/3)<br>(<6/<8) | 8<br>(0/3)<br>(<6/<8) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-58 | | N/A | N/A | 8<br>(0/3)<br>(<7/<9) | 8<br>(0/3)<br>(<7/<9) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | FE-59 | | N/A | N/A | 18<br>(0/3)<br>(<16/<20) | 18<br>(0/3)<br>(<16/<20) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-60 | | N/A | N/A | 8<br>(0/3)<br>(<7/<9) | 8<br>(0/3)<br>(<7/<9) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZN-65 | | N/A | N/A | 21<br>(0/3)<br>(<17/<24) | 21<br>(0/3)<br>(<17/<24) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | N/A | 8<br>(0/3)<br>(<7/<9) | 8<br>(0/3)<br>(<7/<9) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CS-134 | | 15 | N/A | 10<br>(0/3)<br>(<7/<11) | 10<br>(0/3)<br>(<7/<11) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CS-137 | | 18 | N/A | 8<br>(0/3)<br>(<7/<9) | 8<br>(0/3)<br>(<7/<9) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 1ST QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 1ST QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | BA-140 | | 60 | N/A | 38 (0/3) (<33/<44) | 38 (0/3) (<33/<44) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | LA-140 | | 15 | N/A | 10 (0/3) (<8/<10) | 10 (0/3) (<8/<10) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| DIRECT RADIATION (MILLI-ROENTGEN/QTR) | TLD-QUARTERLY | 92 | N/A | 27 (90/90) (21/32) | 24 (2/2) (22/25) | 32 (1/1) (32) | D-110-4 INDICATOR* 0.9 MILES SSW | 0 |



* D-201-2 also read 32 mrem.

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: | | 2ND QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | GR-B | 9 | 4 | 6.3<br>(3/3)<br>( 5.3/ 7.7) | 4.4<br>(5/6)<br>(< 3.0/ 5.4) | 6.3<br>(3/3)<br>( 5.3/ 7.7) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | H-3 | 3 | 2000 | 185<br>(0/1)<br>(<185) | 183<br>(0/2)<br>(<183/<183) | 185<br>(0/1)<br>(<185) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | GAMMA | 9 | | | | | | |
| | MN-54 | | 15 | 3<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 3<br>(0/3)<br>(<2/<3) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | CO-58 | | 15 | 3<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 3<br>(0/3)<br>(<2/<3) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | FE-59 | | 30 | 6<br>(0/3)<br>(<6/<7) | 5<br>(0/6)<br>(<2/<7) | 6<br>(0/3)<br>(<6/<7) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | CO-60 | | 15 | 2<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 2<br>(0/3)<br>(<2/<3) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | ZN-65 | | 30 | 6<br>(0/3)<br>(<4/<7) | 5<br>(0/6)<br>(<2/<7) | 6<br>(0/3)<br>(<4/<7) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | NB-95 | | 15 | 3<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 3<br>(0/3)<br>(<2/<3) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 2ND QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| SURFACE WATER (PCI/LITER) | ZR-95 | | 30 | 5<br>(0/3)<br>(<4/<6) | 4<br>(0/6)<br>(<2/<6) | 5<br>(0/3)<br>(<4/<6) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | I-131 | | 15 | 13<br>(0/3)<br>(<11/<15) | 13<br>(0/6)<br>(<9/<15) | 14<br>(0/3)<br>(<12/<15) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CS-134 | | 15 | 3<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 3<br>(0/3)<br>(<2/<3) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | CS-137 | | 18 | 3<br>(0/3)<br>(<2/<3) | 2<br>(0/6)<br>(<1/<3) | 3<br>(0/3)<br>(<2/<3) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | BA-140 | | 60 | 31<br>(0/3)<br>(<25/<41) | 24<br>(0/6)<br>(<18/<34) | 31<br>(0/3)<br>(<25/<41) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | LA-140 | | 15 | 10<br>(0/3)<br>(<8/<12) | 8<br>(0/6)<br>(<5/<10) | 10<br>(0/3)<br>(<8/<12) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| GROUND WATER (PCI/LITER) | H-3 | 4 | 2000 | 556<br>(3/4)<br>(<171/693) | N/A | 684<br>(3/3)<br>(677/693) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | GAMMA | 4 | | | | | | |
| | MN-54 | | 15 | 6<br>(0/4)<br>(<5/<8) | N/A | 6<br>(0/3)<br>(<5/<8) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 2ND QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| GROUND WATER (PCI/LITER) | CO-58 | | 15 | 6 (0/4) (<6/<8) | N/A | 6 (0/3) (<6/<8) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | FE-59 | | 30 | 13 (0/4) (<11/<18) | N/A | 14 (0/3) (<12/<18) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | CO-60 | | 15 | 6 (0/4) (<5/<8) | N/A | 6 (0/3) (<5/<8) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | ZN-65 | | 30 | 14 (0/4) (<12/<21) | N/A | 15 (0/3) (<12/<21) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | NB-95 | | 15 | 6 (0/4) (<5/<9) | N/A | 7 (0/3) (<6/<9) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | ZR-95 | | 30 | 11 (0/4) (<9/<15) | N/A | 11 (0/3) (<10/<15) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | I-131 | | 15 | 16 (0/4) (<13/<26) | N/A | 17 (0/3) (<13/<26) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | CS-134 | | 15 | 7 (0/4) (<5/<11) | N/A | 7 (0/3) (<5/<11) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 2ND QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| GROUND WATER (PCI/LITER) | CS-137 | | 18 | 6 (0/4) (<5/<9) | N/A | 7 (0/3) (<5/<9) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | BA-140 | | 60 | 37 (0/4) (<30/<48) | N/A | 39 (0/3) (<32/<48) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | LA-140 | | 15 | 12 (0/4) (<10/<15) | N/A | 13 (0/3) (<11/<15) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| FISH (PCI/KG WET) | GAMMA MN-54 | 4 | 130 | 62 (0/2) (<62/<62) | 50 (0/2) (<47/<54) | 62 (0/2) (<62/<62) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CO-58 | | 130 | 86 (0/2) (<84/<88) | 71 (0/2) (<71/<71) | 86 (0/2) (<84/<88) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | FE-59 | | 260 | 227 (0/2) (<217/<237) | 176 (0/2) (<176/<176) | 227 (0/2) (<217/<237) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CO-60 | | 130 | 58 (0/2) (<57/<59) | 55 (0/2) (<50/<60) | 58 (0/2) (<57/<59) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | ZN-65 | | 260 | 152 (0/2) (<141/<163) | 125 (0/2) (<123/<126) | 152 (0/2) (<141/<163) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 2ND QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| FISH (PCI/KG WET) | ZRNB-95 | | N/A | 85 (0/2) (<79/<91) | 76 (0/2) (<75/<77) | 85 (0/2) (<79/<91) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-134 | | 130 | 63 (0/2) (<57/<69) | 52 (0/2) (<47/<56) | 63 (0/2) (<57/<69) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-137 | | 150 | 65 (0/2) (<64/<67) | 54 (0/2) (<54/<55) | 65 (0/2) (<64/<67) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 660 (0/2) (<580/<739) | 547 (0/2) (<521/<573) | 660 (0/2) (<580/<739) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| SEDIMENT (PCI/KG DRY) | GAMMA | 1 | | | | | | |
| | MN-54 | | N/A | 97 (0/1) (<97) | N/A | 97 (0/1) (<97) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-58 | | N/A | 101 (0/1) (<101) | N/A | 101 (0/1) (<101) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | FE-59 | | N/A | 216 (0/1) (<216) | N/A | 216 (0/1) (<216) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-60 | | N/A | 99 (0/1) (<99) | N/A | 99 (0/1) (<99) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 2ND QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| SEDIMENT (PCI/KG DRY) | ZN-65 | | N/A | 305 (0/1) (<305) | N/A | 305 (0/1) (<305) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | ZRNB-95 | | N/A | 136 (0/1) (<136) | N/A | 136 (0/1) (<136) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 150 | 126 (0/1) (<126) | N/A | 126 (0/1) (<126) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-137 | | 180 | 142 (1/1) (142) | N/A | 142 (1/1) (142) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 246 (0/1) (<246) | N/A | 246 (0/1) (<246) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| AIR PARTICULATE (E-3 PCI/CU.METER) | GR-B | 169 | 10 | 14 (153/156) (<5/22) | 15 (13/13) (6/18) | 15 (13/13) (6/22) | D-07 INDICATOR CLAY PRODUCTS 2.6 MILES S OF SITE | 0 |
| | GAMMA | 13 | | | | | | |
| | MN-54 | | N/A | 3.2 (0/12) (< 1.7/< 4.8) | 3.1 (0/1) (< 3.1) | 4.8 (0/1) (< 4.8) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | CO-58 | | N/A | 4.7 (0/12) (< 2.3/< 6.2) | 1.6 (0/1) (< 1.6) | 6.2 (0/1) (< 6.2) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: | | 2ND QUARTER 2006 | |
| | | | | *INDICATOR LOCATIONS* | *CONTROL LOCATION* | *LOCATION WITH HIGHEST ANNUAL MEAN* | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| AIR PARTICULATE (E-3 PCI/CU.METER) | FE-59 | | N/A | 12.8 (0/12) (< 8.1/<20.8) | 7.9 (0/1) (< 7.9) | 20.8 (0/1) (<20.8) | D-53 INDICATOR GRUDY COUNTY ROAD 2.1 MILES SSE OF SITE | 0 |
| | CO-60 | | N/A | 3.2 (0/12) (< 1.8/< 4.0) | 3.0 (0/1) (< 3.0) | 4.0 (0/1) (< 4.0) | D-55 INDICATOR RIDGE ROAD 4.3 MILES N OF SITE | 0 |
| | ZN-65 | | N/A | 7.0 (0/12) (< 3.8/<11.4) | 5.5 (0/1) (< 5.5) | 11.4 (0/1) (<11.4) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | 5.0 (0/12) (< 2.8/< 7.5) | 4.1 (0/1) (< 4.1) | 7.5 (0/1) (< 7.5) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | CS-134 | | 50 | 2.8 (0/12) (< 1.5/< 4.4) | 2.0 (0/1) (< 2.0) | 4.4 (0/1) (< 4.4) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| | CS-137 | | 60 | 2.7 (0/12) (< 1.1/< 4.2) | 2.2 (0/1) (< 2.2) | 4.2 (0/1) (< 4.2) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | BALA140 | | N/A | 88 (0/12) (<15.4/<164) | 88 (0/1) (<88) | 164 (0/1) (<164) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| AIR IODINE (E-3 PCI/CU.METER) | GAMMA I-131 | 169 | 70 | 51 (0/156) (<22/<70) | 49 (0/13) (<32/<66) | 54 (0/13) (<39/<69) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 2ND QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | I-131 | 6 | 1 | N/A | 1.0 (0/6) (< 0.3/< 2.9) | 1.0 (0/6) (< 0.3/< 2.9) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | GAMMA | 6 | | | | | | |
| | MN-54 | | N/A | N/A | 8 (0/6) (<5/<10) | 8 (0/6) (<5/<10) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CO-58 | | N/A | N/A | 8 (0/6) (<5/<9) | 8 (0/6) (<5/<9) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | FE-59 | | N/A | N/A | 19 (0/6) (<12/<23) | 19 (0/6) (<12/<23) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CO-60 | | N/A | N/A | 9 (0/6) (<6/<12) | 9 (0/6) (<6/<12) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | ZN-65 | | N/A | N/A | 20 (0/6) (<12/<25) | 20 (0/6) (<12/<25) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | N/A | 9 (0/6) (<5/<11) | 9 (0/6) (<5/<11) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CS-134 | | 15 | N/A | 9 (0/6) (<5/<13) | 9 (0/6) (<5/<13) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 2ND QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 2ND QUARTER 2006 | | | |
| | | | | INDICATOR | CONTROL | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| | | | | LOCATIONS | LOCATION | | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | CS-137 | | 18 | N/A | 8 (0/6) (<5/<11) | 8 (0/6) (<5/<11) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | BA-140 | | 60 | N/A | 41 (0/6) (<27/<51) | 41 (0/6) (<27/<51) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | LA-140 | | 15 | N/A | 13 (0/6) (<9/<15) | 13 (0/6) (<9/<15) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| DIRECT RADIATION (MILLI-ROENTGEN/QTR.) | TLD-QUARTERLY | 92 | N/A | 25 (90/90) (21/33) | 26 (2/2) (24/27) | 33 (1/1) (33) | D-03-2 INDICATOR* ONSITE 3 0.4 MILES S | 0 |



* D-201-1 also read 33 mrem.

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 3RD QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | GR-B | 12 | 4 | 7.8<br>(3/3)<br>( 6.7/ 9.8) | 6.3<br>(9/9)<br>( 5.1/ 8.2) | 7.8<br>(3/3)<br>( 6.7/ 9.8) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | H-3 | 3 | 2000 | 185<br>(0/1)<br>(<185) | 185<br>(0/2)<br>(<184/<185) | 185<br>(0/1)<br>(<185) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | GAMMA | 12 | | | | | | |
| | MN-54 | | 15 | 1<br>(0/3)<br>(<1/<2) | 2<br>(0/9)<br>(<1/<3) | 2<br>(0/3)<br>(<1/<3) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CO-58 | | 15 | 2<br>(0/3)<br>(<1/<3) | 2<br>(0/9)<br>(<1/<4) | 2<br>(0/3)<br>(<1/<4) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | FE-59 | | 30 | 4<br>(0/3)<br>(<3/<6) | 4<br>(0/9)<br>(<2/<9) | 5<br>(0/3)<br>(<2/<9) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CO-60 | | 15 | 2<br>(0/3)<br>(<1/<2) | 2<br>(0/9)<br>(<1/<4) | 2<br>(0/3)<br>(<1/<4) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | ZN-65 | | 30 | 3<br>(0/3)<br>(<2/<5) | 3<br>(0/9)<br>(<2/<7) | 4<br>(0/3)<br>(<2/<7) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | NB-95 | | 15 | 2<br>(0/3)<br>(<1/<3) | 2<br>(0/9)<br>(<1/<4) | 2<br>(0/3)<br>(<1/<4) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 3RD QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | ZR-95 | | 30 | 3<br>(0/3)<br>(<2/<5) | 4<br>(0/9)<br>(<2/<7) | 4<br>(0/3)<br>(<2/<7) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | I-131 | | 15 | 12<br>(0/3)<br>(<10/<14) | 13<br>(0/9)<br>(<8/<15) | 14<br>(0/3)<br>(<14/<15) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CS-134 | | 15 | 1<br>(0/3)<br>(<1/<2) | 2<br>(0/9)<br>(<1/<3) | 2<br>(0/3)<br>(<1/<3) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CS-137 | | 18 | 2<br>(0/3)<br>(<1/<3) | 2<br>(0/9)<br>(<1/<4) | 2<br>(0/3)<br>(<1/<4) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | BA-140 | | 60 | 19<br>(0/3)<br>(<17/<21) | 21<br>(0/9)<br>(<16/<30) | 22<br>(0/3)<br>(<18/<30) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | LA-140 | | 15 | 6<br>(0/3)<br>(<5/<8) | 6<br>(0/9)<br>(<4/<9) | 7<br>(0/3)<br>(<6/<8) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| GROUND WATER (PCI/LITER) | H-3 | 4 | 2000 | 531<br>(3/4)<br>(<174/729) | N/A | 649<br>(3/3)<br>(507/729) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | GAMMA | 4 | | | | | | |
| | MN-54 | | 15 | 3<br>(0/4)<br>(<1/<6) | N/A | 3<br>(0/3)<br>(<1/<6) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 3RD QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| GROUND WATER (PCI/LITER) | CO-58 | | 15 | 3<br>(0/4)<br>(<1/<6) | N/A | 3<br>(0/3)<br>(<1/<6) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | FE-59 | | 30 | 5<br>(0/4)<br>(<3/<11) | N/A | 6<br>(0/3)<br>(<3/<11) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | CO-60 | | 15 | 3<br>(0/4)<br>(<1/<7) | N/A | 3<br>(0/3)<br>(<1/<7) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZN-65 | | 30 | 5<br>(0/4)<br>(<2/<12) | N/A | 6<br>(0/3)<br>(<2/<12) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | NB-95 | | 15 | 3<br>(0/4)<br>(<1/<6) | N/A | 3<br>(0/3)<br>(<1/<6) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZR-95 | | 30 | 4<br>(0/4)<br>(<2/<9) | N/A | 5<br>(0/3)<br>(<2/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | I-131 | | 15 | 12<br>(0/4)<br>(<5/<14) | N/A | 14<br>(0/1)<br>(<14) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 15 | 2<br>(0/4)<br>(<1/<4) | N/A | 2<br>(0/3)<br>(<1/<4) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 3RD QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| GROUND WATER (PCI/LITER) | CS-137 | | 18 | 3 (0/4) (<1/<7) | N/A | 3 (0/3) (<1/<7) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | BA-140 | | 60 | 20 (0/4) (<11/<32) | N/A | 20 (0/3) (<11/<32) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | LA-140 | | 15 | 7 (0/4) (<4/<11) | N/A | 7 (0/3) (<4/<11) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| AIR PARTICULATE (E-3 PCI/CU.METER) | GR-B | 179 | 10 | 21 (166/166) (10/37) | 23 (13/13) (16/35) | 23 (13/13) (15/37) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |
| | GAMMA | 14 | | | | | | |
| | MN-54 | | N/A | 3.1 (0/13) (< 1.7/< 6.5) | 3.1 (0/1) (< 3.1) | 6.5 (0/1) (< 6.5) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CO-58 | | N/A | 4.9 (0/13) (< 1.7/< 9.4) | 5.4 (0/1) (< 5.4) | 9.4 (0/1) (< 9.4) | D-03 INDICATOR ONSITE 3 0.4 MILES S OF SITE | 0 |
| | FE-59 | | N/A | 17.9 (0/13) (< 9.1/<36.4) | 13.7 (0/1) (<13.7) | 36.4 (0/1) (<36.4) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CO-60 | | N/A | 3.0 (0/13) (< 1.4/< 5.2) | 1.7 (0/1) (< 1.7) | 5.2 (0/1) (< 5.2) | D-03 INDICATOR ONSITE 3 0.4 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 3RD QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| AIR PARTICULATE (E-3 PCI/CU.METER) | ZN-65 | | N/A | 7.2 (0/13) (< 3.7/<11.8) | 6.1 (0/1) (< 6.1) | 11.8 (0/1) (<11.8) | D-03 INDICATOR ONSITE 3 0.4 MILES S OF SITE | 0 |
| | ZRNB-95 | | N/A | 6.2 (0/13) (< 3.9/<11) | 6.9 (0/1) (< 6.9) | 11 (0/1) (<11) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CS-134 | | 50 | 2.6 (0/13) (< 1.5/< 4.5) | 2.7 (0/1) (< 2.7) | 4.5 (0/1) (< 4.5) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CS-137 | | 60 | 2.6 (0/13) (< 1.6/< 5.0) | 3.2 (0/1) (< 3.2) | 5.0 (0/1) (< 5.0) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | BALA140 | | N/A | 257.8 (0/13) (<121/<458) | 279 (0/1) (<279) | 458 (0/1) (<458) | D-14 INDICATOR CHANNAHON 3.7 MILES NE OF SITE | 0 |
| AIR IODINE (E-3 PCI/CU.METER) | GAMMA I-131 | 179 | 70 | 48 (0/166) (<10/<167) | 49 (0/13) (<18/<67) | 56 (0/10) (<16/<167) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| MILK (PCI/LITER) | I-131 | 6 | 1 | N/A | 0.5 (0/6) (< 0.3/< 0.8) | 0.5 (0/6) (< 0.3/< 0.8) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 3RD QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK | GAMMA | 6 | | | | | | |
| (PCI/LITER) | MN-54 | | N/A | N/A | 7<br>(0/6)<br>(<6/<7) | 7<br>(0/6)<br>(<6/<7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-58 | | N/A | N/A | 7<br>(0/6)<br>(<6/<8) | 7<br>(0/6)<br>(<6/<8) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | FE-59 | | N/A | N/A | 16<br>(0/6)<br>(<13/<18) | 16<br>(0/6)<br>(<13/<18) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-60 | | N/A | N/A | 7<br>(0/6)<br>(<5/<7) | 7<br>(0/6)<br>(<5/<7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZN-65 | | N/A | N/A | 16<br>(0/6)<br>(<12/<19) | 16<br>(0/6)<br>(<12/<19) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | N/A | 7<br>(0/6)<br>(<6/<9) | 7<br>(0/6)<br>(<6/<9) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CS-134 | | 15 | N/A | 6<br>(0/6)<br>(<4/<8) | 6<br>(0/6)<br>(<4/<8) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CS-137 | | 18 | N/A | 6<br>(0/6)<br>(<5/<8) | 6<br>(0/6)<br>(<5/<8) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 3RD QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| MILK (PCI/LITER) | BA-140 | | 60 | N/A | 36 (0/6) (<29/<44) | 36 (0/6) (<29/<44) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | LA-140 | | 15 | N/A | 11 (0/6) (<8/<14) | 11 (0/6) (<8/<14) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| VEGETATION (PCI/KG WET) | GAMMA | 10 | | | | | | |
| | MN-54 | | N/A | 13 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 17 (0/2) (<15/<19) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | CO-58 | | N/A | 14 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 16 (0/2) (<9/<23) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | FE-59 | | N/A | 29 (0/8) (<8/<50) | 20 (0/2) (<4/<35) | 31 (0/2) (<28/<34) | D-QUAD 3 INDICATOR JIM BLOOM 3.9 MILES SSW OF SITE | 0 |
| | CO-60 | | N/A | 13 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 18 (0/2) (<14/<23) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | ZN-65 | | N/A | 30 (0/8) (<8/<47) | 17 (0/2) (<4/<30) | 33 (0/2) (<19/<47) | D-QUAD 1 INDICATOR CHRIS LOCKNAR 2.8 MILES NE OF SITE | 0 |
| | ZRNB-95 | | N/A | 14 (0/8) (<3/<24) | 8 (0/2) (<2/<15) | 16 (0/2) (<9/<24) | D-QUAD 1 INDICATOR CHRIS LOCKNAR 2.8 MILES NE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 3RD QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 3RD QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| VEGETATION (PCI/KG WET) | I-131 | | 60 | 38<br>(0/8)<br>(<8/<55) | 23<br>(0/2)<br>(<4/<42) | 51<br>(0/2)<br>(<47/<55) | D-QUAD 4 INDICATOR<br>J.D. CARMICHAEL<br>1.6 MILES NNW OF SITE | 0 |
| | CS-134 | | 60 | 11<br>(0/8)<br>(<3/<18) | 7<br>(0/2)<br>(<1/<13) | 12<br>(0/2)<br>(<6/<18) | D-QUAD 1 INDICATOR<br>CHRIS LOCKNAR<br>2.8 MILES NE OF SITE | 0 |
| | CS-137 | | 80 | 13<br>(0/8)<br>(<3/<21) | 9<br>(0/2)<br>(<2/<17) | 15<br>(0/2)<br>(<8/<21) | D-QUAD 1 INDICATOR<br>CHRIS LOCKNAR<br>2.8 MILES NE OF SITE | 0 |
| | BALA140 | | N/A | 30<br>(0/8)<br>(<5/<55) | 10<br>(0/2)<br>(<2/<18) | 49<br>(0/2)<br>(<42/<55) | D-QUAD 4 INDICATOR<br>J.D. CARMICHAEL<br>1.6 MILES NNW OF SITE | 0 |
| DIRECT RADIATION (MILLI-ROENTGEN/QTR.) | TLD-QUARTERLY | 92 | N/A | 21<br>(90/90)<br>(16/27) | 20<br>(2/2)<br>(19/20) | 27<br>(1/1)<br>(27) | D-110-4 INDICATOR*<br><br>0.9 MILES SSW | 0 |



* D-201-2 also read 27 mrem.

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 4TH QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | GR-B | 12 | 4 | 6.5<br>(3/3)<br>( 4.7/ 8.5) | 5.5<br>(9/9)<br>( 3.7/ 7.9) | 6.5<br>(3/3)<br>( 4.7/ 8.5) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | H-3 | 4 | 2000 | 236<br>(1/1)<br>(236) | 444<br>(1/3)<br>(<181/968) | 968<br>(1/1)<br>(968) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | GAMMA | 12 | | | | | | |
| | MN-54 | | 15 | 4<br>(0/3)<br>(<2/<8) | 3<br>(0/9)<br>(<1/<8) | 4<br>(0/3)<br>(<2/<8) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CO-58 | | 15 | 5<br>(0/3)<br>(<2/<10) | 3<br>(0/9)<br>(<1/<8) | 5<br>(0/3)<br>(<2/<10) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | FE-59 | | 30 | 10<br>(0/3)<br>(<5/<21) | 6<br>(0/9)<br>(<2/<20) | 10<br>(0/3)<br>(<5/<21) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | CO-60 | | 15 | 4<br>(0/3)<br>(<2/<8) | 2<br>(0/9)<br>(<1/<6) | 4<br>(0/3)<br>(<2/<8) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | ZN-65 | | 30 | 9<br>(0/3)<br>(<3/<17) | 5<br>(0/9)<br>(<1/<13) | 9<br>(0/3)<br>(<3/<17) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | NB-95 | | 15 | 5<br>(0/3)<br>(<2/<10) | 3<br>(0/9)<br>(<1/<10) | 5<br>(0/3)<br>(<2/<10) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | 4TH QUARTER 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | ZR-95 | | 30 | 9<br>(0/3)<br>(<3/<18) | 5<br>(0/9)<br>(<1/<16) | 9<br>(0/3)<br>(<3/<18) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | I-131 | | 15 | 11<br>(0/3)<br>(<8/<15) | 11<br>(0/9)<br>(<7/<14) | 11<br>(0/3)<br>(<9/<14) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | CS-134 | | 15 | 4<br>(0/3)<br>(<2/<7) | 2<br>(0/9)<br>(<1/<7) | 4<br>(0/3)<br>(<2/<7) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CS-137 | | 18 | 4<br>(0/3)<br>(<2/<7) | 3<br>(0/9)<br>(<1/<8) | 4<br>(0/3)<br>(<2/<8) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | BA-140 | | 60 | 19<br>(0/3)<br>(<11/<26) | 19<br>(0/9)<br>(<9/<30) | 20<br>(0/3)<br>(<12/<30) | D-52 CONTROL<br>DESPLAINES RIVER - UPSTREAM<br>1.1 MILES ESE OF SITE | 0 |
| | LA-140 | | 15 | 7<br>(0/3)<br>(<4/<11) | 6<br>(0/9)<br>(<3/<12) | 8<br>(0/3)<br>(<4/<12) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| GROUND WATER (PCI/LITER) | H-3 | 4 | 2000 | 472<br>(3/4)<br>(<131/728) | N/A | 585<br>(3/3)<br>(340/728) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | GAMMA | 4 | | | | | | |
| | MN-54 | | 15 | 2<br>(0/4)<br>(<0/<4) | N/A | 2<br>(0/3)<br>(<0/<4) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 4TH QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| GROUND WATER (PCI/LITER) | CO-58 | | 15 | 2<br>(0/4)<br>(<0/<5) | N/A | 2<br>(0/3)<br>(<0/<5) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | FE-59 | | 30 | 4<br>(0/4)<br>(<1/<9) | N/A | 5<br>(0/3)<br>(<1/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | CO-60 | | 15 | 2<br>(0/4)<br>(<0/<4) | N/A | 2<br>(0/3)<br>(<0/<4) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZN-65 | | 30 | 4<br>(0/4)<br>(<1/<10) | N/A | 5<br>(0/3)<br>(<1/<10) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | NB-95 | | 15 | 2<br>(0/4)<br>(<0/<6) | N/A | 3<br>(0/3)<br>(<0/<6) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZR-95 | | 30 | 3<br>(0/4)<br>(<1/<8) | N/A | 4<br>(0/3)<br>(<1/<8) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | I-131 | | 15 | 9<br>(0/4)<br>(<1/<14) | N/A | 11<br>(0/1)<br>(<11) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 15 | 2<br>(0/4)<br>(<0/<4) | N/A | 2<br>(0/3)<br>(<0/<4) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN | **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL | **REPORTING PERIOD:** 4TH QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| GROUND WATER (PCI/LITER) | CS-137 | | 18 | 2<br>(0/4)<br>(<0/<4) | N/A | 2<br>(0/3)<br>(<0/<4) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | BA-140 | | 60 | 15<br>(0/4)<br>(<3/<22) | N/A | 15<br>(0/1)<br>(<15) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | LA-140 | | 15 | 5<br>(0/4)<br>(<1/<9) | N/A | 5<br>(0/3)<br>(<1/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| FISH (PCI/KG WET) | GAMMA | 4 | | | | | | |
| | MN-54 | | 130 | 77<br>(0/2)<br>(<75/<80) | 51<br>(0/2)<br>(<38/<64) | 77<br>(0/2)<br>(<75/<80) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | CO-58 | | 130 | 82<br>(0/2)<br>(<70/<95) | 65<br>(0/2)<br>(<65/<66) | 82<br>(0/2)<br>(<70/<95) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | FE-59 | | 260 | 208<br>(0/2)<br>(<201/<215) | 169<br>(0/2)<br>(<149/<189) | 208<br>(0/2)<br>(<201/<215) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | CO-60 | | 130 | 53<br>(0/2)<br>(<49/<56) | 50<br>(0/2)<br>(<46/<53) | 53<br>(0/2)<br>(<49/<56) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | ZN-65 | | 260 | 155<br>(0/2)<br>(<125/<184) | 139<br>(0/2)<br>(<101/<176) | 155<br>(0/2)<br>(<125/<184) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 4TH QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| FISH (PCI/KG WET) | ZRNB-95 | | N/A | 93 (0/2) (<89/<97) | 71 (0/2) (<55/<87) | 93 (0/2) (<89/<97) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-134 | | 130 | 69 (0/2) (<68/<69) | 56 (0/2) (<48/<64) | 69 (0/2) (<68/<69) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-137 | | 150 | 72 (0/2) (<70/<73) | 58 (0/2) (<47/<68) | 72 (0/2) (<70/<73) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 377 (0/2) (<356/<397) | 337 (0/2) (<293/<381) | 377 (0/2) (<356/<397) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| SEDIMENT (PCI/KG DRY) | GAMMA | 1 | | | | | | |
| | MN-54 | | N/A | 45 (0/1) (<45) | N/A | 45 (0/1) (<45) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-58 | | N/A | 36 (0/1) (<36) | N/A | 36 (0/1) (<36) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | FE-59 | | N/A | 108 (0/1) (<108) | N/A | 108 (0/1) (<108) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-60 | | N/A | 40 (0/1) (<40) | N/A | 40 (0/1) (<40) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** 4TH QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| SEDIMENT (PCI/KG DRY) | ZN-65 | | N/A | 90 (0/1) (<90) | N/A | 90 (0/1) (<90) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | ZRNB-95 | | N/A | 54 (0/1) (<54) | N/A | 54 (0/1) (<54) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 150 | 38 (0/1) (<38) | N/A | 38 (0/1) (<38) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-137 | | 180 | 86 (1/1) (86) | N/A | 86 (1/1) (86) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 102 (0/1) (<102) | N/A | 102 (0/1) (<102) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| AIR PARTICULATE (E-3 PCI/CU.METER) | GR-B | 182 | 10 | 22 (169/169) (10/39) | 22 (13/13) (16/32) | 25 (13/13) (14/39) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| | GAMMA | 14 | | | | | | |
| | MN-54 | | N/A | 2.3 (0/13) (< 1.1/< 3.3) | 1.1 (0/1) (< 1.1) | 3.3 (0/1) (< 3.3) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |
| | CO-58 | | N/A | 2.7 (0/13) (< 1.4/< 4.0) | 2.2 (0/1) (< 2.2) | 4.0 (0/1) (< 4.0) | D-45 INDICATOR MCKINLEY WOODS ROAD 1.7 MILES ENE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 4TH QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| AIR PARTICULATE (E-3 PCI/CU.METER) | FE-59 | | N/A | 7.3 (0/13) (< 4.5/< 9.8) | 4.5 (0/1) (< 4.5) | 9.8 (0/1) (< 9.8) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CO-60 | | N/A | 2.4 (0/13) (< 1.1/< 3.8) | 1.4 (0/1) (< 1.4) | 3.8 (0/1) (< 3.8) | D-55 INDICATOR RIDGE ROAD 4.3 MILES N OF SITE | 0 |
| | ZN-65 | | N/A | 5.0 (0/13) (< 2.6/< 7.8) | 3.0 (0/1) (< 3.0) | 7.8 (0/1) (< 7.8) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | 2.8 (0/13) (< 1.3/< 3.7) | 1.6 (0/1) (< 1.6) | 3.7 (0/1) (< 3.7) | D-08 INDICATOR PRAIRIE PARK 3.8 MILES SW OF SITE | 0 |
| | CS-134 | | 50 | 2.5 (0/13) (< 1.2/< 3.2) | 1.4 (0/1) (< 1.4) | 3.2 (0/1) (< 3.2) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |
| | CS-137 | | 60 | 2.4 (0/13) (< 1.1/< 3.1) | 1.3 (0/1) (< 1.3) | 3.1 (0/1) (< 3.1) | D-07 INDICATOR CLAY PRODUCTS 2.6 MILES S OF SITE | 0 |
| | BALA140 | | N/A | 13.2 (0/13) (< 7.8/<23.7) | 14.7 (0/1) (<14.7) | 23.7 (0/1) (<23.7) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |
| AIR IODINE (E-3 PCI/CU.METER) | GAMMA I-131 | 182 | 70 | 44 (0/169) (<12/<69) | 49 (0/13) (<27/<66) | 49 (0/13) (<27/<66) | D-12 CONTROL LISBON 10.5 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN
**LOCATION OF FACILITY:** MORRIS, IL
**DOCKET NUMBER:** 50-010, 50-237 & 50-249
**REPORTING PERIOD:** 4TH QUARTER 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| MILK (PCI/LITER) | I-131 | 4 | 1 | N/A | 0.5<br>(0/4)<br>(< 0.3/< 0.7) | 0.5<br>(0/4)<br>(< 0.3/< 0.7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | GAMMA | 4 | | | | | | |
| | MN-54 | | N/A | N/A | 6<br>(0/4)<br>(<5/<6) | 6<br>(0/4)<br>(<5/<6) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-58 | | N/A | N/A | 6<br>(0/4)<br>(<5/<7) | 6<br>(0/4)<br>(<5/<7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | FE-59 | | N/A | N/A | 15<br>(0/4)<br>(<14/<17) | 15<br>(0/4)<br>(<14/<17) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CO-60 | | N/A | N/A | 6<br>(0/4)<br>(<5/<7) | 6<br>(0/4)<br>(<5/<7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZN-65 | | N/A | N/A | 13<br>(0/4)<br>(<10/<16) | 13<br>(0/4)<br>(<10/<16) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | N/A | 6<br>(0/4)<br>(<6/<7) | 6<br>(0/4)<br>(<6/<7) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |
| | CS-134 | | 15 | N/A | 5<br>(0/4)<br>(<5/<6) | 5<br>(0/4)<br>(<5/<6) | D-25 CONTROL<br>BIROS FARM<br>11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM 4TH QUARTER SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: 4TH QUARTER 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | CS-137 | - | 18 | N/A | 6 (0/4) (<5/<6) | 6 (0/4) (<5/<6) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | BA-140 | | 60 | N/A | 43 (0/4) (<40/<49) | 43 (0/4) (<40/<49) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | LA-140 | | 15 | N/A | 11 (0/4) (<8/<14) | 11 (0/4) (<8/<14) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| DIRECT RADIATION (MILLI-ROENTGEN/QTR.) | TLD-QUARTERLY | 92 | N/A | 25 (90/90) (19/32) | 22 (2/2) (20/23) | 32 (1/1) (32) | D-201-2 INDICATOR 4.8 MILES N | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | ANNUAL 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | GR-B | 42 | 4 | 7.0<br>(12/12)<br>( 4.7/ 9.8) | 5.4<br>(29/30)<br>(< 3.0/ 8.2) | 7.0<br>(12/12)<br>( 4.7/ 9.8) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | H-3 | 13 | 2000 | 199<br>(1/4)<br>(<185/236) | 272<br>(1/9)<br>(<181/968) | 968<br>(1/1)<br>(968) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | GAMMA | 42 | | | | | | |
| | MN-54 | | 15 | 3<br>(0/12)<br>(<1/<8) | 2<br>(0/30)<br>(<1/<8) | 3<br>(0/6)<br>(<1/<8) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CO-58 | | 15 | 3<br>(0/12)<br>(<1/<10) | 3<br>(0/30)<br>(<1/<8) | 3<br>(0/12)<br>(<1/<10) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | FE-59 | | 30 | 7<br>(0/12)<br>(<3/<21) | 6<br>(0/30)<br>(<2/<20) | 8<br>(0/6)<br>(<2/<20) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |
| | CO-60 | | 15 | 3<br>(0/12)<br>(<1/<8) | 2<br>(0/30)<br>(<1/<6) | 3<br>(0/12)<br>(<1/<8) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | ZN-65 | | 30 | 6<br>(0/12)<br>(<2/<17) | 5<br>(0/30)<br>(<1/<13) | 6<br>(0/12)<br>(<2/<17) | D-51 INDICATOR<br>DRESDEN LOCK AND DAM - DOWNSTREAM<br>0.8 MILES NW OF SITE | 0 |
| | NB-95 | | 15 | 3<br>(0/12)<br>(<1/<10) | 3<br>(0/30)<br>(<1/<10) | 4<br>(0/6)<br>(<1/<10) | D-57 CONTROL<br>KANKAKEE RIVER AT WILL ROAD(CONTROL)<br>2.0 MILES SE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | ANNUAL 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SURFACE WATER (PCI/LITER) | ZR-95 | | 30 | 6 (0/12) (<2/<18) | 5 (0/30) (<1/<16) | 6 (0/6) (<2/<16) | D-57 CONTROL KANKAKEE RIVER AT WILL ROAD(CONTROL) 2.0 MILES SE OF SITE | 0 |
| | I-131 | | 15 | 12 (0/12) (<8/<15) | 13 (0/30) (<7/<15) | 13 (0/12) (<9/<15) | D-52 CONTROL DESPLAINES RIVER - UPSTREAM 1.1 MILES ESE OF SITE | 0 |
| | CS-134 | | 15 | 3 (0/12) (<1/<7) | 2 (0/30) (<1/<7) | 3 (0/12) (<1/<7) | D-51 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-137 | | 18 | 3 (0/12) (<1/<7) | 3 (0/30) (<1/<8) | 3 (0/6) (<1/<8) | D-57 CONTROL KANKAKEE RIVER AT WILL ROAD(CONTROL) 2.0 MILES SE OF SITE | 0 |
| | BA-140 | | 60 | 24 (0/12) (<11/<41) | 22 (0/30) (<9/<34) | 25 (0/12) (<12/<34) | D-52 CONTROL DESPLAINES RIVER - UPSTREAM 1.1 MILES ESE OF SITE | 0 |
| | LA-140 | | 15 | 8 (0/12) (<4/<12) | 7 (0/30) (<3/<12) | 8 (0/12) (<4/<11) | D-52 CONTROL DESPLAINES RIVER - UPSTREAM 1.1 MILES ESE OF SITE | 0 |
| GROUND WATER (PCI/LITER) | H-3 | 15 | 2000 | 520 (11/15) (<131/729) | N/A | 651 (11/11) (340/729) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |
| | GAMMA | 15 | | | | | | |
| | MN-54 | | 15 | 4 (0/15) (<0/<9) | N/A | 4 (0/11) (<0/<8) | D-23 INDICATOR THORSEN WELL 0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | | 50-010, 50-237 & 50-249 | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | | ANNUAL 2006 | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| GROUND WATER (PCI/LITER) | CO-58 | | 15 | 4<br>(0/15)<br>(<0/<9) | N/A | 5<br>(0/11)<br>(<0/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | FE-59 | | 30 | 9<br>(0/15)<br>(<1/<18) | N/A | 9<br>(0/11)<br>(<1/<18) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | CO-60 | | 15 | 4<br>(0/15)<br>(<0/<9) | N/A | 5<br>(0/11)<br>(<0/<8) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZN-65 | | 30 | 10<br>(0/15)<br>(<1/<23) | N/A | 10<br>(0/11)<br>(<1/<23) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | NB-95 | | 15 | 5<br>(0/15)<br>(<0/<10) | N/A | 5<br>(0/11)<br>(<0/<10) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | ZR-95 | | 30 | 8<br>(0/15)<br>(<1/<18) | N/A | 8<br>(0/11)<br>(<1/<18) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | I-131 | | 15 | 11<br>(0/15)<br>(<1/<14) | N/A | 13<br>(0/4)<br>(<11/<14) | D-35 INDICATOR<br>DRESDEN LOCK AND DAM<br>0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 15 | 5<br>(0/15)<br>(<0/<13) | N/A | 5<br>(0/11)<br>(<0/<13) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: ANNUAL 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| GROUND WATER (PCI/LITER) | CS-137 | | 18 | 5<br>(0/15)<br>(<0/<9) | N/A | 5<br>(0/11)<br>(<0/<9) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | BA-140 | | 60 | 27<br>(0/15)<br>(<3/<48) | N/A | 27<br>(0/11)<br>(<3/<48) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| | LA-140 | | 15 | 9<br>(0/15)<br>(<1/<15) | N/A | 9<br>(0/11)<br>(<1/<15) | D-23 INDICATOR<br>THORSEN WELL<br>0.7 MILES S OF SITE | 0 |
| FISH (PCI/KG WET) | GAMMA | 8 | | | | | | |
| | MN-54 | | 130 | 69<br>(0/4)<br>(<62/<80) | 51<br>(0/4)<br>(<38/<64) | 69<br>(0/4)<br>(<62/<80) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | CO-58 | | 130 | 84<br>(0/4)<br>(<70/<95) | 68<br>(0/4)<br>(<65/<71) | 84<br>(0/4)<br>(<70/<95) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | FE-59 | | 260 | 218<br>(0/4)<br>(<201/<237) | 173<br>(0/4)<br>(<149/<189) | 218<br>(0/4)<br>(<201/<237) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | CO-60 | | 130 | 55<br>(0/4)<br>(<49/<59) | 52<br>(0/4)<br>(<46/<60) | 55<br>(0/4)<br>(<49/<59) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |
| | ZN-65 | | 260 | 153<br>(0/4)<br>(<125/<184) | 132<br>(0/4)<br>(<101/<176) | 153<br>(0/4)<br>(<125/<184) | D-28 INDICATOR<br>DRESDEN POOL OF ILL. RIVER<br>0.9 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: ANNUAL 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| FISH (PCI/KG WET) | ZRNB-95 | | N/A | 89 (0/4) (<79/<97) | 73 (0/4) (<55/<87) | 89 (0/4) (<79/<97) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-134 | | 130 | 66 (0/4) (<57/<69) | 54 (0/4) (<47/<64) | 66 (0/4) (<57/<69) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | CS-137 | | 150 | 69 (0/4) (<64/<73) | 56 (0/4) (<47/<68) | 69 (0/4) (<64/<73) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 518 (0/4) (<356/<739) | 442 (0/4) (<293/<573) | 518 (0/4) (<356/<739) | D-28 INDICATOR DRESDEN POOL OF ILL. RIVER 0.9 MILES NW OF SITE | 0 |
| SEDIMENT (PCI/KG DRY) | GAMMA | 2 | | | | | | |
| | MN-54 | | N/A | 71 (0/2) (<45/<97) | N/A | 71 (0/2) (<45/<97) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-58 | | N/A | 69 (0/2) (<36/<101) | N/A | 69 (0/2) (<36/<101) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | FE-59 | | N/A | 162 (0/2) (<108/<216) | N/A | 162 (0/2) (<108/<216) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CO-60 | | N/A | 70 (0/2) (<40/<99) | N/A | 70 (0/2) (<40/<99) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: | DRESDEN | | | | DOCKET NUMBER: | 50-010, 50-237 & 50-249 | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: | MORRIS, IL | | | | REPORTING PERIOD: | ANNUAL 2006 | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| SEDIMENT (PCI/KG DRY) | ZN-65 | | N/A | 197 (0/2) (<90/<305) | N/A | 197 (0/2) (<90/<305) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | ZRNB-95 | | N/A | 95 (0/2) (<54/<136) | N/A | 95 (0/2) (<54/<136) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-134 | | 150 | 82 (0/2) (<38/<126) | N/A | 82 (0/2) (<38/<126) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | CS-137 | | 180 | 114 (2/2) (86/142) | N/A | 114 (2/2) (86/142) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| | BALA140 | | N/A | 174 (0/2) (<102/<246) | N/A | 174 (0/2) (<102/<246) | D-27 INDICATOR DRESDEN LOCK AND DAM - DOWNSTREAM 0.8 MILES NW OF SITE | 0 |
| AIR PARTICULATE (E-3 PCI/CU.METER) | GR-B | 699 | 10 | 19 (644/647) (<5/39) | 19 (52/52) (6/35) | 22 (23/23) (10/34) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | GAMMA | 54 | | | | | | |
| | MN-54 | | N/A | 3.6 (0/50) (< 1.1/< 8.1) | 3.5 (0/4) (< 1.1/< 6.7) | 4.5 (0/2) (< 2.6/< 6.5) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CO-58 | | N/A | 5.1 (0/50) (< 1.4/<11.3) | 5.6 (0/4) (< 1.6/<13.1) | 6.1 (0/2) (< 3.6/< 8.7) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

**NAME OF FACILITY:** DRESDEN **DOCKET NUMBER:** 50-010, 50-237 & 50-249
**LOCATION OF FACILITY:** MORRIS, IL **REPORTING PERIOD:** ANNUAL 2006

| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | INDICATOR LOCATIONS MEAN (F) RANGE | CONTROL LOCATION MEAN (F) RANGE | LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
|---|---|---|---|---|---|---|---|---|
| AIR PARTICULATE (E-3 PCI/CU.METER) | FE-59 | | N/A | 16.8 (0/50) (< 4.5/<37.6) | 15 (0/4) (< 4.5/<34.1) | 23.1 (0/2) (< 9.8/<36.4) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CO-60 | | N/A | 3.4 (0/50) (< 1.1/< 8.0) | 2.3 (0/4) (< 1.4/< 3.2) | 4.2 (0/2) (< 3.4/< 4.9) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | ZN-65 | | N/A | 8.5 (0/50) (< 2.6/<20.2) | 7.3 (0/4) (< 3.0/<14.8) | 10.9 (0/4) (< 5.2/<20.2) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | ZRNB-95 | | N/A | 6.2 (0/50) (< 1.3/<13.7) | 5.4 (0/4) (< 1.6/< 9.1) | 7.3 (0/2) (< 3.6/<11) | D-56 INDICATOR WILDFEATHER 1.7 MILES SE OF SITE | 0 |
| | CS-134 | | 50 | 3.5 (0/50) (< 1.2/< 7.6) | 2.9 (0/4) (< 1.4/< 5.5) | 4.5 (0/4) (< 2.4/< 7.6) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | CS-137 | | 60 | 3.2 (0/50) (< 1.1/< 7.6) | 2.9 (0/4) (< 1.3/< 4.8) | 4.3 (0/4) (< 2.6/< 7.6) | D-10 INDICATOR GOOSE LAKE VILLAGE 3.5 MILES SSW OF SITE | 0 |
| | BALA140 | | N/A | 176.7 (0/50) (< 7.8/<481) | 184.4 (0/4) (<14.7/<356) | 228.6 (0/4) (<11.4/<458) | D-14 INDICATOR CHANNAHON 3.7 MILES NE OF SITE | 0 |
| AIR IODINE (E-3 PCI/CU.METER) | GAMMA | 699 | | | | | | |
| | I-131 | | 70 | 45 (0/647) (<10/<167) | 46 (0/52) (<18/<67) | 47 (0/52) (<18/<69) | D-13 INDICATOR MINOOKA 4.4 MILES N OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: ANNUAL 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | I-131 | 19 | 1 | N/A | 0.7 (0/19) (< 0.3/< 2.9) | 0.7 (0/19) (< 0.3/< 2.9) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | GAMMA | 19 | | | | | | |
| | MN-54 | | N/A | N/A | 7 (0/19) (<5/<10) | 7 (0/19) (<5/<10) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CO-58 | | N/A | N/A | 7 (0/19) (<5/<9) | 7 (0/19) (<5/<9) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | FE-59 | | N/A | N/A | 17 (0/19) (<12/<23) | 17 (0/19) (<12/<23) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CO-60 | | N/A | N/A | 7 (0/19) (<5/<12) | 7 (0/19) (<5/<12) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | ZN-65 | | N/A | N/A | 17 (0/19) (<10/<25) | 17 (0/19) (<10/<25) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | ZRNB-95 | | N/A | N/A | 8 (0/19) (<5/<11) | 8 (0/19) (<5/<11) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | CS-134 | | 15 | N/A | 7 (0/19) (<4/<13) | 7 (0/19) (<4/<13) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: ANNUAL 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| MILK (PCI/LITER) | CS-137 | | 18 | N/A | 7 (0/19) (<5/<11) | 7 (0/19) (<5/<11) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | BA-140 | | 60 | N/A | 39 (0/19) (<27/<51) | 39 (0/19) (<27/<51) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| | LA-140 | | 15 | N/A | 11 (0/19) (<8/<15) | 11 (0/19) (<8/<15) | D-25 CONTROL BIROS FARM 11.3 MILES SW OF SITE | 0 |
| VEGETATION (PCI/KG WET) | GAMMA | 10 | | | | | | |
| | MN-54 | | N/A | 13 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 17 (0/2) (<15/<19) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | CO-58 | | N/A | 14 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 16 (0/2) (<9/<23) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | FE-59 | | N/A | 29 (0/8) (<8/<50) | 20 (0/2) (<4/<35) | 31 (0/2) (<28/<34) | D-QUAD 3 INDICATOR JIM BLOOM 3.9 MILES SSW OF SITE | 0 |
| | CO-60 | | N/A | 13 (0/8) (<3/<23) | 7 (0/2) (<2/<13) | 18 (0/2) (<14/<23) | D-QUAD 4 INDICATOR J.D. CARMICHAEL 1.6 MILES NNW OF SITE | 0 |
| | ZN-65 | | N/A | 30 (0/8) (<8/<47) | 17 (0/2) (<4/<30) | 33 (0/2) (<19/<47) | D-QUAD 1 INDICATOR CHRIS LOCKNAR 2.8 MILES NE OF SITE | 0 |

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

## TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR DRESDEN NUCLEAR POWER STATION, 2006

| NAME OF FACILITY: DRESDEN | | | | | DOCKET NUMBER: 50-010, 50-237 & 50-249 | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION OF FACILITY: MORRIS, IL | | | | | REPORTING PERIOD: ANNUAL 2006 | | | |
| | | | | INDICATOR LOCATIONS | CONTROL LOCATION | LOCATION WITH HIGHEST ANNUAL MEAN | | |
| MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT) | TYPES OF ANALYSES PERFORMED | NUMBER OF ANALYSES PERFORMED | REQUIRED LOWER LIMIT OF DETECTION (LLD) | MEAN (F) RANGE | MEAN (F) RANGE | MEAN (F) RANGE | STATIONS # NAME DISTANCE AND DIRECTION | NUMBER OF NONROUTINE REPORTED MEASUREMENTS |
| VEGETATION (PCI/KG WET) | ZRNB-95 | | N/A | 14<br>(0/8)<br>(<3/<24) | 8<br>(0/2)<br>(<2/<15) | 16<br>(0/2)<br>(<9/<24) | D-QUAD 1 INDICATOR<br>CHRIS LOCKNAR<br>2.8 MILES NE OF SITE | 0 |
| | I-131 | | 60 | 38<br>(0/8)<br>(<8/<55) | 23<br>(0/2)<br>(<4/<42) | 51<br>(0/2)<br>(<47/<55) | D-QUAD 4 INDICATOR<br>J.D. CARMICHAEL<br>1.6 MILES NNW OF SITE | 0 |
| | CS-134 | | 60 | 11<br>(0/8)<br>(<3/<18) | 7<br>(0/2)<br>(<1/<13) | 12<br>(0/2)<br>(<6/<18) | D-QUAD 1 INDICATOR<br>CHRIS LOCKNAR<br>2.8 MILES NE OF SITE | 0 |
| | CS-137 | | 80 | 13<br>(0/8)<br>(<3/<21) | 9<br>(0/2)<br>(<2/<17) | 15<br>(0/2)<br>(<8/<21) | D-QUAD 1 INDICATOR<br>CHRIS LOCKNAR<br>2.8 MILES NE OF SITE | 0 |
| | BALA140 | | N/A | 30<br>(0/8)<br>(<5/<55) | 10<br>(0/2)<br>(<2/<18) | 49<br>(0/2)<br>(<42/<55) | D-QUAD 4 INDICATOR<br>J.D. CARMICHAEL<br>1.6 MILES NNW OF SITE | 0 |
| DIRECT RADIATION (MILLI-ROENTGEN/QTR.) | TLD-QUARTERLY | 368 | N/A | 25<br>(360/360)<br>(16/33) | 23<br>(8/8)<br>(19/27) | 30<br>(4/4)<br>(26/33) | D-201-1 INDICATOR<br>4.8 MILES N | 0 |

* D-201-2 also read 30 mrem but the range was (27/32).

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDAs AND THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

# APPENDIX B

# LOCATION DESIGNATION, DISTANCE & DIRECTION, AND SAMPLE COLLECTION & ANALYTICAL METHODS

TABLE B-1: Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Dresden Nuclear Power Station, 2006

| Location | Location Description | Distance & Direction From Site |
|---|---|---|
| A. Surface Water | | |
| D-51 | Dresden Lock and Dam, Downstream (indicator) | 0.8 miles NW |
| D-52 | DesPlaines River, Upstream (control) | 1.1 miles ESE |
| D-54 | Kankakee River, Upstream (control) | 8.7 miles SE |
| D-57 | Kankakee River at Will Road (control) | 2.0 miles SE |
| B. Ground/Well Water | | |
| D-23 | Thorsen Well (indicator) | 0.7 miles S |
| D-35 | Dresden Lock and Dam (indicator) | 0.8 miles NW |
| C. Milk - bi-weekly / monthly | | |
| D-25 | Biros Farm (control) | 11.3 miles SW |
| D. Air Particulates / Air Iodine | | |
| D-01 | Onsite 1 (indicator) | 0.8 miles NW |
| D-02 | Onsite 2 (indicator) | 0.3 miles NNE |
| D-03 | Onsite 3 (indicator) | 0.4 miles S |
| D-04 | Collins Road (indicator) | 0.8 miles W |
| D-07 | Clay Products (indicator) | 2.6 miles S |
| D-08 | Prairie Park (indicator) | 3.8 miles SW |
| D-10 | Goose Lake Village (indicator) | 3.5 miles SSW |
| D-12 | Lisbon (control) | 10.5 miles NW |
| D-13 | Minooka (indicator) | 4.4 miles N |
| D-14 | Channahon (indicator) | 3.7 miles NE |
| D-45 | McKinley Woods Road (indicator) | 1.7 miles ENE |
| D-53 | Grundy County Road (indicator) | 2.1 miles SSE |
| D-55 | Ridge Road (indicator) | 4.3 miles N |
| D-56 | Wildfeather (indicator) | 1.7 miles SE |
| E. Fish | | |
| D-28 | Dresden Pool of Illinois River, Downstream (indicator) | 0.9 miles NW |
| D-46 | DesPlaines River, Upstream (control) | 1.2 miles ESE |
| F. Sediment | | |
| D-27 | Dresden Lock and Dam, Downstream (indicator) | 0.8 miles NW |
| G. Vegetation | | |
| Quadrant 1 | Chris Locknar | 2.8 miles NE |
| Quadrant 2 | Robert Pagliano | 3.2 miles SSE |
| Quadrant 3 | Jim Bloom | 3.9 miles SSW |
| Quadrant 4 | J.D. Carmichael | 1.6 miles NNW |
| Control | Glasscock Farm | 12.8 miles ENE |

TABLE B-1: Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Dresden Nuclear Power Station, 2006

| Location | Location Description | Distance & Direction From Site |
|---|---|---|
| H. Environmental Dosimetry - TLD | | |
| Inner Ring | | |
| D-101-1 and -2 | | 1.0 miles N |
| D-102-1 and -2 | | 1.3 miles NNE |
| D-103-1 and -2 | | 1.2 miles NE |
| D-104-1 and -2 | | 1.7 miles ENE |
| D-105-1 and –2 | | 1.5 miles E |
| D-106-1 and -2 | | 1.1 miles ESE |
| D-107-1 and -2 | | 1.4 miles SE |
| D-108-1 and -2 | | 1.9 miles SSE |
| D-109-1 and -2 | | 0.8 miles S |
| D-110-3 and -4 | | 0.9 miles SSW |
| D-111-1 and -2 | | 0.6 miles SW |
| D-112a-1 and -2 | | 0.7 miles WSW |
| D-113-1 and -2 | | 0.9 miles W |
| D-114-1 and -2 | | 0.9 miles WNW |
| D-115-1 and -2 | | 0.8 miles NW |
| D-116-1 and -2 | | 1.0 miles NNW |
| Outer Ring | | |
| D-201-1 and -2 | | 4.8 miles N |
| D-202-1 and -2 | | 5.1 miles NNE |
| D-203-1 and -2 | | 4.7 miles NE |
| D-204-1 and -2 | | 5.0 miles ENE |
| D-205-1 and -2 | | 4.0 miles E |
| D-206 -1 and -2 | | 3.5 miles ESE |
| D-207-1 and -2 | | 4.2 miles SE |
| D-208-1 and -2 | | 4.9 miles SSE |
| D-209-1 and -2 | | 4.1 miles S |
| D-210-1 and -2 | | 4.9 miles SSW |
| D-211-1 and -2 | | 4.8 miles SW |
| D-212-3 and -4 | | 6.0 miles WSW |
| D-213-1 and -2 | | 4.5 miles W |
| D-214-1 and -2 | | 5.0 miles WNW |
| D-215-1 and -2 | | 4.8 miles NW |
| D-216-1 and -2 | | 4.9 miles NNW |
| Other | | |
| D-01-1 and -2 | Onsite 1 | 0.8 miles NW |
| D-02-1 and -2 | Onsite 2 | 0.3 miles NNE |
| D-03-1 and -2 | Onsite 3 | 0.4 miles S |
| D-04-1 and -2 | Collins Road | 0.8 miles W |
| D-07-1 and -2 | Clay Products | 2.6 miles S |
| D-08-1 and -2 | Prairie Park | 3.8 miles SW |
| D-10-1 and -2 | Goose Lake Village | 3.5 miles SSW |
| D-13-1 and -2 | Minooka | 4.4 miles N |
| D-14-1 and -2 | Channahon | 3.7 miles NE |
| D-45-1 and -2 | McKinley Woods Road | 1.7 miles ENE |
| D-53-1 and -2 | Grundy County Road | 2.1 miles SSE |
| D-55-1 and -2 | Ridge Road | 4.3 miles N |
| D-56-1 and –2 | Wildfeather | 1.7 miles SE |

TABLE B-1: Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Dresden Nuclear Power Station, 2006

| Location | Location Description | Distance & Direction From Site |
|---|---|---|
| Control | | |
| D-12-1 and -2 | Lisbon | 10.5 miles NW |

TABLE B-2: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Dresden Nuclear Power Station, 2006

| Sample Medium | Analysis | Sampling Method | Collection Procedure Number | Sample Size | Analytical Procedure Number |
|---|---|---|---|---|---|
| Surface Water | Gamma Spectroscopy | Monthly composite sample or monthly composite from weekly grab samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual<br><br>TBE, TBE-2023 Compositing of samples<br><br>EIML-COMP-01 procedure for compositing water and milk samples | 2 gallon | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Surface Water | Gross Beta | Monthly composite sample or monthly composite from weekly grab samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual<br><br>TBE, TBE-2023 Compositing of samples<br><br>EIML-COMP-01 procedure for compositing water and milk samples | 2 gallon | TBE, TBE-2008 Gross Alpha and/or gross beta activity in various matrices |
| Surface Water | Tritium | Quarterly composite of monthly composite samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual<br><br>TBE, TBE-2023 Compositing of samples<br><br>EIML-COMP-01 procedure for compositing water and milk samples | 500 ml | TBE, TBE-2011 Tritium analysis in drinking water by liquid scintillation |
| Ground Water | Gamma Spectroscopy | Quarterly grab samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 2 gallon | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Ground Water | Tritium | Quarterly grab samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 500 ml | TBE, TBE-2011 Tritium analysis in drinking water by liquid scintillation |
| Fish | Gamma Spectroscopy | Samples collected twice annually via electroshocking or other techniques | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 1000 grams (wet) | TBE-2007 Gamma emitting radioisotope analysis |
| Sediment | Gamma Spectroscopy | Semi-annual grab samples | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 500 grams (dry) | TBE, TBE-2007 Gamma emitting radioisotope analysis |

TABLE B-2: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Dresden Nuclear Power Station, 2006

| Sample Medium | Analysis | Sampling Method | Collection Procedure Number | Sample Size | Analytical Procedure Number |
|---|---|---|---|---|---|
| Dredging Spoils | Gamma Spectroscopy | Annual grab samples if dredging occurred within 1 mile of Dresden Station during the year. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 500 grams (dry) | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Air Particulates | Gross Beta | One-week of continuous air sampling through glass fiber filter paper | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 1 filter (approximately 280 cubic meters weekly) | TBE, TBE-2008 Gross Alpha and/or gross beta activity in various matrices |
| Air Particulates | Gamma Spectroscopy | Quarterly composite of each station | TBE, TBE-2023 Compositing of samples<br><br>Env. Inc., AP-03 Procedure for compositing air particulate filters for gamma spectroscopic analysis | 13 filters | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Air Iodine | Gamma Spectroscopy | One- or two-week composite of continuous air sampling through charcoal filter | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 1 filter (approximately 280 cubic meters weekly) | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Milk | I-131 | Bi-weekly grab sample May through October. Monthly all other times | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 2 gallon | TBE, TBE-2012 Radioiodine in various matrices |
| Milk | Gamma Spectroscopy | Bi-weekly grab sample May through October. Monthly all other times | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 2 gallon | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| Food Products | Gamma Spectroscopy | Annual grab samples. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 1000 grams | TBE, TBE-2007 Gamma emitting radioisotope analysis |
| TLD | Thermoluminescence Dosimetry | Quarterly TLDs comprised of two Global Dosimetry TLDs, with two $CaF_2$ elements and two LiF elements in each TLD. | EIML-SPM-1, Environmental Incorporated Midwest Laboratory Sampling Procedures Manual | 2 dosimeters | Global Dosimetry |

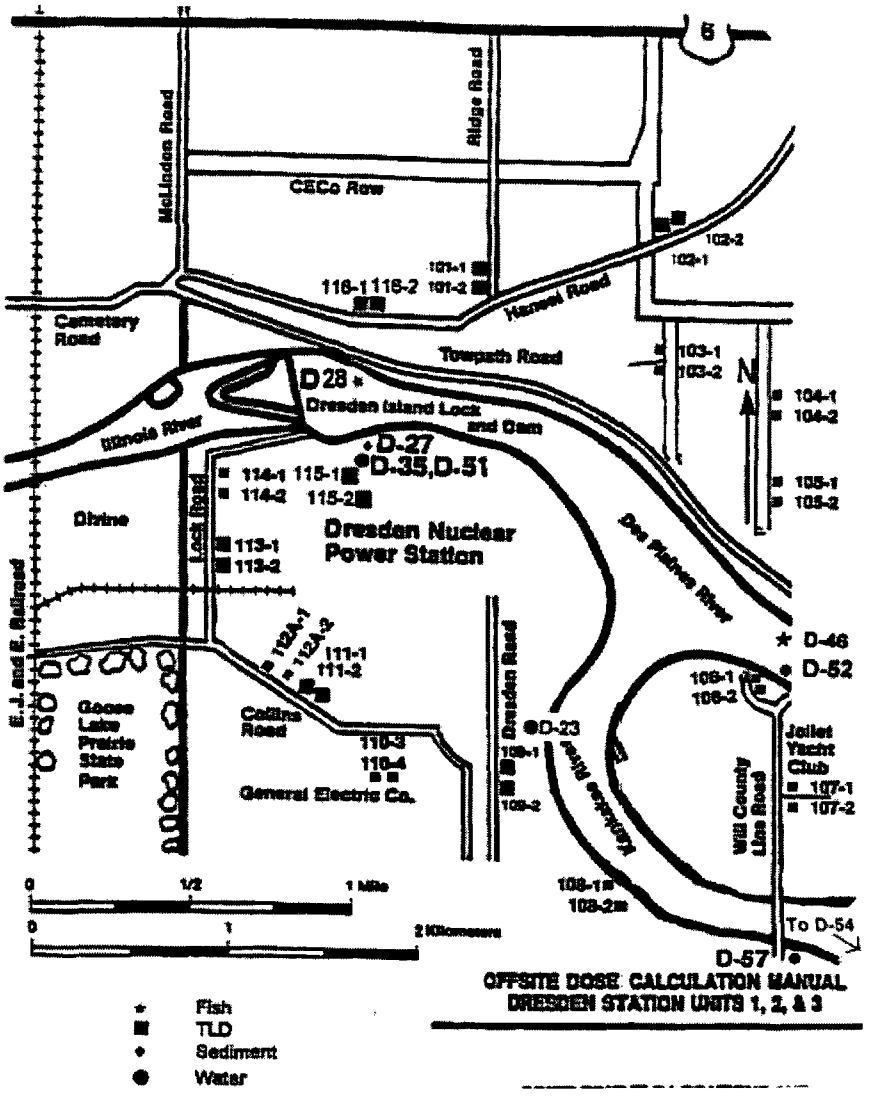



Figure B-1
Dresden Station Inner Ring TLD Locations, Fish, Water, and Sediment Locations, 2006

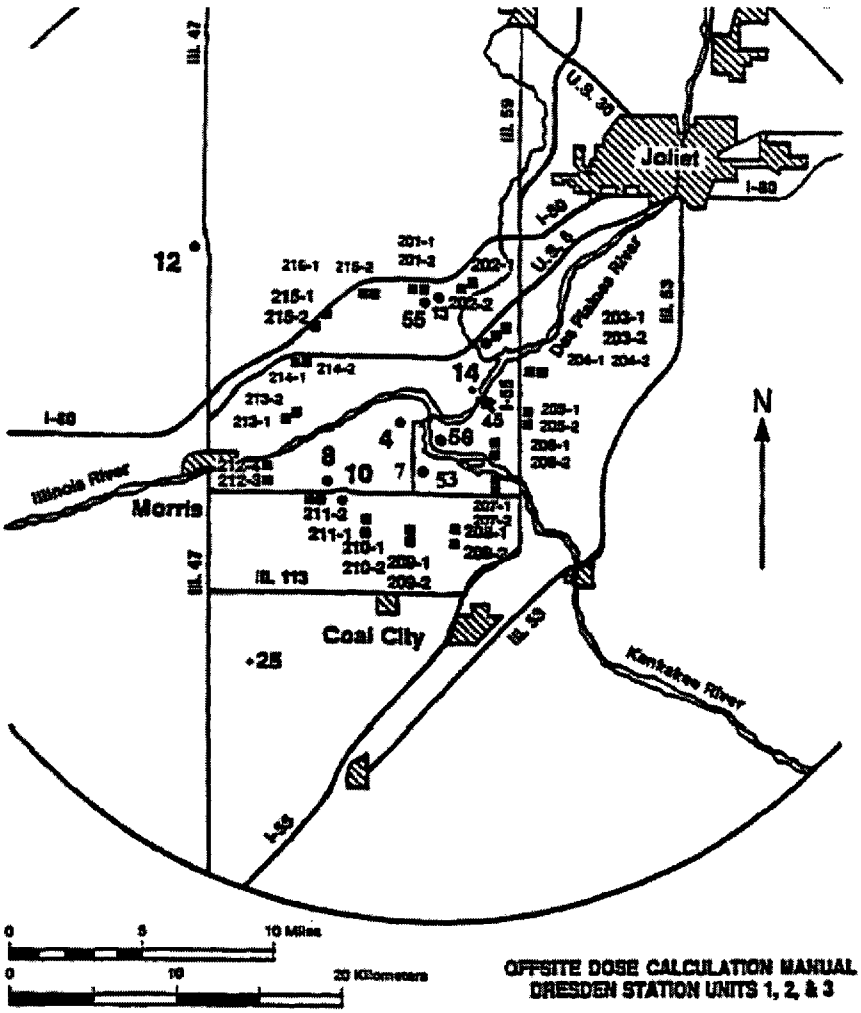



Figure B-2
Dresden Station Fixed Air Sampling and TLD Sites, Outer Ring TLD Locations and Milk Location, 2006

# APPENDIX C

# DATA TABLES AND FIGURES
# PRIMARY LABORATORY

**TABLE C-I.1 CONCENTRATIONS OF GROSS BETA IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| COLLECTION PERIOD | D-51 | D-52 | D-54 | D-57 |
|---|---|---|---|---|
| JAN | 6.8 ± 2.2 | 3.9 ± 2.0 | 4.4 ± 1.9 (1) | |
| FEB | 8.6 ± 2.3 | 5.1 ± 1.9 | 4.4 ± 1.8 | |
| MAR | 6.4 ± 2.1 | 8.0 ± 2.3 | 4.2 ± 1.9 | |
| APR | 5.3 ± 2.2 | 4.8 ± 2.1 | 5.2 ± 2.1 | |
| MAY | 6.0 ± 2.3 | 4.0 ± 2.1 | < 3.0 | |
| JUN | 7.7 ± 2.3 | 4.3 ± 2.0 | 5.4 ± 2.2 | |
| JUL | 9.8 ± 2.6 | 6.8 ± 2.3 | 5.1 ± 2.3 | 5.5 ± 2.1 |
| AUG | 6.7 ± 2.0 | 8.2 ± 2.1 | 6.5 ± 2.0 | 6.4 ± 2.2 |
| SEP | 6.8 ± 2.1 | 5.1 ± 2.0 | 7.7 ± 2.2 | 5.9 ± 2.1 |
| OCT | 8.5 ± 1.9 | 5.9 ± 1.7 | 6.2 ± 1.8 | 7.6 ± 1.9 |
| NOV | 6.3 ± 2.1 | 7.9 ± 2.3 | 5.2 ± 2.0 | 4.6 ± 2.0 |
| DEC | 4.7 ± 2.0 | 4.5 ± 2.1 | 3.7 ± 1.9 | 3.9 ± 2.0 |
| MEAN | 7.0 ± 2.9 | 5.7 ± 3.2 | 5.1 ± 2.6 | 5.7 ± 2.6 |

**TABLE C-I.2 CONCENTRATIONS OF TRITIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| COLLECTION PERIOD | D-51 | D-52 | D-54 | D-57 |
|---|---|---|---|---|
| JAN-MAR | < 190 | < 192 | < 188 (1) | |
| APR-JUN | < 185 | < 183 | < 183 | |
| JUL-SEP | < 185 | < 185 | < 184 | |
| OCT-DEC | 236 ± 122 | < 181 | < 184 | 968 ± 170 |
| MEAN | 199 ± 50 | 185 ± 10 | 185 ± 4 | 968 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDA AND POSITIVE VALUES

**TABLE C-I.3 CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | NB-95 | ZR-95 | I-131 | CS-134 | CS-137 | BA-140 | LA-140 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-51 | JAN | < 4 | < 4 | < 8 | < 4 | < 8 | < 4 | < 7 | < 14.7 | < 4 | < 4 | < 30 | < 10 |
| | FEB | < 4 | < 4 | < 10 | < 4 | < 11 | < 5 | < 8 | < 13 | < 5 | < 4 | < 30 | < 11 |
| | MAR | < 3 | < 3 | < 6 | < 3 | < 6 | < 3 | < 5 | < 12 | < 3 | < 3 | < 23 | < 7 |
| | APR | < 3 | < 3 | < 7 | < 3 | < 7 | < 3 | < 6 | < 14.8 | < 3 | < 3 | < 27 | < 9 |
| | MAY | < 2 | < 2 | < 6 | < 2 | < 4 | < 2 | < 4 | < 11 | < 2 | < 2 | < 41 | < 12 |
| | JUN | < 3 | < 3 | < 6 | < 3 | < 6 | < 3 | < 5 | < 14 | < 3 | < 3 | < 25 | < 8 |
| | JUL | < 1 | < 1 | < 4 | < 2 | < 3 | < 2 | < 3 | < 13 | < 1 | < 1 | < 18 | < 6 |
| | AUG | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 2 | < 14 | < 1 | < 1 | < 17 | < 5 |
| | SEP | < 2 | < 3 | < 6 | < 2 | < 5 | < 3 | < 5 | < 10 | < 2 | < 3 | < 21 | < 8 |
| | OCT | < 8 | < 10 | < 21 | < 8 | < 17 | < 10 | < 18 | < 8 | < 7 | < 7 | < 11 | < 4 |
| | NOV | < 3 | < 3 | < 6 | < 4 | < 6 | < 3 | < 6 | < 14.8 | < 2 | < 3 | < 26 | < 11 |
| | DEC | < 2 | < 2 | < 5 | < 2 | < 3 | < 2 | < 3 | < 12 | < 2 | < 2 | < 20 | < 6 |
| | MEAN | 3 ± 4 | 3 ± 4 | 7 ± 10 | 3 ± 4 | 6 ± 8 | 3 ± 5 | 6 ± 8 | 12 ± 4 | 3 ± 4 | 3 ± 3 | 24 ± 15 | 8 ± 5 |
| D-52 | JAN | < 4 | < 4 | < 8 | < 4 | < 8 | < 4 | < 7 | < 14.8 | < 4 | < 4 | < 30 | < 11 |
| | FEB | < 4 | < 5 | < 10 | < 4 | < 11 | < 4 | < 8 | < 14 | < 5 | < 5 | < 31 | < 10 |
| | MAR | < 3 | < 3 | < 7 | < 3 | < 6 | < 3 | < 6 | < 14 | < 3 | < 3 | < 27 | < 9 |
| | APR | < 3 | < 3 | < 7 | < 3 | < 6 | < 3 | < 6 | < 14.6 | < 3 | < 3 | < 28 | < 9 |
| | MAY | < 2 | < 2 | < 5 | < 1 | < 3 | < 2 | < 3 | < 12 | < 2 | < 2 | < 34 | < 10 |
| | JUN | < 3 | < 3 | < 7 | < 3 | < 7 | < 3 | < 6 | < 14.9 | < 3 | < 3 | < 29 | < 9 |
| | JUL | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 3 | < 14.9 | < 1 | < 1 | < 20 | < 7 |
| | AUG | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 2 | < 14.8 | < 1 | < 1 | < 17 | < 6 |
| | SEP | < 3 | < 3 | < 7 | < 4 | < 6 | < 3 | < 6 | < 13 | < 3 | < 3 | < 28 | < 8 |
| | OCT | < 1 | < 1 | < 2 | < 1 | < 2 | < 1 | < 2 | < 9 | < 1 | < 1 | < 12 | < 4 |
| | NOV | < 3 | < 3 | < 6 | < 3 | < 6 | < 3 | < 6 | < 14 | < 3 | < 3 | < 30 | < 8 |
| | DEC | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 3 | < 12 | < 1 | < 2 | < 18 | < 6 |
| | MEAN | 2 ± 2 | 3 ± 2 | 6 ± 5 | 2 ± 2 | 5 ± 5 | 3 ± 2 | 5 ± 4 | 13 ± 4 | 2 ± 3 | 3 ± 3 | 25 ± 13 | 8 ± 4 |

**TABLE C-I.3 CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | NB-95 | ZR-95 | I-131 | CS-134 | CS-137 | BA-140 | LA-140 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-54 | JAN | < 3 | < 4 | < 8 | < 4 | < 8 | < 4 | < 7 | < 14.8 | < 4 | < 3 | < 28 | < 10 |
| | FEB | < 4 | < 4 | < 9 | < 4 | < 10 | < 4 | < 8 | < 14 | < 4 | < 4 | < 28 | < 9 |
| | MAR | < 2 | < 3 | < 6 | < 3 | < 6 | < 3 | < 5 | < 13 | < 3 | < 3 | < 25 | < 8 |
| | APR | < 2 | < 3 | < 6 | < 2 | < 5 | < 3 | < 5 | < 11 | < 2 | < 2 | < 21 | < 7 |
| | MAY | < 1 | < 1 | < 2 | < 1 | < 2 | < 1 | < 2 | < 14.7 | < 1 | < 1 | < 18 | < 5 |
| | JUN | < 2 | < 2 | < 5 | < 2 | < 5 | < 2 | < 4 | < 9 | < 2 | < 2 | < 18 | < 6 |
| | JUL | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 3 | < 12 | < 1 | < 1 | < 18 | < 6 |
| | AUG | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 3 | < 14 | < 1 | < 1 | < 20 | < 7 |
| | SEP | < 2 | < 2 | < 4 | < 2 | < 3 | < 2 | < 3 | < 8 | < 2 | < 2 | < 16 | < 4 |
| | OCT | < 1 | < 1 | < 2 | < 1 | < 1 | < 1 | < 1 | < 7 | < 1 | < 1 | < 9 | < 3 |
| | NOV | < 3 | < 3 | < 6 | < 4 | < 5 | < 3 | < 6 | < 9 | < 3 | < 3 | < 21 | < 7 |
| | DEC | < 2 | < 2 | < 6 | < 2 | < 4 | < 3 | < 5 | < 12 | < 2 | < 2 | < 25 | < 8 |
| | MEAN | 2 ± 2 | 2 ± 2 | 5 ± 5 | 2 ± 2 | 4 ± 5 | 2 ± 2 | 4 ± 4 | 12 ± 6 | 2 ± 2 | 2 ± 2 | 21 ± 11 | 7 ± 4 |
| D-57 | JAN | (1) | | | | | | | | | | | |
| | FEB | | | | | | | | | | | | |
| | MAR | | | | | | | | | | | | |
| | APR | | | | | | | | | | | | |
| | MAY | | | | | | | | | | | | |
| | JUN | | | | | | | | | | | | |
| | JUL | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 3 | < 14.7 | < 1 | < 1 | < 19 | < 6 |
| | AUG | < 1 | < 1 | < 2 | < 1 | < 2 | < 1 | < 2 | < 14.8 | < 1 | < 1 | < 18 | < 5 |
| | SEP | < 3 | < 4 | < 9 | < 3 | < 7 | < 4 | < 7 | < 14 | < 3 | < 4 | < 30 | < 9 |
| | OCT | < 8 | < 8 | < 20 | < 6 | < 13 | < 10 | < 16 | < 8 | < 7 | < 8 | < 11 | < 4 |
| | NOV | < 3 | < 3 | < 6 | < 3 | < 6 | < 4 | < 7 | < 13 | < 3 | < 3 | < 29 | < 12 |
| | DEC | < 2 | < 2 | < 4 | < 2 | < 3 | < 2 | < 3 | < 12 | < 2 | < 2 | < 19 | < 7 |
| | MEAN | 3 ± 5 | 3 ± 5 | 8 ± 13 | 3 ± 4 | 6 ± 9 | 4 ± 7 | 6 ± 11 | 13 ± 5 | 3 ± 4 | 3 ± 5 | 21 ± 14 | 7 ± 6 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-II.1 CONCENTRATIONS OF TRITIUM IN GROUND WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| COLLECTION PERIOD | D-23 | D-35 |
|---|---|---|
| JAN | 680 ± 121 | < 161 |
| FEB | (1) | |
| MAR | 722 ± 123 | |
| APR | 681 ± 135 | < 171 |
| MAY | 693 ± 125 | |
| JUN | 677 ± 148 | |
| JUL | 507 ± 135 | < 174 |
| AUG | 712 ± 148 | |
| SEP | 729 ± 151 | |
| OCT | 688 ± 93 | < 131 |
| NOV | 728 ± 142 | |
| DEC | 340 ± 118 | |
| MEAN | 651 ± 240 | 159 ± 39 |

519.60

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-II.2 CONCENTRATIONS OF GAMMA EMITTERS IN GROUND WATER SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | NB-95 | ZR-95 | I-131 | CS-134 | CS-137 | BA-140 | LA-140 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D-23 | JAN | < 8 | < 9 | < 17 | < 8 | < 23 | < 10 | < 18 | < 13 | < 13 | < 9 | < 41 | < 12.5 |
| | FEB | (1) | | | | | | | | | | | |
| | MAR | < 7 | < 6 | < 14 | < 7 | < 17 | < 8 | < 11 | < 11 | < 9 | < 7 | < 30 | < 10.5 |
| | APR | < 5 | < 6 | < 12 | < 5 | < 12 | < 6 | < 10 | < 13 | < 5 | < 6 | < 32 | < 11.1 |
| | MAY | < 8 | < 8 | < 18 | < 8 | < 21 | < 9 | < 15 | < 13 | < 11 | < 9 | < 37 | < 12.3 |
| | JUN | < 5 | < 6 | < 12 | < 5 | < 12 | < 6 | < 10 | < 6 | < 5 | < 5 | < 48 | < 14.6 |
| | JUL | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 2 | < 13 | < 1 | < 1 | < 18 | < 5.89 |
| | AUG | < 6 | < 6 | < 11 | < 7 | < 12 | < 6 | < 9 | < 14 | < 4 | < 7 | < 32 | < 10.9 |
| | SEP | < 2 | < 2 | < 4 | < 2 | < 3 | < 2 | < 3 | < 5 | < 2 | < 2 | < 11 | < 3.84 |
| | OCT | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 3 | < 14 | < 1 | < 1 | < 20 | < 6.57 |
| | NOV | < 0.4 | < 0.4 | < 1 | < 0.4 | < 1 | < 0.5 | < 1 | < 1 | < 0.4 | < 0.4 | < 3 | < 0.95 |
| | DEC | < 4 | < 5 | < 9 | < 4 | < 10 | < 6 | < 8 | < 11 | < 4 | < 4 | < 22 | < 8.52 |
| | MEAN | 4 ± 6 | 5 ± 6 | 9 ± 12 | 5 ± 6 | 10 ± 15 | 5 ± 7 | 8 ± 11 | 10 ± 9 | 5 ± 8 | 5 ± 6 | 27 ± 27 | 9 ± 8 |
| D-35 | JAN | < 9 | < 7 | < 18 | < 9 | < 23 | < 9 | < 14 | < 13 | < 11 | < 9 | < 41 | < 14.1 |
| | APR | < 5 | < 6 | < 11 | < 6 | < 13 | < 5 | < 9 | < 13 | < 6 | < 6 | < 30 | < 10.3 |
| | JUL | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 3 | < 14 | < 1 | < 1 | < 19 | < 6.49 |
| | OCT | < 1 | < 1 | < 3 | < 1 | < 2 | < 1 | < 2 | < 11 | < 1 | < 1 | < 15 | < 4.46 |
| | MEAN | 4 ± 7 | 4 ± 6 | 9 ± 14 | 4 ± 8 | 10 ± 20 | 4 ± 7 | 7 ± 11 | 13 ± 2 | 5 ± 9 | 4 ± 8 | 26 ± 24 | 9 ± 9 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-III.1** **CONCENTRATIONS OF GAMMA EMITTERS IN FISH SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA-140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-28 | | | | | | | | | | |
| Channel Catfish | 05/15/06 | < 62 | < 84 | < 237 | < 59 | < 163 | < 79 | < 57 | < 67 | < 739 |
| Largemouth Bass | 05/15/06 | < 62 | < 88 | < 217 | < 57 | < 141 | < 91 | < 69 | < 64 | < 580 |
| Largemouth Bass | ( 10/02/06 | < 75 | < 95 | < 215 | < 56 | < 184 | < 97 | < 68 | < 70 | < 356 |
| Smallmouth Buffalo | 10/02/06 | < 80 | < 70 | < 201 | < 49 | < 125 | < 89 | < 69 | < 73 | < 397 |
| MEAN | | 69 ± 18 | 84 ± 22 | 218 ± 30 | 55 ± 9 | 153 ± 51 | 89 ± 15 | 66 ± 12 | 69 ± 8 | 518 ± 353 |
| D-46 | | | | | | | | | | |
| Channel Catfish | 05/15/06 | < 47 | < 71 | < 176 | < 60 | < 126 | < 75 | < 47 | < 55 | < 521 |
| Freshwater Drum | 05/15/06 | < 54 | < 71 | < 176 | < 50 | < 123 | < 77 | < 56 | < 54 | < 573 |
| Common Carp | 10/02/06 | < 38 | < 65 | < 189 | < 53 | < 101 | < 55 | < 48 | < 47 | < 293 |
| Largemouth Bass | (: 10/02/06 | < 64 | < 66 | < 149 | < 46 | < 176 | < 87 | < 64 | < 68 | < 381 |
| MEAN | | 51 ± 23 | 68 ± 7 | 173 ± 34 | 52 ± 12 | 132 ± 63 | 73 ± 27 | 54 ± 16 | 56 ± 18 | 442 ± 256 |

**TABLE C-IV.1 CONCENTRATIONS OF GAMMA EMITTERS IN SEDIMENT SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/KG DRY ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA-140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-27 | 05/05/06 | < 97 | < 101 | < 216 | < 99 | < 305 | < 136 | < 126 | 142 ± 77 | < 246 |
| | 10/27/06 | < 45 | < 36.4 | < 108 | < 40 | < 90 | < 53.7 | < 38.1 | 86 ± 49 | < 102 |
| | MEAN | 71 ± 73 | 69 ± 91 | 162 ± 153 | 70 ± 84 | 197 ± 304 | 95 ± 116 | 82 ± 124 | 114 ± 80 | 174 ± 204 |

## TABLE C-V.1 CONCENTRATIONS OF GROSS BETA IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF E-3 PCI/CU METER ± SIGMA

| | GROUP I | | | GROUP II | | | | |
|---|---|---|---|---|---|---|---|---|
| WEEK | D-01 | D-02 | D-03 | D-04 | D-07 | D-45 | D-53 | D-56 |
| 1 | 14 ± 4 | 14 ± 4 | 21 ± 4 | 16 ± 4 | 17 ± 4 | 17 ± 4 | 16 ± 4 | (1) |
| 2 | 22 ± 4 | 22 ± 4 | 21 ± 4 | 22 ± 5 | 25 ± 5 | 19 ± 4 | 17 ± 4 | |
| 3 | 21 ± 4 | 21 ± 4 | 19 ± 4 | 18 ± 4 | 26 ± 5 | 22 ± 4 | 23 ± 5 | |
| 4 | 23 ± 4 | 21 ± 4 | 19 ± 4 | 20 ± 4 | 21 ± 4 | 22 ± 4 | 19 ± 4 | |
| 5 | 16 ± 4 | 16 ± 4 | 18 ± 4 | 20 ± 4 | 19 ± 4 | 22 ± 5 | 16 ± 4 | |
| 6 | 12 ± 4 | 12 ± 4 | 15 ± 4 | 14 ± 4 | 13 ± 4 | 12 ± 4 | 11 ± 4 | |
| 7 | 15 ± 4 | 17 ± 4 | 15 ± 4 | 19 ± 4 | 18 ± 4 | 17 ± 4 | 14 ± 4 | |
| 8 | 24 ± 5 | 26 ± 5 | 26 ± 5 | 24 ± 5 | 26 ± 5 | 25 ± 5 | 23 ± 5 | |
| 9 | 20 ± 4 | 20 ± 4 | 21 ± 4 | 19 ± 4 | 21 ± 4 | 22 ± 4 | 20 ± 4 | |
| 10 | 12 ± 4 | 14 ± 4 | 13 ± 4 | 15 ± 4 | 15 ± 4 | 15 ± 4 | 16 ± 4 | |
| 11 | 19 ± 4 | 17 ± 4 | 18 ± 4 | 19 ± 4 | 18 ± 4 | 19 ± 4 | 18 ± 4 | |
| 12 | 12 ± 4 | 16 ± 4 | 13 ± 4 | 15 ± 4 | 14 ± 4 | 10 ± 4 | 13 ± 4 | |
| 13 | 11 ± 4 | 15 ± 4 | 11 ± 3 | 13 ± 4 | 13 ± 4 | 14 ± 4 | 13 ± 4 | |
| 14 | 18 ± 4 | 16 ± 4 | 12 ± 4 | 15 ± 4 | 16 ± 4 | 16 ± 4 | 14 ± 4 | |
| 15 | 18 ± 4 | 17 ± 4 | 20 ± 4 | 19 ± 5 | 21 ± 5 | 21 ± 5 | 18 ± 4 | |
| 16 | 18 ± 4 | 14 ± 4 | 16 ± 4 | 16 ± 4 | 14 ± 4 | 18 ± 4 | 18 ± 4 | |
| 17 | 11 ± 4 | 14 ± 4 | 17 ± 4 | 17 ± 4 | 16 ± 4 | 15 ± 4 | 15 ± 4 | |
| 18 | 15 ± 4 | 13 ± 4 | 17 ± 4 | 12 ± 4 | 15 ± 4 | 12 ± 4 | 14 ± 4 | |
| 19 | 14 ± 4 | 14 ± 4 | 15 ± 4 | 13 ± 4 | 13 ± 4 | 11 ± 4 | 15 ± 4 | |
| 20 | 7 ± 3 | < 5 | < 5 | < 5 | 6 ± 3 | 7 ± 3 | 6 ± 3 | |
| 21 | 12 ± 4 | 11 ± 4 | 12 ± 4 | 14 ± 4 | 15 ± 4 | 15 ± 4 | 13 ± 4 | |
| 22 | 15 ± 4 | 17 ± 4 | 15 ± 4 | 22 ± 5 | 22 ± 5 | 19 ± 4 | 16 ± 4 | |
| 23 | 13 ± 4 | 14 ± 4 | 12 ± 4 | 14 ± 4 | 19 ± 4 | 17 ± 4 | 18 ± 4 | |
| 24 | 14 ± 4 | 12 ± 4 | 12 ± 4 | 18 ± 4 | 17 ± 4 | 16 ± 4 | 14 ± 4 | |
| 25 | 15 ± 4 | 15 ± 4 | 14 ± 4 | 16 ± 4 | 16 ± 4 | 20 ± 5 | 13 ± 4 | |
| 26 | 14 ± 4 | 9 ± 4 | 8 ± 4 | 11 ± 4 | 11 ± 4 | 10 ± 4 | 11 ± 4 | |
| 27 | 22 ± 5 | 25 ± 5 | 22 ± 5 | 25 ± 5 | 20 ± 5 | 23 ± 5 | 24 ± 5 | |
| 28 | 16 ± 4 | 16 ± 4 | 15 ± 4 | 14 ± 4 | 14 ± 4 | 17 ± 4 | 15 ± 4 | |
| 29 | 22 ± 4 | 20 ± 4 | 24 ± 5 | 20 ± 4 | 30 ± 5 | 27 ± 5 | 22 ± 5 | |
| 30 | 19 ± 4 | 15 ± 4 | 17 ± 4 | 19 ± 4 | 19 ± 5 | 22 ± 5 | 16 ± 4 | 10 ± 4 |
| 31 | 17 ± 4 | 20 ± 4 | 22 ± 5 | 26 ± 5 | 24 ± 5 | 20 ± 4 | 19 ± 5 | 24 ± 5 |
| 32 | 21 ± 4 | 15 ± 4 | 20 ± 4 | 27 ± 5 | 25 ± 4 | 15 ± 4 | 23 ± 4 | 23 ± 4 |
| 33 | 26 ± 5 | 23 ± 5 | 22 ± 5 | 28 ± 5 | 29 ± 5 | 28 ± 5 | 27 ± 5 | 28 ± 5 |
| 34 | 35 ± 5 | 27 ± 5 | 34 ± 5 | 30 ± 5 | 32 ± 5 | 31 ± 5 | 28 ± 5 | 33 ± 5 |
| 35 | 20 ± 5 | 14 ± 4 | 17 ± 4 | 21 ± 5 | 21 ± 5 | 24 ± 5 | 23 ± 5 | 16 ± 4 |
| 36 | 17 ± 4 | 16 ± 4 | 18 ± 4 | 20 ± 4 | 18 ± 4 | 20 ± 4 | 21 ± 4 | 24 ± 5 |
| 37 | 12 ± 4 | 16 ± 4 | 16 ± 4 | 19 ± 4 | 15 ± 4 | 19 ± 4 | 19 ± 4 | 19 ± 4 |
| 38 | 18 ± 4 | 18 ± 4 | 22 ± 5 | 19 ± 4 | 20 ± 5 | 19 ± 4 | 18 ± 4 | 23 ± 5 |
| 39 | 12 ± 4 | 18 ± 4 | 18 ± 4 | 17 ± 4 | 15 ± 4 | 18 ± 4 | 18 ± 4 | 17 ± 4 |
| 40 | 20 ± 4 | 17 ± 4 | 22 ± 4 | 20 ± 4 | 23 ± 4 | 24 ± 4 | 21 ± 4 | 18 ± 4 |
| 41 | 11 ± 4 | 11 ± 4 | 11 ± 4 | 12 ± 4 | 16 ± 4 | 16 ± 4 | 15 ± 4 | 15 ± 4 |
| 42 | 19 ± 4 | 16 ± 4 | 15 ± 4 | 20 ± 4 | 21 ± 4 | 17 ± 4 | 19 ± 4 | 19 ± 4 |
| 43 | 17 ± 4 | 18 ± 4 | 17 ± 4 | 20 ± 4 | 17 ± 4 | 17 ± 4 | 18 ± 4 | 15 ± 4 |
| 44 | 20 ± 4 | 20 ± 4 | 17 ± 4 | 18 ± 4 | 18 ± 4 | 16 ± 4 | 19 ± 4 | 17 ± 4 |
| 45 | 30 ± 5 | 34 ± 5 | 28 ± 5 | 30 ± 5 | 36 ± 6 | 29 ± 5 | 27 ± 5 | 29 ± 5 |
| 46 | 17 ± 4 | 24 ± 5 | 23 ± 5 | 17 ± 4 | 18 ± 4 | 23 ± 5 | 20 ± 4 | 21 ± 4 |
| 47 | 25 ± 5 | 27 ± 5 | 24 ± 5 | 26 ± 5 | 29 ± 5 | 31 ± 5 | 26 ± 5 | 27 ± 5 |
| 48 | 18 ± 4 | 21 ± 4 | 21 ± 4 | 18 ± 4 | 21 ± 4 | 19 ± 4 | 17 ± 4 | 23 ± 4 |
| 49 | 21 ± 5 | 30 ± 5 | 26 ± 5 | 36 ± 5 | 32 ± 5 | 28 ± 5 | 28 ± 5 | 34 ± 5 |
| 50 | 26 ± 6 | 27 ± 6 | 21 ± 5 | 28 ± 6 | 26 ± 6 | 23 ± 6 | 25 ± 6 | 22 ± 5 |
| 51 | 16 ± 4 | 21 ± 5 | 17 ± 4 | 19 ± 4 | 21 ± 5 | 19 ± 4 | 10 ± 4 | 22 ± 5 |
| 52 | 29 ± 4 | 33 ± 5 | 30 ± 4 | 35 ± 5 | 32 ± 5 | 33 ± 5 | 29 ± 5 | 28 ± 4 |
| MEAN | 18 ± 11 | 18 ± 12 | 18 ± 11 | 19 ± 12 | 20 ± 12 | 19 ± 11 | 18 ± 10 | 22 ± 12 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING BOTH THE MDA AND POSITIVE VALUES

**TABLE C-V.1 CONCENTRATIONS OF GROSS BETA IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER ± SIGMA

| | GROUP III | | | | | GROUP IV |
|---|---|---|---|---|---|---|
| WEEK | D-08 | D-10 | D-13 | D-14 | D-55 (1) | D-12 |
| 1 | 18 ± 4 | 17 ± 4 | 19 ± 4 | 19 ± 4 | 20 ± 4 | 22 ± 4 |
| 2 | 21 ± 4 | 21 ± 4 | 25 ± 5 | 23 ± 5 | 25 ± 5 | 24 ± 5 |
| 3 | 22 ± 4 | 25 ± 5 | 24 ± 4 | 24 ± 4 | 20 ± 4 | 22 ± 4 |
| 4 | 19 ± 4 | 19 ± 4 | 19 ± 4 | 21 ± 4 | 18 ± 4 | 21 ± 4 |
| 5 | 18 ± 4 | 18 ± 4 | 15 ± 4 | 20 ± 4 | 18 ± 4 | 16 ± 4 |
| 6 | 14 ± 4 | 13 ± 4 | 11 ± 4 | 15 ± 4 | 15 ± 4 | 12 ± 4 |
| 7 | 14 ± 4 | 17 ± 4 | 15 ± 4 | 15 ± 4 | 11 ± 4 | 13 ± 4 |
| 8 | 24 ± 5 | 23 ± 5 | 27 ± 5 | 24 ± 5 | 22 ± 5 | 28 ± 5 |
| 9 | 23 ± 4 | 17 ± 4 | 28 ± 5 | 22 ± 4 | 21 ± 4 | 19 ± 4 |
| 10 | 14 ± 4 | 16 ± 4 | 12 ± 4 | 17 ± 4 | 13 ± 4 | 14 ± 4 |
| 11 | 17 ± 4 | 21 ± 4 | 19 ± 4 | 9 ± 4 | 16 ± 4 | 18 ± 4 |
| 12 | 14 ± 4 | 16 ± 4 | 18 ± 4 | 13 ± 4 | 13 ± 4 | 16 ± 4 |
| 13 | 14 ± 4 | 13 ± 4 | 15 ± 4 | 12 ± 4 | 12 ± 4 | 10 ± 3 |
| 14 | 17 ± 4 | 15 ± 4 | 19 ± 4 | 15 ± 4 | 16 ± 4 | 17 ± 4 |
| 15 | 14 ± 4 | 21 ± 5 | 21 ± 5 | 21 ± 5 | 19 ± 4 | 17 ± 4 |
| 16 | 18 ± 4 | 14 ± 4 | 15 ± 4 | 15 ± 4 | 15 ± 4 | 14 ± 4 |
| 17 | 11 ± 4 | 16 ± 4 | 17 ± 4 | 15 ± 4 | 12 ± 4 | 12 ± 4 |
| 18 | 14 ± 4 | 12 ± 4 | 14 ± 4 | 13 ± 4 | 14 ± 4 | 16 ± 4 |
| 19 | 15 ± 4 | 13 ± 4 | 14 ± 4 | 14 ± 4 | 10 ± 4 | 17 ± 4 |
| 20 | 6 ± 3 | 6 ± 3 | 9 ± 4 | 8 ± 4 | 7 ± 3 | 6 ± 3 |
| 21 | 14 ± 4 | 15 ± 4 | 16 ± 4 | 15 ± 4 | 15 ± 4 | 12 ± 4 |
| 22 | 18 ± 4 | 17 ± 4 | 18 ± 4 | 18 ± 4 | 18 ± 4 | 17 ± 4 |
| 23 | 17 ± 4 | 15 ± 4 | 12 ± 4 | 15 ± 4 | 15 ± 4 | 14 ± 4 |
| 24 | 11 ± 3 | 15 ± 4 | 12 ± 3 | 13 ± 4 | 12 ± 4 | 14 ± 4 |
| 25 | 14 ± 4 | 15 ± 4 | 14 ± 4 | 19 ± 4 | 18 ± 4 | 18 ± 4 |
| 26 | 8 ± 4 | 7 ± 4 | 11 ± 4 | 12 ± 4 | 14 ± 4 | 15 ± 4 |
| 27 | 27 ± 5 | 21 ± 4 | 24 ± 5 | 25 ± 5 | 27 ± 5 | 25 ± 5 |
| 28 | 16 ± 4 | 17 ± 4 | 17 ± 4 | 18 ± 4 | 15 ± 4 | 18 ± 4 |
| 29 | 23 ± 5 | 25 ± 5 | 23 ± 5 | 31 ± 5 | 27 ± 5 | 28 ± 5 |
| 30 | 23 ± 5 | 18 ± 4 | 19 ± 4 | 27 ± 5 | 18 ± 4 | 18 ± 4 |
| 31 | 19 ± 4 | 25 ± 5 | 25 ± 5 | 26 ± 5 | 25 ± 5 | 24 ± 5 |
| 32 | 22 ± 4 | 26 ± 4 | 28 ± 5 | 23 ± 4 | 29 ± 5 | 25 ± 4 |
| 33 | 22 ± 4 | 26 ± 5 | 27 ± 5 | 24 ± 5 | 24 ± 5 | 25 ± 5 |
| 34 | 28 ± 5 | 29 ± 5 | 37 ± 6 | 30 ± 5 | 29 ± 5 | 35 ± 5 |
| 35 | 18 ± 4 | 21 ± 5 | 22 ± 5 | 20 ± 5 | 21 ± 5 | 22 ± 5 |
| 36 | 23 ± 5 | 22 ± 4 | 21 ± 4 | 20 ± 4 | 23 ± 5 | 17 ± 4 |
| 37 | 15 ± 4 | 21 ± 5 | 15 ± 4 | 17 ± 4 | 17 ± 4 | 20 ± 4 |
| 38 | 19 ± 4 | 18 ± 4 | 20 ± 5 | 18 ± 4 | 18 ± 4 | 22 ± 5 |
| 39 | 18 ± 4 | 16 ± 4 | 18 ± 4 | 17 ± 4 | 19 ± 4 | 16 ± 4 |
| 40 | 19 ± 4 | 20 ± 4 | 22 ± 4 | 20 ± 4 | 22 ± 4 | 22 ± 4 |
| 41 | 14 ± 4 | 15 ± 4 | 17 ± 4 | 13 ± 4 | 14 ± 4 | 16 ± 4 |
| 42 | 21 ± 4 | 16 ± 4 | 20 ± 4 | 19 ± 4 | 15 ± 4 | 24 ± 4 |
| 43 | 20 ± 5 | 17 ± 4 | 16 ± 4 | 14 ± 4 | 19 ± 5 | 21 ± 5 |
| 44 | 23 ± 5 | 20 ± 4 | 18 ± 4 | 21 ± 5 | 19 ± 4 | 18 ± 4 |
| 45 | 30 ± 5 | 28 ± 5 | 23 ± 5 | 29 ± 5 | 34 ± 5 | 29 ± 5 |
| 46 | 25 ± 5 | 18 ± 4 | 22 ± 5 | 21 ± 5 | 21 ± 4 | 17 ± 4 |
| 47 | 29 ± 5 | 27 ± 5 | 31 ± 5 | 32 ± 5 | 27 ± 5 | 25 ± 5 |
| 48 | 21 ± 4 | 22 ± 4 | 22 ± 4 | 21 ± 4 | 19 ± 4 | 20 ± 4 |
| 49 | 33 ± 5 | 31 ± 5 | 20 ± 5 | 28 ± 5 | 34 ± 5 | 26 ± 5 |
| 50 | 39 ± 5 | 23 ± 5 | 28 ± 6 | 24 ± 5 | 17 ± 5 | 19 ± 5 |
| 51 | 22 ± 5 | 22 ± 5 | 19 ± 4 | 24 ± 5 | 21 ± 5 | 21 ± 5 |
| 52 | 28 ± 4 | 28 ± 4 | 35 ± 5 | 31 ± 5 | 36 ± 5 | 32 ± 5 |
| MEAN | 19 ± 12 | 19 ± 10 | 20 ± 12 | 20 ± 12 | 19 ± 12 | 19 ± 11 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-V.2 MONTHLY AND YEARLY MEAN VALUES OF GROSS BETA CONCENTRATIONS (E-3 PCI/CU METER) IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

| GROUP I - ON-SITE LOCATIONS | | | | GROUP II - NEAR-FIELD LOCATIONS | | | | GROUP III - FAR-FIELD LOCATIONS | | | | GROUP IV - CONTROL LOCATION | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COLLECTION PERIOD | MIN. | MAX. | MEAN ± 2 SD | COLLECTION PERIOD | MIN. | MAX. | MEAN ± 2 SD | COLLECTION PERIOD | MIN. | MAX. | MEAN ± 2 SD | COLLECTION PERIOD | MIN. | MAX. | MEAN ± 2 SD |
| 12/30/05 - 02/03/06 | 14 | 23 | 19 ± 6 | 12/30/05 - 02/03/06 | 16 | 26 | 20 ± 6 | 12/30/05 - 02/03/06 | 15 | 25 | 20 ± 6 | 12/30/05 - 02/03/06 | 16 | 24 | 21 ± 6 |
| 02/03/06 - 03/03/06 | 12 | 26 | 18 ± 10 | 02/03/06 - 03/03/06 | 11 | 26 | 19 ± 9 | 02/03/06 - 03/03/06 | 11 | 28 | 19 ± 11 | 02/03/06 - 03/03/06 | 12 | 28 | 18 ± 15 |
| 03/03/06 - 03/31/06 | 11 | 19 | 14 ± 5 | 03/03/06 - 03/31/06 | 10 | 19 | 15 ± 5 | 03/03/06 - 03/31/06 | 9 | 21 | 15 ± 5 | 03/03/06 - 03/31/06 | 10 | 18 | 14 ± 7 |
| 03/31/06 - 04/28/06 | 11 | 20 | 16 ± 5 | 03/31/06 - 04/28/06 | 14 | 21 | 17 ± 4 | 03/31/06 - 04/28/06 | 11 | 21 | 16 ± 6 | 03/31/06 - 04/28/06 | 12 | 17 | 15 ± 5 |
| 04/28/06 - 06/02/06 | < 5 | 17 | 12 ± 8 | 04/28/06 - 06/02/06 | < 5 | 22 | 13 ± 9 | 04/28/06 - 06/02/06 | 6 | 18 | 13 ± 7 | 04/28/06 - 06/02/06 | 6 | 17 | 14 ± 9 |
| 06/02/06 - 06/30/06 | 8 | 15 | 13 ± 5 | 06/02/06 - 06/30/06 | 10 | 20 | 15 ± 6 | 06/02/06 - 06/30/06 | 7 | 19 | 13 ± 6 | 06/02/06 - 06/30/06 | 14 | 18 | 15 ± 4 |
| 06/30/06 - 07/28/06 | 15 | 25 | 19 ± 8 | 06/30/06 - 07/28/06 | 10 | 30 | 19 ± 11 | 06/30/06 - 07/28/06 | 15 | 31 | 22 ± 9 | 06/30/06 - 07/28/06 | 18 | 28 | 22 ± 10 |
| 07/28/06 - 09/01/06 | 14 | 35 | 22 ± 12 | 07/28/06 - 09/01/06 | 15 | 33 | 25 ± 10 | 07/28/06 - 09/01/06 | 18 | 37 | 25 ± 8 | 07/28/06 - 09/01/06 | 22 | 35 | 26 ± 10 |
| 09/01/06 - 09/29/06 | 12 | 22 | 17 ± 6 | 09/01/06 - 09/29/06 | 15 | 24 | 19 ± 5 | 09/01/06 - 09/29/06 | 15 | 23 | 19 ± 5 | 09/01/06 - 09/29/06 | 16 | 22 | 19 ± 5 |
| 09/29/06 - 11/03/06 | 11 | 22 | 17 ± 7 | 09/29/06 - 11/03/06 | 12 | 24 | 18 ± 5 | 09/29/06 - 11/03/06 | 13 | 23 | 18 ± 6 | 09/29/06 - 11/03/06 | 16 | 24 | 20 ± 6 |
| 11/03/06 - 12/01/06 | 17 | 34 | 24 ± 10 | 11/03/06 - 12/01/06 | 17 | 36 | 24 ± 10 | 11/03/06 - 12/01/06 | 18 | 34 | 25 ± 9 | 11/03/06 - 12/01/06 | 17 | 29 | 23 ± 10 |
| 12/01/06 - 12/30/06 | 16 | 33 | 25 ± 11 | 12/01/06 - 12/30/06 | 10 | 36 | 26 ± 13 | 12/01/06 - 12/30/06 | 17 | 39 | 27 ± 13 | 12/01/06 - 12/30/06 | 19 | 32 | 25 ± 12 |
| 12/30/05 - 12/30/06 | < 5 | 35 | 18 ± 8 | 12/30/05 - 12/30/06 | < 5 | 36 | 19 ± 8 | 12/30/05 - 12/30/06 | 6 | 39 | 19 ± 9 | 12/30/05 - 12/30/06 | 6 | 35 | 19 ± 8 |

**TABLE C-V.3** **CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-01 | 12/30/05 - 03/31/06 | < 6 | < 9 | < 30 | < 7 | < 14 | < 7 | < 6 | < 5 | < 383 |
| | 03/31/06 - 06/30/06 | < 2 | < 2 | < 10 | < 3 | < 5 | < 3 | < 2 | < 2 | < 91 |
| | 06/30/06 - 09/29/06 | < 3 | < 3 | < 11 | < 2 | < 7 | < 4 | < 2 | < 2 | < 121 |
| | 09/29/06 - 12/30/06 | < 1 | < 1 | < 5 | < 2 | < 4 | < 1 | < 1 | < 1 | < 8 |
| | MEAN | 3 ± 4 | 4 ± 7 | 14 ± 22 | 3 ± 5 | 7 ± 9 | 4 ± 5 | 3 ± 5 | 2 ± 4 | 151 ± 324 |
| D-02 | 12/30/05 - 03/31/06 | < 6 | < 8 | < 30 | < 2 | < 14 | < 10 | < 6 | < 5 | < 246 |
| | 03/31/06 - 06/30/06 | < 3 | < 5 | < 13 | < 4 | < 6 | < 4 | < 3 | < 3 | < 56 |
| | 06/30/06 - 09/29/06 | < 3 | < 5 | < 13 | < 3 | < 5 | < 8 | < 3 | < 2 | < 250 |
| | 09/29/06 - 12/30/06 | < 2 | < 3 | < 5 | < 1 | < 4 | < 2 | < 2 | < 2 | < 16 |
| | MEAN | 3 ± 4 | 5 ± 5 | 15 ± 22 | 2 ± 2 | 7 ± 9 | 6 ± 7 | 3 ± 4 | 3 ± 3 | 142 ± 247 |
| D-03 | 12/30/05 - 03/31/06 | < 4 | < 4 | < 35 | < 6 | < 16 | < 8 | < 6 | < 6 | < 481 |
| | 03/31/06 - 06/30/06 | < 5 | < 6 | < 13 | < 3 | < 9 | < 5 | < 2 | < 4 | < 15 |
| | 06/30/06 - 09/29/06 | < 6 | < 9 | < 26 | < 5 | < 12 | < 8 | < 5 | < 5 | < 306 |
| | 09/29/06 - 12/30/06 | < 2 | < 2 | < 7 | < 2 | < 6 | < 3 | < 2 | < 2 | < 10 |
| | MEAN | 4 ± 3 | 5 ± 6 | 20 ± 26 | 4 ± 3 | 10 ± 9 | 6 ± 5 | 4 ± 4 | 4 ± 3 | 203 ± 462 |
| D-04 | 12/30/05 - 03/31/06 | < 8 | < 5 | < 27 | < 3 | < 17 | < 12 | < 7 | < 5 | < 217 |
| | 03/31/06 - 06/30/06 | < 3 | < 4 | < 10 | < 4 | < 8 | < 5 | < 2 | < 2 | < 88 |
| | 06/30/06 - 09/29/06 | < 3 | < 6 | < 21 | < 3 | < 7 | < 4 | < 2 | < 3 | < 201 |
| | 09/29/06 - 12/30/06 | < 3 | < 2 | < 7 | < 2 | < 5 | < 3 | < 3 | < 3 | < 10 |
| | MEAN | 4 ± 5 | 4 ± 3 | 16 ± 18 | 3 ± 1 | 9 ± 11 | 6 ± 8 | 3 ± 5 | 3 ± 3 | 129 ± 196 |

**TABLE C-V.3** **CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-07 | 12/30/05 - 03/31/06 | < 7 | < 11 | < 38 | < 8 | < 11 | < 13 | < 6 | < 5 | < 434 |
| | 03/31/06 - 06/30/06 | < 2 | < 4 | < 8 | < 4 | < 4 | < 4 | < 1 | < 1 | < 80 |
| | 06/30/06 - 09/29/06 | < 3 | < 3 | < 14 | < 1 | < 4 | < 4 | < 2 | < 2 | < 258 |
| | 09/29/06 - 12/30/06 | < 3 | < 3 | < 7 | < 3 | < 6 | < 3 | < 3 | < 3 | < 15 |
| | MEAN | 4 ± 5 | 6 ± 8 | 17 ± 29 | 4 ± 6 | 6 ± 7 | 6 ± 9 | 3 ± 4 | 3 ± 3 | 197 ± 377 |
| D-08 | 12/30/05 - 03/31/06 | < 6 | < 7 | < 27 | < 6 | < 11 | < 10 | < 7 | < 5 | < 307 |
| | 03/31/06 - 06/30/06 | < 4 | < 6 | < 19 | < 3 | < 11 | < 7 | < 4 | < 4 | < 164 |
| | 06/30/06 - 09/29/06 | < 2 | < 4 | < 17 | < 2 | < 6 | < 4 | < 2 | < 2 | < 153 |
| | 09/29/06 - 12/30/06 | < 3 | < 2 | < 8 | < 2 | < 8 | < 4 | < 3 | < 3 | < 11 |
| | MEAN | 4 ± 3 | 5 ± 5 | 18 ± 15 | 3 ± 3 | 9 ± 6 | 6 ± 6 | 4 ± 4 | 3 ± 3 | 159 ± 242 |
| D-10 | 12/30/05 - 03/31/06 | < 6 | < 9 | < 27 | < 6 | < 20 | < 11 | < 8 | < 8 | < 290 |
| | 03/31/06 - 06/30/06 | < 5 | < 6 | < 15 | < 3 | < 9 | < 7 | < 4 | < 4 | < 54 |
| | 06/30/06 - 09/29/06 | < 3 | < 5 | < 20 | < 3 | < 9 | < 6 | < 4 | < 3 | < 293 |
| | 09/29/06 - 12/30/06 | < 3 | < 3 | < 10 | < 1 | < 5 | < 2 | < 2 | < 3 | < 8 |
| | MEAN | 4 ± 3 | 6 ± 5 | 18 ± 14 | 3 ± 4 | 11 ± 13 | 7 ± 7 | 4 ± 4 | 4 ± 5 | 161 ± 303 |
| D-12 | 12/30/05 - 03/31/06 | < 7 | < 13 | < 34 | < 3 | < 15 | < 9 | < 6 | < 5 | < 356 |
| | 03/31/06 - 06/30/06 | < 3 | < 2 | < 8 | < 3 | < 5 | < 4 | < 2 | < 2 | < 88 |
| | 06/30/06 - 09/29/06 | < 3 | < 5 | < 14 | < 2 | < 6 | < 7 | < 3 | < 3 | < 279 |
| | 09/29/06 - 12/29/06 | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 1 | < 1 | < 15 |
| | MEAN | 3 ± 5 | 6 ± 11 | 15 ± 27 | 2 ± 2 | 7 ± 10 | 5 ± 6 | 3 ± 4 | 3 ± 3 | 184 ± 319 |

**TABLE C-V.3** **CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-13 | 12/30/05 - 03/31/06 | < 6 | < 8 | < 26 | < 5 | < 15 | < 14 | < 6 | < 5 | < 430 |
| | 03/31/06 - 06/30/06 | < 4 | < 4 | < 13 | < 2 | < 6 | < 4 | < 3 | < 3 | < 97 |
| | 06/30/06 - 09/29/06 | < 3 | < 3 | < 17 | < 3 | < 6 | < 6 | < 1 | < 2 | < 294 |
| | 09/29/06 - 12/29/06 | < 3 | < 4 | < 9 | < 3 | < 6 | < 3 | < 3 | < 3 | < 24 |
| | MEAN | 4 ± 3 | 5 ± 5 | 16 ± 15 | 3 ± 2 | 8 ± 9 | 7 ± 10 | 3 ± 3 | 3 ± 2 | 211 ± 370 |
| D-14 | 12/30/05 - 03/31/06 | < 6 | < 7 | < 30 | < 4 | < 17 | < 12 | < 6 | < 5 | < 351 |
| | 03/31/06 - 06/30/06 | < 3 | < 5 | < 9 | < 3 | < 6 | < 7 | < 3 | < 3 | < 94 |
| | 06/30/06 - 09/29/06 | < 2 | < 3 | < 16 | < 2 | < 8 | < 4 | < 1 | < 2 | < 390 |
| | 09/29/06 - 12/29/06 | < 1 | < 2 | < 4 | < 1 | < 3 | < 2 | < 1 | < 2 | < 11 |
| | MEAN | 3 ± 4 | 4 ± 5 | 15 ± 22 | 3 ± 3 | 8 ± 13 | 6 ± 9 | 3 ± 5 | 3 ± 3 | 212 ± 374 |
| D-45 | 12/30/05 - 03/31/06 | < 5 | < 10 | < 36 | < 5 | < 15 | < 11 | < 7 | < 5 | < 306 |
| | 03/31/06 - 06/30/06 | < 2 | < 4 | < 10 | < 3 | < 6 | < 4 | < 2 | < 2 | < 88 |
| | 06/30/06 - 09/29/06 | < 2 | < 2 | < 9 | < 4 | < 4 | < 6 | < 2 | < 2 | < 183 |
| | 09/29/06 - 12/29/06 | < 3 | < 4 | < 6 | < 2 | < 4 | < 3 | < 3 | < 3 | < 17 |
| | MEAN | 3 ± 3 | 5 ± 7 | 15 ± 27 | 3 ± 2 | 7 ± 10 | 6 ± 8 | 3 ± 5 | 3 ± 3 | 149 ± 250 |
| D-53 | 12/30/05 - 03/31/06 | < 7 | < 9 | < 24 | < 5 | < 19 | < 12 | < 6 | < 5 | < 385 |
| | 03/31/06 - 06/30/06 | < 4 | < 5 | < 21 | < 3 | < 8 | < 6 | < 3 | < 2 | < 89 |
| | 06/30/06 - 09/29/06 | < 2 | < 5 | < 18 | < 3 | < 4 | < 7 | < 2 | < 3 | < 203 |
| | 09/29/06 - 12/30/06 | < 3 | < 2 | < 7 | < 2 | < 4 | < 3 | < 2 | < 2 | < 11 |
| | MEAN | 4 ± 4 | 6 ± 6 | 18 ± 14 | 3 ± 2 | 9 ± 14 | 7 ± 8 | 3 ± 4 | 3 ± 2 | 172 ± 325 |

**TABLE C-V.3** **CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BALA140 |
|---|---|---|---|---|---|---|---|---|---|---|
| D-55 | 12/30/05 - 03/31/06 | < 6 | < 11 | < 30 | < 6 | < 12 | < 12 | < 6 | < 6 | < 425 |
| (1) | 03/31/06 - 06/30/06 | < 3 | < 4 | < 14 | < 4 | < 7 | < 5 | < 3 | < 2 | < 140 |
| | 06/30/06 - 09/29/06 | < 2 | < 5 | < 12 | < 2 | < 9 | < 5 | < 2 | < 2 | < 265 |
| | 09/29/06 - 12/29/06 | < 2 | < 4 | < 9 | < 4 | < 7 | < 3 | < 3 | < 3 | < 16 |
| | MEAN | 3 ± 4 | 6 ± 7 | 17 ± 19 | 4 ± 3 | 9 ± 5 | 6 ± 7 | 3 ± 3 | 3 ± 4 | 212 ± 350 |
| D-56 | (1) | | | | | | | | | |
| | 07/25/06 - 09/29/06 | < 4 | < 6 | < 11 | < 2 | < 8 | < 6 | < 3 | < 3 | < 366 |
| | 09/29/06 - 12/30/06 | < 3 | < 4 | < 10 | < 3 | < 5 | < 4 | < 3 | < 3 | < 14 |
| | MEAN | 3 ± 2 | 5 ± 4 | 10 ± 2 | 3 ± 2 | 6 ± 4 | 5 ± 4 | 3 ± 1 | 3 ± 1 | 190 ± 498 |



(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

## TABLE C-VI.1 CONCENTRATIONS OF I-131 IN AIR IODINE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF E-3 PCI/CU METER ± SIGMA

| | GROUP I | | | GROUP II | | | | |
|---|---|---|---|---|---|---|---|---|
| WEEK | D-01 | D-02 | D-03 | D-04 | D-07 | D-45 | D-53 | D-56 |
| 1 | < 36.3 | < 36.3 | < 35.9 | < 36.2 | < 27 | < 27 | < 27 | (1) |
| 2 | < 21.5 | < 39.3 | < 39.2 | < 40.5 | < 40 | < 47 | < 45 | |
| 3 | < 26 | < 26.1 | < 26 | < 26.1 | < 34 | < 36 | < 37 | |
| 4 | < 35.9 | < 23.4 | < 35.9 | < 36.4 | < 36 | < 41 | < 40 | |
| 5 | < 43 | < 44.6 | < 43.1 | < 43.5 | < 29 | < 40 | < 39 | |
| 6 | < 39.4 | < 29.9 | < 39.6 | < 39.4 | < 40 | < 43 | < 42 | |
| 7 | < 42.2 | < 42.4 | < 42.1 | < 42.4 | < 28 | < 40 | < 39 | |
| 8 | < 40.9 | < 42.4 | < 28.2 | < 42.3 | < 43 | < 43 | < 42 | |
| 9 | < 39.2 | < 39.4 | < 39.3 | < 39.3 | < 47 | < 43 | < 42 | |
| 10 | < 23.3 | < 24.3 | < 23.4 | < 17.6 | < 24 | < 29 | < 28 | |
| 11 | < 33.8 | < 34 | < 33.9 | < 35.1 | < 26 | < 39 | < 38 | |
| 12 | < 28.9 | < 29.4 | < 29.3 | < 29 | < 16 | < 34 | < 32 | |
| 13 | < 32 | < 32.2 | < 31.9 | < 32.1 | < 25 | < 43 | < 40 | |
| 14 | < 45 | < 44.9 | < 44.8 | < 45.1 | < 39 | < 40 | < 40 | |
| 15 | < 55.6 | < 57 | < 53.7 | < 55.8 | < 61 | < 61 | < 60 | |
| 16 | < 38.9 | < 36 | < 36.8 | < 39 | < 44 | < 51 | < 49 | |
| 17 | < 35.7 | < 35.4 | < 35.3 | < 35.7 | < 24 | < 31 | < 29 | |
| 18 | < 65.4 | < 65.7 | < 65.6 | < 65.5 | < 62 | < 61 | < 61 | |
| 19 | < 54.5 | < 56.8 | < 53 | < 54.5 | < 61 | < 57 | < 56 | |
| 20 | < 40.6 | < 40.7 | < 40.7 | < 40.7 | < 40 | < 40 | < 40 | |
| 21 | < 45.1 | < 43.9 | < 45.4 | < 43.8 | < 63 | < 69 | < 67 | |
| 22 | < 40.3 | < 40.4 | < 40.3 | < 40.3 | < 26 | < 63 | < 61 | |
| 23 | < 65.5 | < 65.9 | < 65.8 | < 65.5 | < 66 | < 63 | < 62 | |
| 24 | < 69.5 | < 69.5 | < 69.7 | < 69.5 | < 52 | < 64 | < 63 | |
| 25 | < 51.6 | < 51.8 | < 51.7 | < 51.6 | < 32 | < 46 | < 44 | |
| 26 | < 65.3 | < 66 | < 66.1 | < 65.4 | < 36 | < 37 | < 36 | |
| 27 | < 55.2 | < 54.4 | < 55 | < 55.2 | < 42 | < 60 | < 59 | |
| 28 | < 68.9 | < 68.3 | < 68.1 | < 68.9 | < 38 | < 62 | < 63 | |
| 29 | < 44.9 | < 45.9 | < 45.7 | < 45.2 | < 37 | < 35 | < 37 | |
| 30 | < 54.7 | < 54.9 | < 53.1 | < 54.8 | < 48 | < 66 | < 66 | < 167 (2) |
| 31 | < 42 | < 42.2 | < 42.2 | < 42.2 | < 22 | < 16 | < 17 | < 16 |
| 32 | < 56.4 | < 56.7 | < 56.5 | < 56.4 | < 45 | < 45 | < 44 | < 44 |
| 33 | < 21 | < 20.6 | < 21.8 | < 20.9 | < 16 | < 40 | < 41 | < 41 |
| 34 | < 31 | < 31.6 | < 31.2 | < 31.2 | < 26 | < 34 | < 31 | < 31 |
| 35 | < 28.4 | < 28.5 | < 28.4 | < 28.4 | < 23 | < 61 | < 59 | < 59 |
| 36 | < 67 | < 67.2 | < 67.1 | < 67 | < 37 | < 48 | < 46 | < 46 |
| 37 | < 62.5 | < 62.8 | < 62.7 | < 62.4 | < 50 | < 69 | < 66 | < 67 |
| 38 | < 36.9 | < 67.3 | < 67.2 | < 67.2 | < 69 | < 35 | < 34 | < 33 |
| 39 | < 31 | < 56.8 | < 56.8 | < 56.5 | < 55 | < 56 | < 55 | < 56 |
| 40 | < 52 | < 65.2 | < 65 | < 65.3 | < 66 | < 43 | < 43 | < 44 |
| 41 | < 67.6 | < 37.4 | < 67.8 | < 67.7 | < 66 | < 34 | < 34 | < 34 |
| 42 | < 32.8 | < 61.2 | < 60.9 | < 59.6 | < 60 | < 55 | < 56 | < 57 |
| 43 | < 60.3 | < 60.5 | < 59.7 | < 59.6 | < 36 | < 63 | < 59 | < 59 |
| 44 | < 62.2 | < 60.5 | < 33.2 | < 64.4 | < 62 | < 53 | < 52 | < 53 |
| 45 | < 68.2 | < 68.6 | < 68.5 | < 68.2 | < 56 | < 39 | < 42 | < 42 |
| 46 | < 51.8 | < 61.5 | < 51.8 | < 51.7 | < 49 | < 49 | < 46 | < 45 |
| 47 | < 30.4 | < 30.5 | < 30.5 | < 24.2 | < 31 | < 32 | < 31 | < 30 |
| 48 | < 11.6 | < 24.4 | < 25.2 | < 24.3 | < 22 | < 27 | < 26 | < 25 |
| 49 | < 44 | < 44.2 | < 44.1 | < 44 | < 23 | < 47 | < 56 | < 45 |
| 50 | < 49.8 | < 49.8 | < 49.8 | < 49.7 | < 37 | < 40 | < 36 | < 36 |
| 51 | < 20.5 | < 27.5 | < 27.5 | < 27.4 | < 28 | < 45 | < 27 | < 27 |
| 52 | < 26.9 | < 26.6 | < 26.5 | < 26.9 | < 15 | < 28 | < 23 | < 23 |
| MEAN | 44 ± 30 | 46 ± 30 | 46 ± 29 | 47 ± 30 | 40 ± 30 | 45 ± 25 | 44 ± 25 | 47 ± 58 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION
(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATIONS

**TABLE C-VI.1 CONCENTRATIONS OF I-131 IN AIR IODINE SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF E-3 PCI/CU METER + SIGMA

| | GROUP III | | | | | GROUP IIV |
|---|---|---|---|---|---|---|
| WEEK | D-08 | D-10 | D-13 | D-14 | D-55 | D-12 |
| 1 | < 30 | < 30 | < 30 | < 27 | < 27 (1) | < 31 |
| 2 | < 33 | < 33 | < 34 | < 47 | < 47 | < 33 |
| 3 | < 34 | < 34 | < 34 | < 35 | < 24 | < 34 |
| 4 | < 34 | < 34 | < 33 | < 39 | < 41 | < 34 |
| 5 | < 37 | < 37 | < 38 | < 40 | < 40 | < 37 |
| 6 | < 48 | < 50 | < 50 | < 43 | < 43 | < 50 |
| 7 | < 36 | < 36 | < 36 | < 40 | < 40 | < 36 |
| 8 | < 26 | < 25 | < 26 | < 42 | < 43 | < 25 |
| 9 | < 48 | < 48 | < 31 | < 43 | < 43 | < 53 |
| 10 | < 29 | < 30 | < 31 | < 28 | < 28 | < 31 |
| 11 | < 47 | < 47 | < 47 | < 41 | < 39 | < 47 |
| 12 | < 26 | < 26 | < 27 | < 34 | < 34 | < 26 |
| 13 | < 41 | < 41 | < 42 | < 43 | < 43 | < 42 |
| 14 | < 26 | < 39 | < 39 | < 40 | < 40 | < 39 |
| 15 | < 62 | < 62 | < 61 | < 61 | < 34 | < 62 |
| 16 | < 44 | < 32 | < 46 | < 51 | < 51 | < 46 |
| 17 | < 42 | < 42 | < 40 | < 31 | < 31 | < 39 |
| 18 | < 62 | < 62 | < 61 | < 61 | < 61 | < 34 |
| 19 | < 61 | < 61 | < 61 | < 55 | < 57 | < 41 |
| 20 | < 40 | < 40 | < 40 | < 40 | < 22 | < 40 |
| 21 | < 63 | < 63 | < 69 | < 69 | < 40 | < 63 |
| 22 | < 62 | < 62 | < 62 | < 63 | < 60 | < 62 |
| 23 | < 66 | < 66 | < 63 | < 63 | < 35 | < 66 |
| 24 | < 66 | < 65 | < 66 | < 62 | < 64 | < 66 |
| 25 | < 32 | < 32 | < 47 | < 44 | < 36 | < 32 |
| 26 | < 52 | < 55 | < 53 | < 37 | < 37 | < 52 |
| 27 | < 56 | < 54 | < 55 | < 60 | < 59 | < 56 |
| 28 | < 62 | < 62 | < 63 | < 62 | < 62 | < 63 |
| 29 | < 57 | < 57 | < 57 | < 35 | < 35 | < 57 |
| 30 | < 60 | < 60 | < 60 | < 42 | < 66 | < 60 |
| 31 | < 18 | < 18 | < 18 | < 10 | < 16 | < 18 |
| 32 | < 66 | < 66 | < 66 | < 36 | < 45 | < 66 |
| 33 | < 28 | < 36 | < 35 | < 34 | < 40 | < 36 |
| 34 | < 56 | < 56 | < 60 | < 48 | < 34 | < 57 |
| 35 | < 56 | < 44 | < 56 | < 56 | < 61 | < 56 |
| 36 | < 67 | < 67 | < 67 | < 55 | < 46 | < 67 |
| 37 | < 64 | < 64 | < 65 | < 69 | < 69 | < 36 |
| 38 | < 39 | < 31 | < 39 | < 39 | < 35 | < 39 |
| 39 | < 24 | < 30 | < 30 | < 30 | < 55 | < 30 |
| 40 | < 36 | < 55 | < 52 | < 50 | < 43 | < 52 |
| 41 | < 67 | < 50 | < 64 | < 65 | < 34 | < 64 |
| 42 | < 23 | < 42 | < 43 | < 43 | < 56 | < 43 |
| 43 | < 64 | < 65 | < 67 | < 52 | < 64 | < 64 |
| 44 | < 36 | < 64 | < 65 | < 67 | < 54 | < 65 |
| 45 | < 64 | < 64 | < 63 | < 31 | < 40 | < 63 |
| 46 | < 53 | < 49 | < 50 | < 51 | < 49 | < 50 |
| 47 | < 15 | < 27 | < 28 | < 28 | < 32 | < 28 |
| 48 | < 14 | < 26 | < 26 | < 26 | < 27 | < 27 |
| 49 | < 65 | < 65 | < 66 | < 30 | < 45 | < 66 |
| 50 | < 18 | < 36 | < 36 | < 25 | < 37 | < 36 |
| 51 | < 25 | < 45 | < 28 | < 45 | < 28 | < 46 |
| 52 | < 25 | < 25 | < 32 | < 18 | < 28 | < 31 |
| MEAN | 44 ± 33 | 46 ± 29 | 47 ± 29 | 44 ± 28 | 43 ± 25 | 46 ± 28 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-VII.1 CONCENTRATIONS OF I-131 IN MILK SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| COLLECTION PERIOD | CONTROL FARM D-25 | |
|---|---|---|
| 01/05/06 | < 0.6 | |
| 02/02/06 | < 0.4 | |
| 03/02/06 | < 0.6 | |
| 04/06/06 | < 0.3 | |
| 05/05/06 | < 0.7 | |
| 05/19/06 | < 0.6 | |
| 06/02/06 | < 0.7 | |
| 06/16/06 | < 0.95 | |
| 06/30/06 | < 2.9 | (1) |
| 07/14/06 | < 0.6 | |
| 07/28/06 | < 0.8 | |
| 08/10/06 | < 0.3 | |
| 08/25/06 | < 0.7 | |
| 09/08/06 | < 0.3 | |
| 09/22/06 | < 0.5 | |
| 10/06/06 | < 0.3 | |
| 10/19/06 | < 0.7 | |
| 11/03/06 | < 0.7 | |
| 12/07/06 | < 0.3 | |
| MEAN | 0.7 ± 1.1 | |

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

**TABLE C-VII.2 CONCENTRATIONS OF GAMMA EMITTERS IN MILK SAMPLES COLLECTED THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | CS-134 | CS-137 | BA-140 | LA-140 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D-25 | 01/05/06 | < 8 | < 9 | < 19 | < 9 | < 24 | < 9 | < 11 | < 9 | < 38 | < 10 |
| | 02/02/06 | < 8 | < 9 | < 20 | < 9 | < 23 | < 9 | < 10 | < 9 | < 44 | < 10 |
| | 03/02/06 | < 6 | < 7 | < 16 | < 7 | < 17 | < 7 | < 7 | < 7 | < 33 | < 8 |
| | 04/06/06 | < 8 | < 9 | < 17 | < 8 | < 25 | < 10 | < 13 | < 8 | < 41 | < 13 |
| | 05/05/06 | < 8 | < 8 | < 20 | < 9 | < 21 | < 10 | < 8 | < 8 | < 51 | < 14.7 |
| | 05/19/06 | < 8 | < 9 | < 21 | < 9 | < 24 | < 9 | < 9 | < 10 | < 43 | < 13 |
| | 06/02/06 | < 7 | < 8 | < 19 | < 8 | < 18 | < 8 | < 8 | < 8 | < 44 | < 14 |
| | 06/16/06 | < 10 | < 9 | < 23 | < 12 | < 22 | < 11 | < 10 | < 11 | < 38 | < 13 |
| | 06/30/06 | < 5 | < 5 | < 12 | < 6 | < 12 | < 5 | < 5 | < 5 | < 27 | < 9 |
| | 07/14/06 | < 6 | < 8 | < 17 | < 7 | < 17 | < 7 | < 7 | < 7 | < 44 | < 14 |
| | 07/28/06 | < 6 | < 7 | < 18 | < 6 | < 19 | < 8 | < 8 | < 7 | < 37 | < 12 |
| | 08/10/06 | < 7 | < 6 | < 15 | < 7 | < 15 | < 6 | < 6 | < 5 | < 36 | < 9 |
| | 08/25/06 | < 6 | < 6 | < 13 | < 7 | < 12 | < 7 | < 5 | < 5 | < 33 | < 13 |
| | 09/08/06 | < 6 | < 6 | < 16 | < 5 | < 17 | < 7 | < 4 | < 5 | < 39 | < 13 |
| | 09/22/06 | < 7 | < 7 | < 15 | < 7 | < 15 | < 9 | < 7 | < 8 | < 29 | < 8 |
| | 10/06/06 | < 5 | < 6 | < 16 | < 6 | < 10 | < 7 | < 5 | < 5 | < 49 | < 12 |
| | 10/19/06 | < 5 | < 7 | < 14 | < 6 | < 14 | < 6 | < 5 | < 6 | < 40 | < 14 |
| | 11/03/06 | < 6 | < 5 | < 14 | < 5 | < 12 | < 6 | < 5 | < 6 | < 43 | < 11 |
| | 12/07/06 | < 6 | < 6 | < 17 | < 7 | < 16 | < 6 | < 6 | < 6 | < 41 | < 8 |
| | MEAN | 7 ± 3 | 7 ± 3 | 17 ± 6 | 7 ± 4 | 17 ± 9 | 8 ± 3 | 7 ± 5 | 7 ± 4 | 39 ± 12 | 11 ± 5 |

**TABLE C-VIII.1** **CONCENTRATIONS OF GAMMA EMITTERS IN VEGETATION SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

| STC | COLLECTION PERIOD | MN-54 | CO-58 | FE-59 | CO-60 | ZN-65 | ZRNB-95 | I-131 | CS-134 | CS-137 | BALA140 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D-QUAD 1 Beets | 09/16/06 | < 23 | < 21 | < 44 | < 14 | < 47 | < 24 | < 45 | < 18 | < 21 | < 32 |
| D-QUAD 1 Swiss Chard | 09/16/06 | < 8 | < 8 | < 16 | < 8 | < 19 | < 9 | < 19 | < 6 | < 8 | < 15 |
| | MEAN | 15 ± 21 | 14 ± 19 | 30 ± 40 | 11 ± 9 | 33 ± 39 | 16 ± 21 | 32 ± 37 | 12 ± 17 | 15 ± 18 | 23 ± 23 |
| D-QUAD 2 Carrot greens | 09/23/06 | < 3 | < 3 | < 8 | < 3 | < 8 | < 3 | < 8 | < 3 | < 3 | < 5 |
| D-QUAD 2 Carrots | 09/23/06 | < 17 | < 18 | < 50 | < 16 | < 43 | < 17 | < 55 | < 15 | < 16 | < 46 |
| | MEAN | 10 ± 19 | 11 ± 21 | 29 ± 59 | 10 ± 18 | 26 ± 50 | 10 ± 19 | 31 ± 66 | 9 ± 17 | 10 ± 19 | 26 ± 58 |
| D-QUAD 3 Broccoli | 09/16/06 | < 11 | < 11 | < 28 | < 10 | < 26 | < 9 | < 25 | < 10 | < 9 | < 20 |
| D-QUAD 3 Potatoes | 09/23/06 | < 14 | < 17 | < 34 | < 19 | < 37 | < 18 | < 53 | < 14 | < 15 | < 28 |
| | MEAN | 12 ± 4 | 14 ± 8 | 31 ± 9 | 14 ± 12 | 32 ± 16 | 13 ± 12 | 39 ± 40 | 12 ± 7 | 12 ± 8 | 24 ± 11 |
| D-QUAD 4 Cabbage | 09/16/06 | < 19 | < 23 | < 36 | < 23 | < 41 | < 20 | < 55 | < 18 | < 20 | < 42 |
| D-QUAD 4 Onions | 09/16/06 | < 15 | < 9 | < 12 | < 14 | < 19 | < 10 | < 47 | < 5 | < 9 | < 55 |
| | MEAN | 17 ± 6 | 16 ± 19 | 24 ± 34 | 18 ± 12 | 30 ± 31 | 15 ± 15 | 51 ± 11 | 12 ± 19 | 15 ± 15 | 49 ± 19 |
| D-Control Sweet potato greens | 09/23/06 | < 2 | < 2 | < 4 | < 2 | < 4 | < 2 | < 4 | < 1 | < 2 | < 2 |
| D-Control Sweet potatoes | 09/23/06 | < 13 | < 13 | < 35 | < 13 | < 30 | < 15 | < 42 | < 13 | < 17 | < 18 |
| | MEAN | 7 ± 17 | 7 ± 16 | 20 ± 43 | 7 ± 16 | 17 ± 36 | 8 ± 19 | 23 ± 53 | 7 ± 16 | 9 ± 21 | 10 ± 21 |

**TABLE C-IX.1 QUARTERLY TLD RESULTS FOR DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF MILLI-ROENTGEN/QUARTER ± 2 STANDARD DEVIATIONS

| STATION CODE | MEAN ± 2 S. D. | JAN - MAR | APR-JUN | JUL-SEP | OCT-DEC |
|---|---|---|---|---|---|
| D-01-1 | 23.8 ± 5.3 | 24 | 25 | 20 | 26 |
| D-01-2 | 24.5 ± 6.2 | 27 | 25 | 20 | 26 |
| D-02-1 | 25.8 ± 5.0 | 29 | 25 | 23 | 26 |
| D-02-2 | 27.8 ± 8.1 | 30 | 31 | 22 | 28 |
| D-03-1 | 21.8 ± 4.7 | 25 | 22 | 20 | 20 |
| D-03-2 | 23.3 ± 14 | 22 | 33 | 17 | 21 |
| D-04-1 | 25.3 ± 3.4 | 27 | 25 | 23 | 26 |
| D-04-2 | 24.8 ± 5.7 | 28 | 25 | 21 | 25 |
| D-07-1 | 23.8 ± 6.0 | 27 | 23 | 20 | 25 |
| D-07-2 | 22.8 ± 5.3 | 25 | 23 | 19 | 24 |
| D-08-1 | 24.3 ± 3.8 | 27 | 24 | 23 | 23 |
| D-08-2 | 25.3 ± 3.4 | 27 | 25 | 23 | 26 |
| D-10-1 | 26.0 ± 4.3 | 27 | 26 | 23 | 28 |
| D-10-2 | 25.0 ± 4.3 | 24 | 28 | 23 | 25 |
| D-12-1 | 23.0 ± 5.9 | 22 | 27 | 20 | 23 |
| D-12-2 | 22.0 ± 5.9 | 25 | 24 | 19 | 20 |
| D-13-1 | 23.0 ± 3.7 | 25 | 22 | 21 | 24 |
| D-13-2 | 21.3 ± 5.5 | 24 | 23 | 18 | 20 |
| D-14-1 | 23.5 ± 5.3 | 25 | 26 | 20 | 23 |
| D-14-2 | 23.8 ± 4.1 | 26 | 24 | 21 | 24 |
| D-45-1 | 25.0 ± 5.9 | 25 | 26 | 21 | 28 |
| D-45-2 | 26.8 ± 1.0 | 27 | 27 | 26 | 27 |
| D-53-1 | 20.0 ± 5.4 | 21 | 21 | 16 | 22 |
| D-53-2 | 19.5 ± 4.8 | 21 | 21 | 16 | 20 |
| D-55-1 | 25.8 ± 7.2 | 29 | 25 | 21 | 28 |
| D-55-2 | 24.5 ± 2.0 | 24 | 26 | 24 | 24 |
| D-56-1 | 20.3 ± 6.0 | 24 | 21 | 17 | 19 |
| D-56-2 | 22.0 ± 4.9 | 25 | 22 | 19 | 22 |
| D-101-1 | 25.8 ± 5.7 | 28 | 25 | 22 | 28 |
| D-101-2 | 24.5 ± 5.3 | 26 | 27 | 21 | 24 |
| D-102-1 | 26.0 ± 1.6 | 26 | 26 | 25 | 27 |
| D-102-2 | 27.5 ± 4.8 | 29 | 29 | 24 | 28 |
| D-103-1 | 24.8 ± 4.4 | 28 | 24 | 23 | 24 |
| D-103-2 | 24.5 ± 4.2 | 27 | 25 | 22 | 24 |
| D-104-1 | 26.0 ± 5.9 | 29 | 26 | 22 | 27 |
| D-104-2 | 24.5 ± 6.6 | 28 | 25 | 20 | 25 |
| D-105-1 | 25.0 ± 6.9 | 28 | 26 | 20 | 26 |
| D-105-2 | 24.8 ± 5.0 | 28 | 24 | 22 | 25 |
| D-106-1 | 23.0 ± 8.5 | 27 | 24 | 17 | 24 |
| D-106-2 | 20.8 ± 4.4 | 22 | 23 | 18 | 20 |
| D-107-1 | 21.8 ± 3.8 | 23 | 23 | 19 | 22 |
| D-107-2 | 21.0 ± 5.9 | 24 | 21 | 17 | 22 |
| D-108-1 | 25.8 ± 4.4 | 28 | 25 | 23 | 27 |
| D-108-2 | 23.0 ± 5.4 | 25 | 24 | 19 | 24 |
| D-109-1 | 26.8 ± 1.9 | 28 | 26 | 26 | 27 |
| D-109-2 | 25.5 ± 6.6 | 29 | 26 | 21 | 26 |
| D-110-3 | 28.3 ± 4.4 | 31 | 27 | 26 | 29 |
| D-110-4 | 29.0 ± 4.3 | 32 | 28 | 27 | 29 |
| D-111-1 | 26.8 ± 4.1 | 29 | 25 | 25 | 28 |
| D-111-2 | 27.0 ± 5.9 | 30 | 28 | 23 | 27 |
| D-112A-1 | 24.3 ± 6.0 | 28 | 23 | 21 | 25 |
| D-112A-2 | 24.5 ± 6.2 | 29 | 24 | 22 | 23 |
| D-113-1 | 22.0 ± 7.1 | 25 | 24 | 17 | 22 |
| D-113-2 | 23.3 ± 4.4 | 26 | 24 | 22 | 21 |
| D-114-1 | 24.0 ± 6.3 | 27 | 26 | 20 | 23 |
| D-114-2 | 22.3 ± 4.4 | 24 | 23 | 19 | 23 |

**TABLE C-IX.1 QUARTERLY TLD RESULTS FOR DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF MILLI-ROENTGEN/QUARTER ± 2 STANDARD DEVIATIONS

| STATION CODE | MEAN ± 2 S. D. | JAN - MAR | APR-JUN | JUL-SEP | OCT-DEC |
|---|---|---|---|---|---|
| D-115-1 | 25.0 ± 3.3 | 27 | 25 | 23 | 25 |
| D-115-2 | 26.0 ± 5.7 | 28 | 28 | 22 | 26 |
| D-116-1 | 26.0 ± 5.9 | 30 | 25 | 23 | 26 |
| D-116-2 | 26.3 ± 5.0 | 29 | 26 | 23 | 27 |
| D-201-1 | 29.8 ± 6.0 | 31 | 33 | 26 | 29 |
| D-201-2 | 29.8 ± 5.3 | 32 | 28 | 27 | 32 |
| D-202-1 | 25.5 ± 4.2 | 28 | 25 | 23 | 26 |
| D-202-2 | 24.5 ± 4.2 | 27 | 24 | 22 | 25 |
| D-203-1 | 24.5 ± 5.3 | 27 | 24 | 21 | 26 |
| D-203-2 | 22.8 ± 6.8 | 26 | 24 | 18 | 23 |
| D-204-1 | 25.0 ± 5.9 | 28 | 25 | 21 | 26 |
| D-204-2 | 24.0 ± 5.2 | 27 | 23 | 21 | 25 |
| D-205-1 | 26.3 ± 7.2 | 29 | 27 | 21 | 28 |
| D-205-2 | 25.3 ± 6.0 | 29 | 24 | 22 | 26 |
| D-206-1 | 25.0 ± 5.2 | 28 | 24 | 22 | 26 |
| D-206-2 | 25.0 ± 4.9 | 28 | 25 | 22 | 25 |
| D-207-1 | 22.8 ± 4.4 | 25 | 22 | 20 | 24 |
| D-207-2 | 23.3 ± 4.1 | 26 | 23 | 21 | 23 |
| D-208-1 | 21.8 ± 5.0 | 25 | 22 | 19 | 21 |
| D-208-2 | 21.0 ± 3.7 | 23 | 22 | 19 | 20 |
| D-209-1 | 21.3 ± 3.4 | 23 | 22 | 19 | 21 |
| D-209-2 | 21.8 ± 4.1 | 24 | 22 | 19 | 22 |
| D-210-1 | 24.3 ± 4.7 | 26 | 26 | 21 | 24 |
| D-210-2 | 25.5 ± 6.2 | 28 | 27 | 21 | 26 |
| D-211-1 | 26.8 ± 6.0 | 28 | 30 | 23 | 26 |
| D-211-2 | 26.0 ± 5.4 | 27 | 28 | 22 | 27 |
| D-212-3 | 23.0 ± 3.3 | 25 | 23 | 21 | 23 |
| D-212-4 | 22.8 ± 5.3 | 25 | 23 | 19 | 24 |
| D-213-1 | 21.0 ± 6.7 | 22 | 23 | 16 | 23 |
| D-213-2 | 21.0 ± 5.9 | 24 | 22 | 17 | 21 |
| D-214-1 | 28.5 ± 5.0 | 31 | 29 | 25 | 29 |
| D-214-2 | 28.3 ± 5.0 | 31 | 28 | 25 | 29 |
| D-215-1 | 28.3 ± 5.5 | 31 | 27 | 25 | 30 |
| D-215-2 | 27.3 ± 5.0 | 30 | 27 | 24 | 28 |
| D-216-1 | 25.3 ± 4.4 | 28 | 24 | 23 | 26 |
| D-216-2 | 27.5 ± 5.3 | 30 | 27 | 24 | 29 |

**TABLE C-IX.2 MEAN QUARTERLY TLD RESULTS FOR THE INNER RING, OUTER RING, OTHER AND CONTROL LOCATIONS FOR DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF MILLI-ROENTGEN/QUARTER ± 2
STANDARD DEVIATIONS OF THE STATION DATA

| STATION CODE | INNER RING | OUTER RING | OTHER | CONTROL |
|---|---|---|---|---|
| JAN-MAR | 27.4 ± 4.5 | 27.3 ± 5.3 | 25.6 ± 4.6 | 23.5 ± 4.2 |
| APR-JUN | 25.2 ± 3.5 | 25.1 ± 5.5 | 24.8 ± 5.7 | 25.5 ± 4.2 |
| JUL-SEP | 21.7 ± 5.3 | 21.5 ± 5.2 | 20.7 ± 5.1 | 19.5 ± 1.4 |
| OCT-DEC | 25.1 ± 4.7 | 25.4 ± 5.8 | 24.2 ± 5.5 | 21.5 ± 4.2 |

**TABLE C-IX.3 SUMMARY OF THE AMBIENT DOSIMETRY PROGRAM FOR DRESDEN NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF MILLI-ROENTGEN/QUARTER

| LOCATION | SAMPLES ANALYZED | PERIOD MINIMUM | PERIOD MAXIMUM | PERIOD MEAN ± 2 S. D. |
|---|---|---|---|---|
| INNER RING | 128 | 17 | 32 | 24.9 ± 6.1 |
| OUTER RING | 128 | 16 | 33 | 24.8 ± 6.8 |
| OTHER | 104 | 16 | 33 | 23.8 ± 6.4 |
| CONTROL | 8 | 19 | 27 | 22.5 ± 5.6 |

INNER RING STATIONS - D-101-1, D-101-2, D-102-1, D-102-2, D-103-1, D-103-2, D-104-1, D-104-2 D-105-1, D-105-2, D-106-1, D-106-2, D-107-1, D-107-2, D-108-1, D-108-2, D-109-1, D-109-2, D-110-3, D-110-4, D-111-1, D-111-2, D-112A-1, D-112A-2, D-113-1, D-113-2, D-114-1, D-114-2, D-115-1, D-115-2 D-116-1, D-116-2

INNER RING STATIONS - D-201-1, D-201-2, D-202-1, D-202-2, D-203-1, D-203-2, D-204-1, D-204-2 D-205-1, D-205-2, D-206-1, D-206-2, D-207-1, D-207-2, D-208-1, D-208-2, D-209-1, D-209-2, D-210-1, D-210-2, D-211-1, D-211-2, D-212-3, D-212-4, D-213-1, D-213-2, D-214-1, D-214-2, D-215-1, D-215-2 D-216-1, D-216-2

OTHER STATIONS - D-01-1, D-01-2, D-02-1, D-02-2, D-03-1, D-03-2, D-04-1, D-04-2, D-07-1, D-07-2 D-08-1, D-08-2, D-10-1, D-10-2, D-13-1, D-13-2, D-14-1, D-14-2, D-45-1, D-45-2, D-53-1, D-53-2 D-55-1 D-55-2, D-56-1, D-56-2

CONTROL STATIONS - D-12-1, D-12-2

## TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

**SURFACE WATER (TRITIUM LIQUID SCINTILLATION)**

| COLLECTION PERIOD | D-51 | D-52 | D-54 | D-57 |
|---|---|---|---|---|
| JAN-MAR | 01/06/06 - 03/31/06 | 01/06/06 - 03/31/06 | 01/05/06 - 03/30/06 | (1) |
| APR-JUN | 04/07/06 - 06/30/06 | 04/07/06 - 06/30/06 | 04/06/06 - 06/29/06 | |
| JUL-SEP | 07/07/06 - 09/29/06 | 07/07/06 - 09/29/06 | 07/06/06 - 09/28/06 | |
| OCT-DEC | 10/06/06 - 12/29/06 | 10/06/06 - 12/29/06 | 10/05/06 - 12/28/06 | 09/29/06 - 12/30/06 |

**SURFACE WATER (GROSS BETA & GAMMA SPECTROSCOPY)**

| COLLECTION PERIOD | D-51 | D-52 | D-54 | D-57 |
|---|---|---|---|---|
| JAN | 01/06/06 - 01/27/06 | 01/06/06 - 01/27/06 | 01/05/06 - 01/26/06 | (1) |
| FEB | 02/03/06 - 02/24/06 | 02/03/06 - 02/24/06 | 02/02/06 - 02/23/06 | |
| MAR | 03/03/06 - 03/31/06 | 03/03/06 - 03/31/06 | 03/02/06 - 03/30/06 | |
| APR | 04/07/06 - 04/28/06 | 04/07/06 - 04/28/06 | 04/06/06 - 04/27/06 | |
| MAY | 05/05/06 - 05/26/06 | 05/05/06 - 05/26/06 | 05/04/06 - 05/25/06 | |
| JUN | 06/02/06 - 06/30/06 | 06/02/06 - 06/30/06 | 06/01/06 - 06/29/06 | |
| JUL | 07/07/06 - 07/28/06 | 07/07/06 - 07/28/06 | 07/06/06 - 07/27/06 | 07/24/06 - 07/28/06 |
| AUG | 08/04/06 - 08/25/06 | 08/04/06 - 08/25/06 | 08/03/06 - 08/31/06 | 08/04/06 - 08/25/06 |
| SEP | 09/01/06 - 09/29/06 | 09/01/06 - 09/29/06 | 09/07/06 - 09/28/06 | 09/01/06 - 09/29/06 |
| OCT | 10/06/06 - 10/27/06 | 10/06/06 - 10/27/06 | 10/05/06 - 10/26/06 | 09/29/06 - 10/27/06 |
| NOV | 11/03/06 - 11/24/06 | 11/03/06 - 11/24/06 | 11/02/06 - 11/30/06 | 10/27/06 - 11/24/06 |
| DEC | 12/01/06 - 12/29/06 | 12/01/06 - 12/29/06 | 12/07/06 - 12/28/06 | 11/24/06 - 12/30/06 |

**GROUND WATER (TRITIUM & GAMMA SPECTROSCOPY)**

| COLLECTION PERIOD | D-23 | D-35 |
|---|---|---|
| JAN | 01/13/06 - 01/13/06 | 01/13/06 - 01/13/06 |
| FEB | (1) | |
| MAR | 03/17/06 - 03/17/06 | |
| APR | 04/14/06 - 04/14/06 | 04/14/06 - 04/14/06 |
| MAY | 05/12/06 - 05/12/06 | |
| JUN | 06/09/06 - 06/09/06 | |
| JUL | 07/14/06 - 07/14/06 | 07/14/06 - 07/14/06 |
| AUG | 08/11/06 - 08/11/06 | |
| SEP | 09/08/06 - 09/08/06 | |
| OCT | 10/13/06 - 10/13/06 | 10/13/06 - 10/13/06 |
| NOV | 11/10/06 - 11/10/06 | |
| DEC | 12/08/06 - 12/08/06 | |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

## TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

**AIR PARTICULATE (GAMMA SPECTROSCOPY)**

| COLLECTION PERIOD | D-01 | D-02 | D-03 | D-04 | D-07 |
|---|---|---|---|---|---|
| JAN-MAR | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 |
| APR-JUN | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 |
| JUL-SEP | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 |
| OCT-DEC | 09/29/06 - 12/30/06 | 09/29/06 - 12/30/06 | 09/29/06 - 12/30/06 | 09/29/06 - 12/30/06 | 09/29/06 - 12/30/06 |

**AIR PARTICULATE (GAMMA SPECTROSCOPY)**

| COLLECTION PERIOD | D-08 | D-10 | D-12 | D-13 | D-14 |
|---|---|---|---|---|---|
| JAN-MAR | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 |
| APR-JUN | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 |
| JUL-SEP | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 |
| OCT-DEC | 09/29/06 - 12/30/06 | 09/29/06 - 12/30/06 | 09/29/06 - 12/29/06 | 09/29/06 - 12/29/06 | 09/29/06 - 12/29/06 |

**AIR PARTICULATE (GAMMA SPECTROSCOPY)**

| COLLECTION PERIOD | D-45 | D-53 | D-55 (1) | D-56 |
|---|---|---|---|---|
| JAN-MAR | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | 12/30/05 - 03/31/06 | |
| APR-JUN | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | 03/31/06 - 06/30/06 | (1) |
| JUL-SEP | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 06/30/06 - 09/29/06 | 07/25/06 - 09/29/06 |
| OCT-DEC | 09/29/06 - 12/29/06 | 09/29/06 - 12/30/06 | 09/29/06 - 12/29/06 | 09/29/06 - 12/30/06 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

## TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

**AIR PARTICULATE (GROSS BETA & I-131)**

| COLLECTION PERIOD | D-01 | D-02 | D-03 | D-04 | D-07 |
|---|---|---|---|---|---|
| 1 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 |
| 2 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 |
| 3 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 |
| 4 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 |
| 5 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 |
| 6 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 |
| 7 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 |
| 8 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 |
| 9 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 |
| 10 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 |
| 11 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 |
| 12 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 |
| 13 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 |
| 14 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 |
| 15 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 |
| 16 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 |
| 17 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 |
| 18 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 |
| 19 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 |
| 20 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 |
| 21 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 |
| 22 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 |
| 23 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 |
| 24 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 |
| 25 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 |
| 26 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 |
| 27 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 |
| 28 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 |
| 29 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 |
| 30 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 |
| 31 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 |
| 32 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 |
| 33 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 |
| 34 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 |
| 35 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 |
| 36 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 |
| 37 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 |
| 38 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 |
| 39 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 |
| 40 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 |
| 41 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 |
| 42 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 |
| 43 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 |
| 44 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 |
| 45 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 |
| 46 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 |
| 47 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 |
| 48 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 |
| 49 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 |
| 50 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 |
| 51 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 |
| 52 | 12/22/06 - 12/30/06 | 12/22/06 - 12/30/06 | 12/22/06 - 12/30/06 | 12/22/06 - 12/30/06 | 12/22/06 - 12/30/06 |

**TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

**AIR PARTICULATE (GROSS BETA & I-131)**

| COLLECTION PERIOD | D-08 | D-10 | D-12 | D-13 | D-14 |
|---|---|---|---|---|---|
| 1 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 |
| 2 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 |
| 3 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 |
| 4 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 |
| 5 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 |
| 6 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 |
| 7 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 |
| 8 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 |
| 9 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 |
| 10 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 |
| 11 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 |
| 12 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 |
| 13 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 |
| 14 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 |
| 15 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 |
| 16 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 |
| 17 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 |
| 18 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 |
| 19 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 |
| 20 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 |
| 21 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 |
| 22 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 |
| 23 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 |
| 24 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 |
| 25 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 |
| 26 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 |
| 27 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 |
| 28 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 |
| 29 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 |
| 30 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 |
| 31 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 |
| 32 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 |
| 33 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 |
| 34 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 |
| 35 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 |
| 36 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 |
| 37 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 |
| 38 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 |
| 39 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 |
| 40 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 |
| 41 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 |
| 42 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 |
| 43 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 |
| 44 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 |
| 45 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 |
| 46 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 |
| 47 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 |
| 48 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 |
| 49 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 |
| 50 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 |
| 51 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 |
| 52 | 12/22/06 - 12/30/06 | 12/22/06 - 12/30/06 | 12/22/06 - 12/29/06 | 12/22/06 - 12/29/06 | 12/22/06 - 12/29/06 |

**TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

**AIR PARTICULATE (GROSS BETA & I-131)**

| COLLECTION PERIOD | D-45 | D-53 | D-55 (1) | D-56 |
|---|---|---|---|---|
| 1 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | 12/30/05 - 01/06/06 | (1) |
| 2 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | 01/06/06 - 01/13/06 | |
| 3 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | 01/13/06 - 01/20/06 | |
| 4 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | 01/20/06 - 01/27/06 | |
| 5 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | 01/27/06 - 02/03/06 | |
| 6 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | 02/03/06 - 02/10/06 | |
| 7 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | 02/10/06 - 02/17/06 | |
| 8 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | 02/17/06 - 02/24/06 | |
| 9 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | 02/24/06 - 03/03/06 | |
| 10 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | 03/03/06 - 03/10/06 | |
| 11 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | 03/10/06 - 03/17/06 | |
| 12 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | 03/17/06 - 03/24/06 | |
| 13 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | 03/24/06 - 03/31/06 | |
| 14 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | 03/31/06 - 04/07/06 | |
| 15 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | 04/07/06 - 04/14/06 | |
| 16 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | 04/14/06 - 04/21/06 | |
| 17 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | 04/21/06 - 04/28/06 | |
| 18 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | 04/28/06 - 05/05/06 | |
| 19 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | 05/05/06 - 05/12/06 | |
| 20 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | 05/12/06 - 05/19/06 | |
| 21 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | 05/19/06 - 05/26/06 | |
| 22 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | 05/26/06 - 06/02/06 | |
| 23 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | 06/02/06 - 06/09/06 | |
| 24 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | 06/09/06 - 06/16/06 | |
| 25 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | 06/16/06 - 06/23/06 | |
| 26 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | 06/23/06 - 06/30/06 | |
| 27 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | 06/30/06 - 07/07/06 | |
| 28 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | 07/07/06 - 07/14/06 | |
| 29 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | 07/14/06 - 07/21/06 | |
| 30 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/21/06 - 07/28/06 | 07/25/06 - 07/28/06 |
| 31 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 | 07/28/06 - 08/04/06 |
| 32 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 | 08/04/06 - 08/11/06 |
| 33 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 | 08/11/06 - 08/18/06 |
| 34 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 | 08/18/06 - 08/25/06 |
| 35 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 | 08/25/06 - 09/01/06 |
| 36 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 | 09/01/06 - 09/08/06 |
| 37 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 | 09/08/06 - 09/15/06 |
| 38 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 | 09/15/06 - 09/22/06 |
| 39 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 | 09/22/06 - 09/29/06 |
| 40 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 | 09/29/06 - 10/06/06 |
| 41 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 | 10/06/06 - 10/13/06 |
| 42 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 | 10/13/06 - 10/20/06 |
| 43 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 | 10/20/06 - 10/27/06 |
| 44 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 | 10/27/06 - 11/03/06 |
| 45 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 | 11/03/06 - 11/10/06 |
| 46 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 | 11/10/06 - 11/17/06 |
| 47 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 | 11/17/06 - 11/24/06 |
| 48 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 | 11/24/06 - 12/01/06 |
| 49 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 | 12/01/06 - 12/08/06 |
| 50 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 | 12/08/06 - 12/15/06 |
| 51 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 | 12/15/06 - 12/22/06 |
| 52 | 12/22/06 - 12/29/06 | 12/22/06 - 12/30/06 | 12/22/06 - 12/29/06 | 12/22/06 - 12/30/06 |

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

**TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006**

**TLD**

| STATION CODE | JAN - MAR | APR - JUN | JUL - SEP | OCT - DEC |
|---|---|---|---|---|
| D-01-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-01-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-02-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-02-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-03-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-03-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-04-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-04-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-07-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-07-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-08-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-08-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-10-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-10-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-12-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-12-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-13-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-13-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-14-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-14-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-45-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-45-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-53-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-53-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-55-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-55-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-56-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-56-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-101-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-101-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-102-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-102-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-103-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-103-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-104-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-104-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-105-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-105-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-106-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-106-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-107-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-107-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-108-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-108-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-109-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-109-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-110-3 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-110-4 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-111-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-111-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-112A-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-112A-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-113-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-113-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-114-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-114-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |

## TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF DRESDEN NUCLEAR POWER STATION, 2006

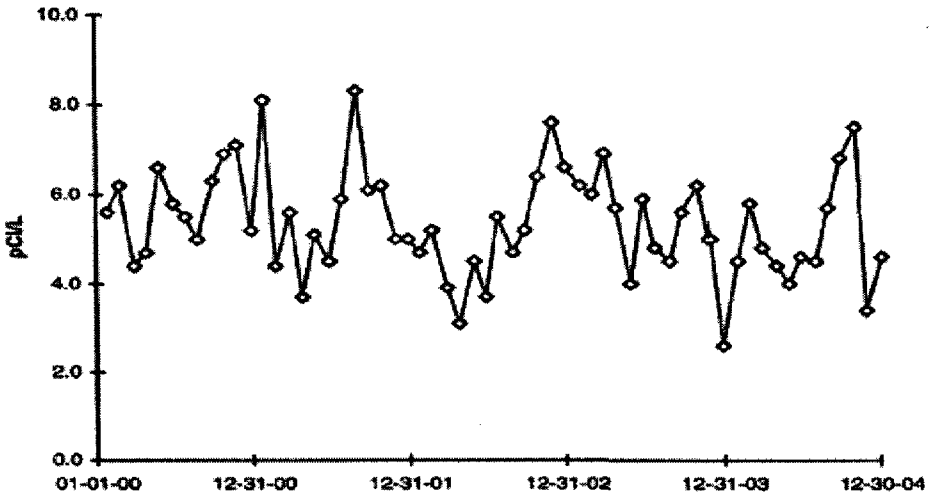
**TLD**

| STATION CODE | JAN - MAR | APR - JUN | JUL - SEP | OCT - DEC |
|---|---|---|---|---|
| D-115-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-115-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-116-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-116-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-201-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-201-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-202-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-202-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-203-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-203-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-204-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-204-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-205-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-205-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-206-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-206-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-207-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-207-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-208-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-208-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-209-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-209-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-210-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-210-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-211-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-211-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-212-3 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-212-4 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-213-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-213-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-214-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-214-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-215-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-215-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-216-1 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |
| D-216-2 | 12/30/05 - 03/31/06 | 03/31/06 - 06/30/06 | 06/30/06 - 09/29/06 | 09/29/06 - 12/30/06 |

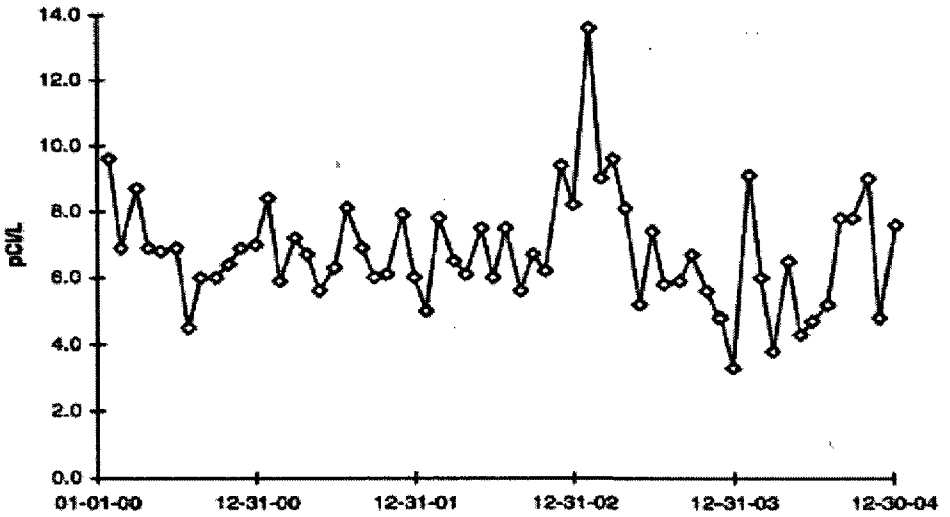
Intentionally left blank

# FIGURE C-1
# SURFACE WATER - GROSS BETA - STATIONS D-51 and D-52 (C) COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004

**D-51 Dresden Lock & Dam**

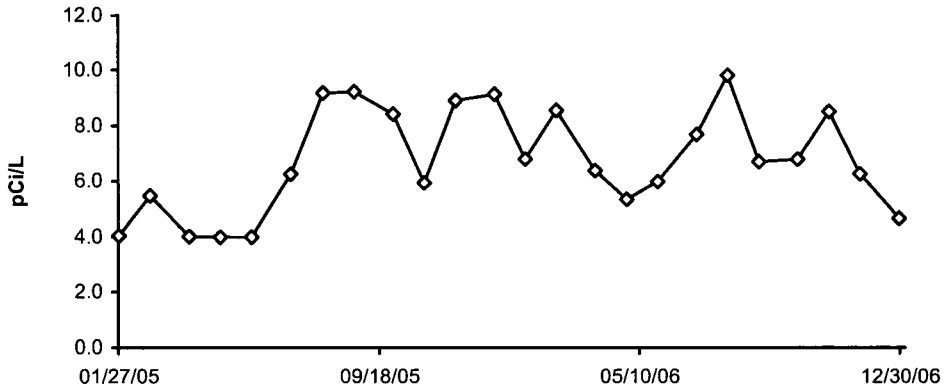



**D-52 (C) DesPlaines River**

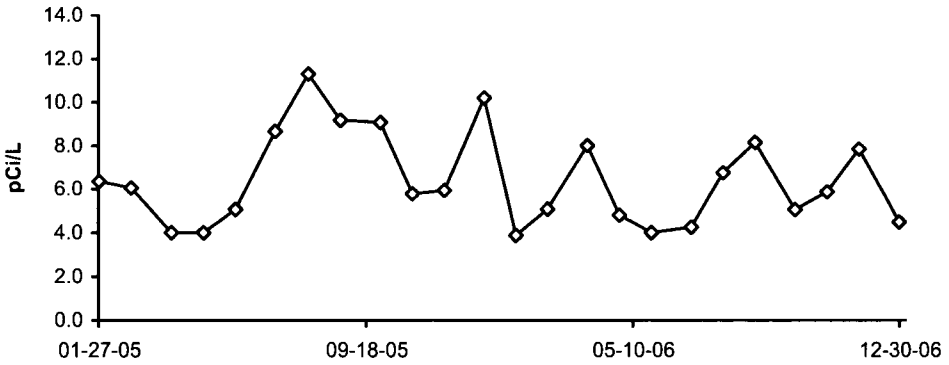


# FIGURE C-1 (cont.)
# SURFACE WATER - GROSS BETA - STATIONS D-51 and D-52 (C) COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-51 Dresden Lock & Dam**

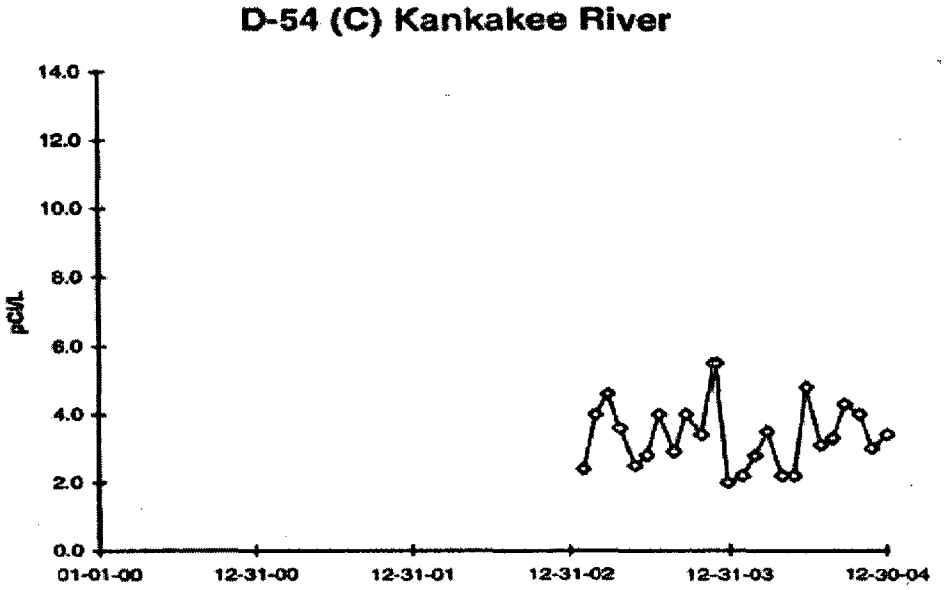



**D-52 (C) DesPlaines River**



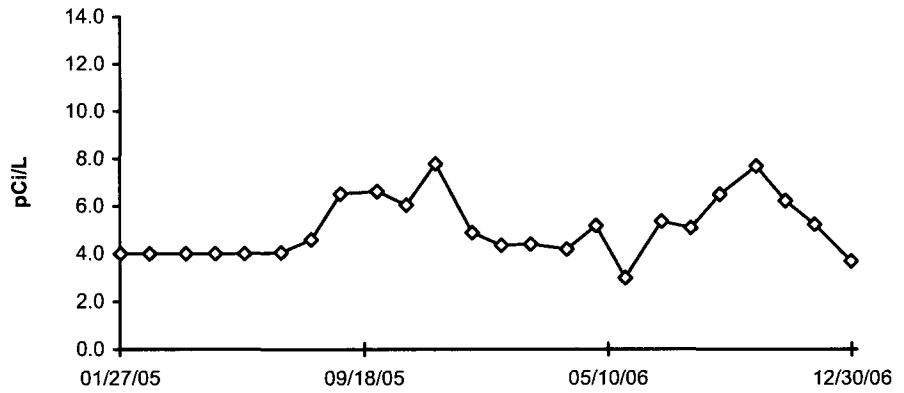

DUE TO VENDOR CHANGE IN 2005, < VALUES ARE LLD VALUES JANUARY THROUGH JUNE 2005 AND MDC VALUES AFTER JULY 2005

# FIGURE C-2
# SURFACE WATER - GROSS BETA - STATION D-54 (C)
# COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004



# FIGURE C-2 (cont.)
# SURFACE WATER - GROSS BETA - STATION D-54 (C)
# COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

## D-54 (C) Kankakee River

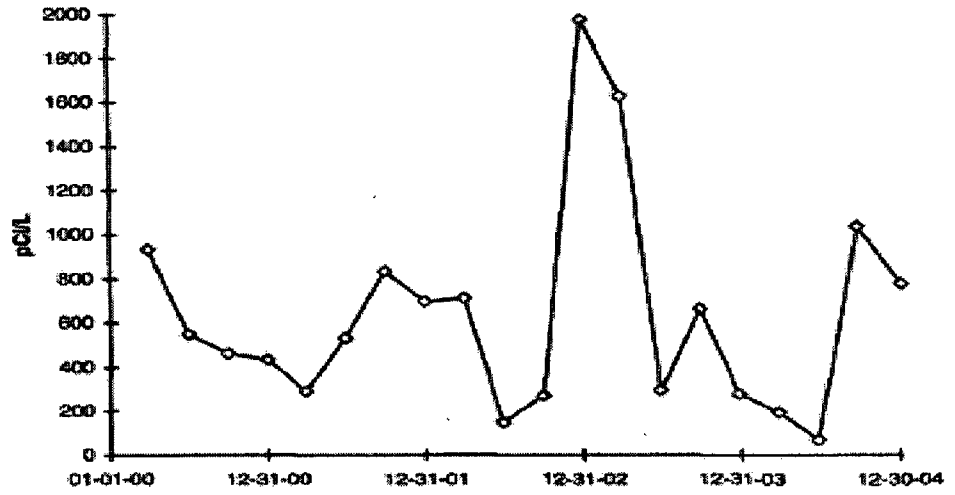



## D-57 (C) Kankakee River

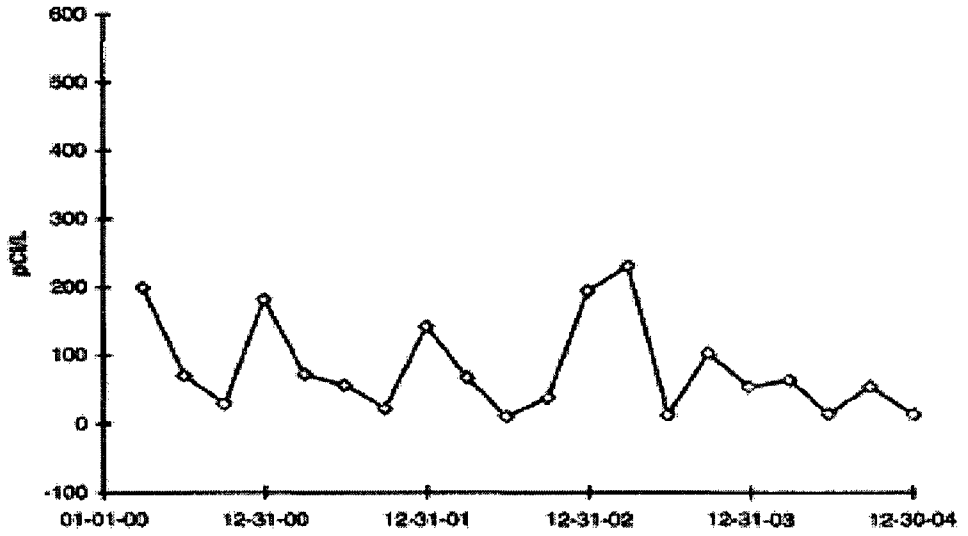

DUE TO VENDOR CHANGE IN 2005, < VALUES ARE LLD VALUES JANUARY THROUGH JUNE 2005 AND MDC VALUES AFTER JULY 2005

# FIGURE C-3
# SURFACE WATER - TRITIUM - STATIONS D-51 and D-52 (C) COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004

**D-51 Dresden Lock & Dam**

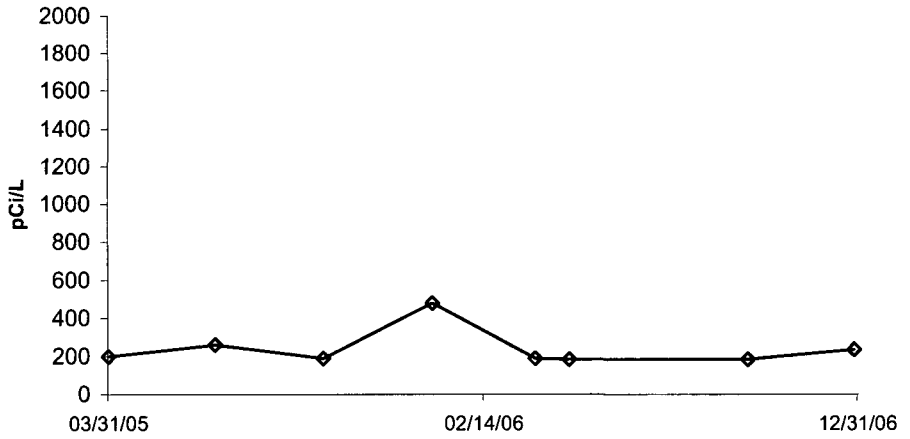



**D-52 (C) Des Plaines River**

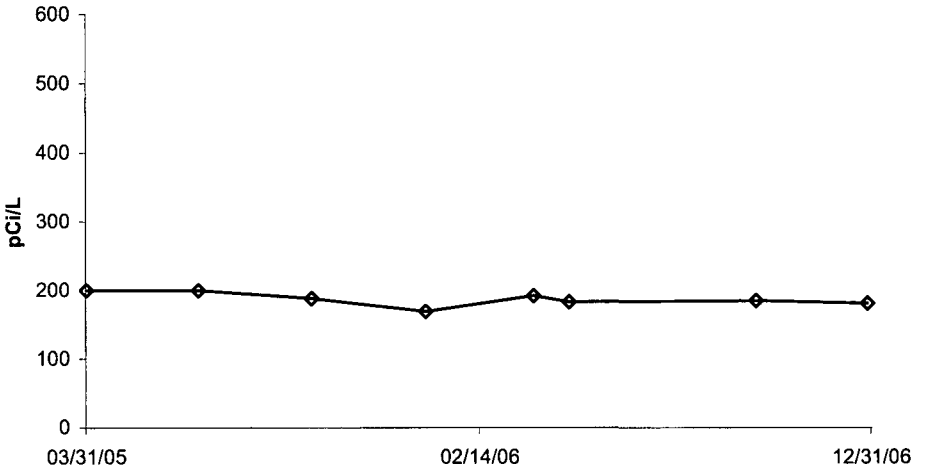


# FIGURE C-3 (cont.)
# SURFACE WATER - TRITIUM - STATIONS D-51 and D-52 (C) COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

## D-51 Dresden Lock & Dam

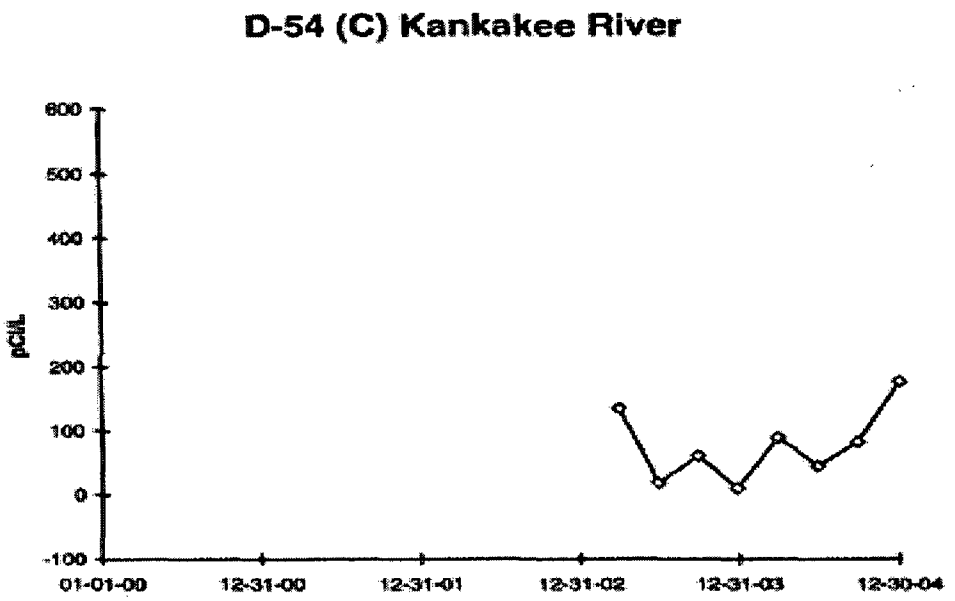



## D-52 (C) Des Plaines River



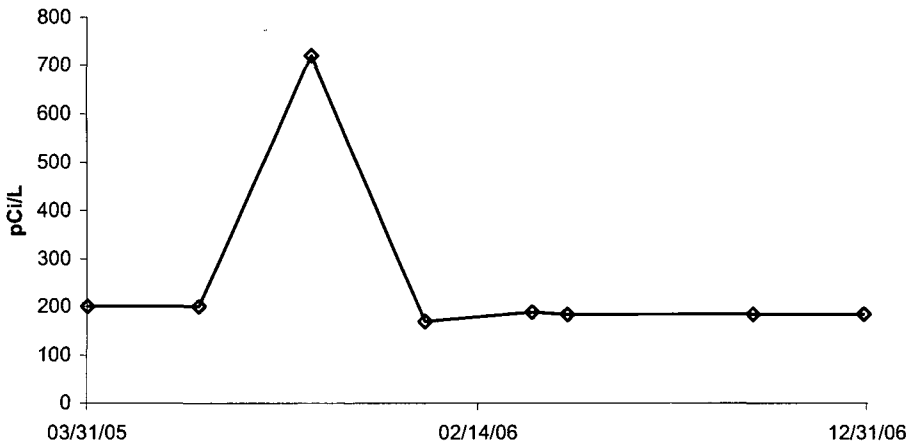

DUE TO VENDOR CHANGE IN 2005, < VALUES ARE LLD VALUES JANUARY THROUGH JUNE 2005 AND MDC VALUES AFTER JULY 2005

# FIGURE C-4
# SURFACE WATER - TRITIUM - STATION D-54 (C)
# COLLECTED IN THE VICINITY OF DNPS, 2002 - 2004



# FIGURE C-4 (cont.)
# SURFACE WATER - TRITIUM - STATION D-54 (C) AND D-57 (C) COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

## D-54 (C) Kankakee River




Location shared with Braidwood Station (BD-10).

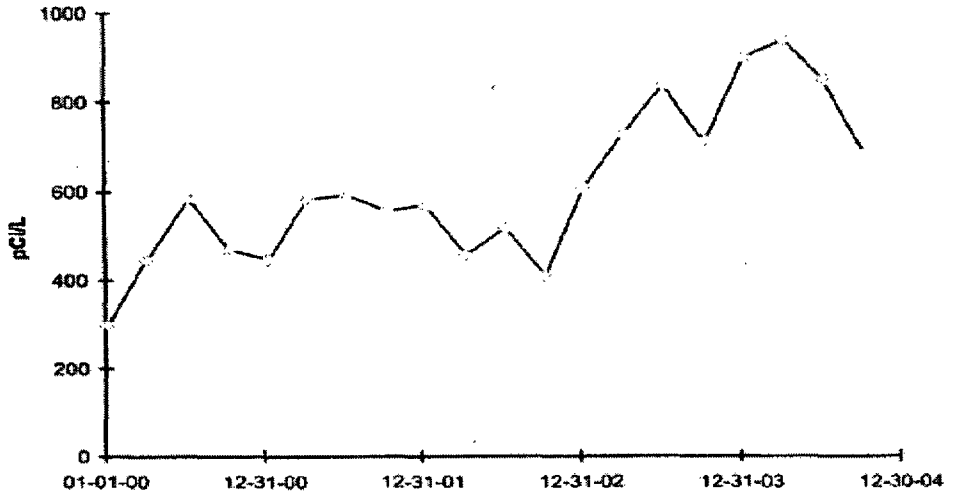
## D-57 (C) Kankakee River


D-57 NEW STATION 07/24/06

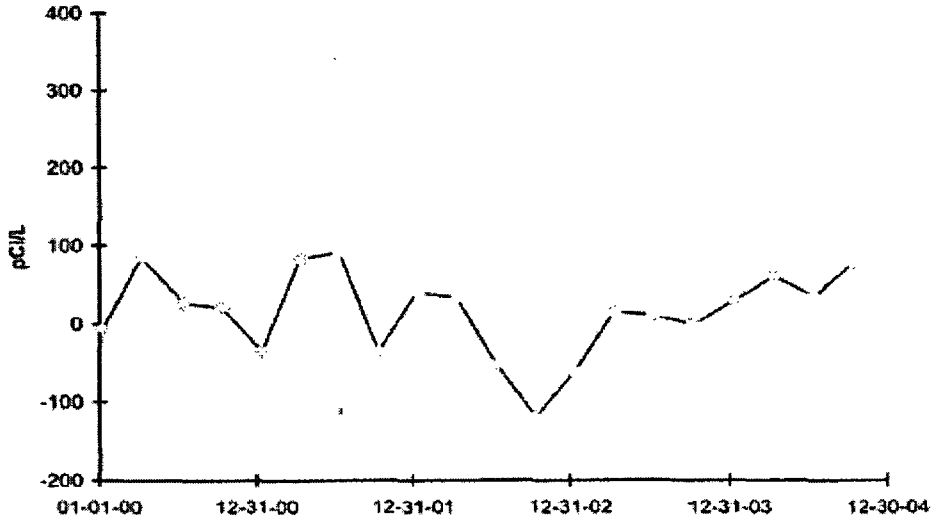
DUE TO VENDOR CHANGE IN 2005, < VALUES ARE LLD VALUES JANUARY THROUGH JUNE 2005 AND MDC VALUES AFTER JULY 2005

# FIGURE C-5
# GROUND WATER - TRITIUM - STATIONS D-23 and D-35 COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004

## D-23 Thorsen

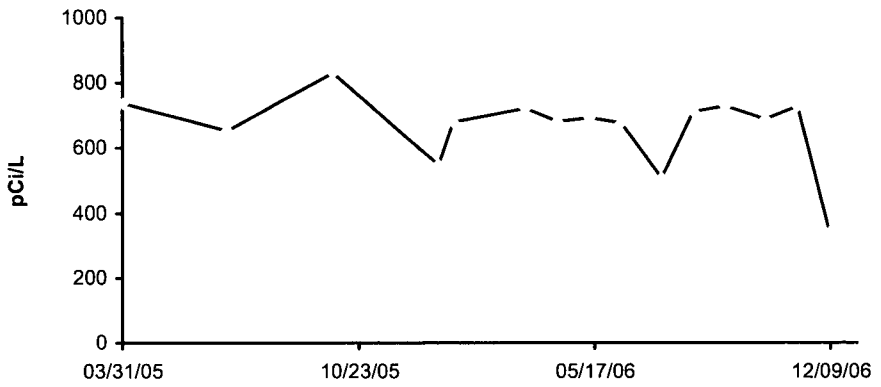



## D-35 Dresden Lock and Dam

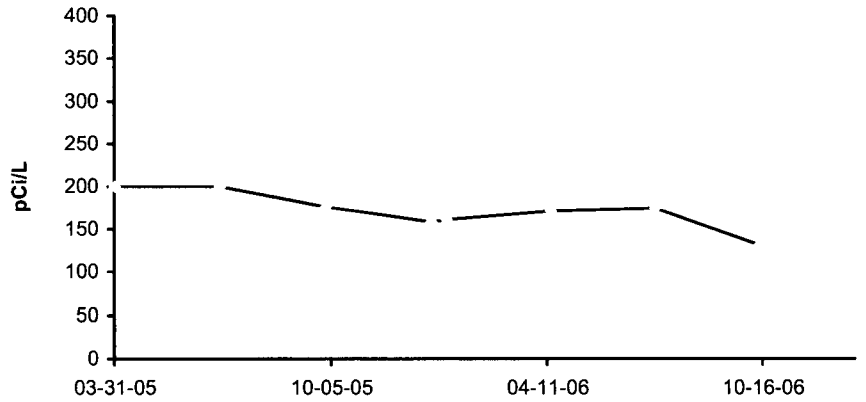


# FIGURE C-5 (cont.)
# GROUND WATER - TRITIUM - STATIONS D-23 and D-35 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-23 Thorsen**

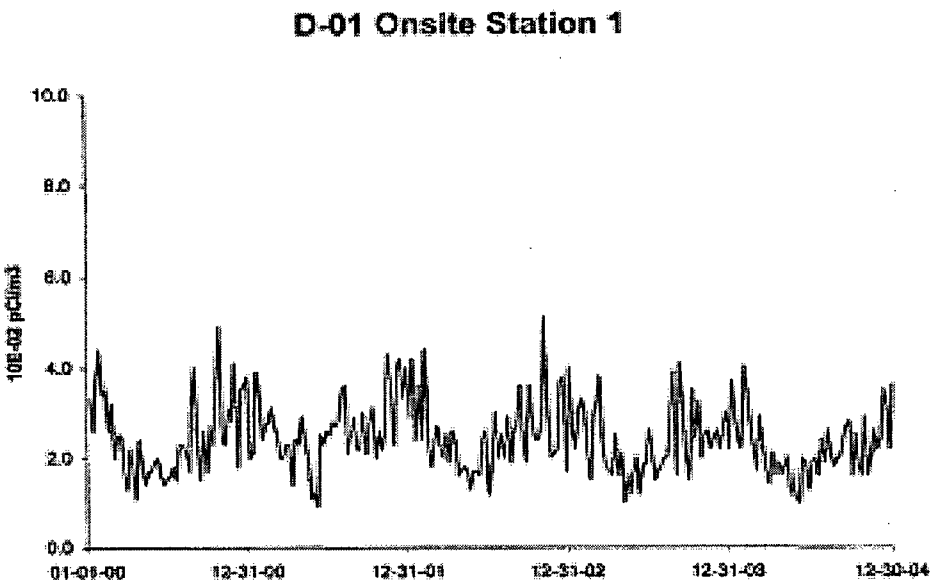


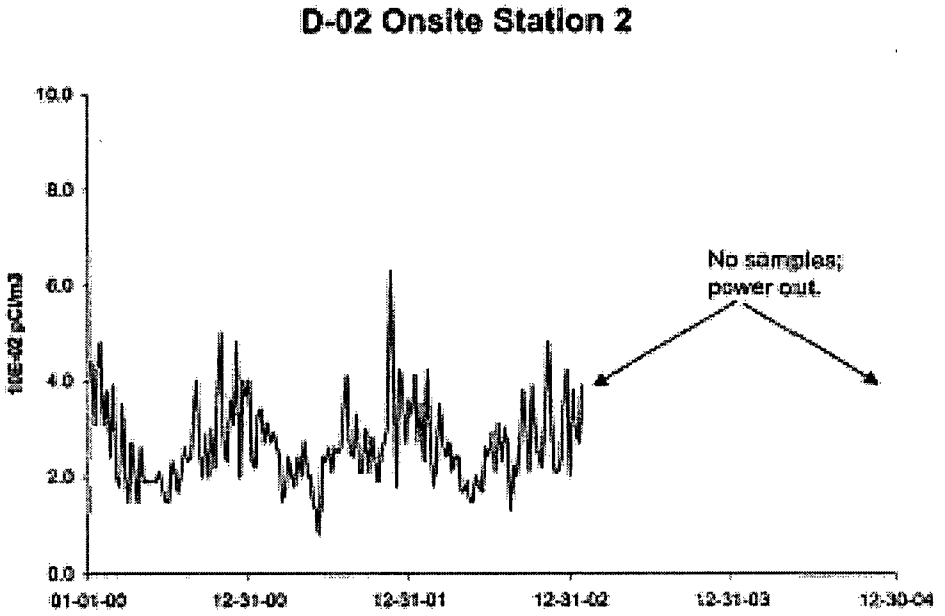

**D-35 Dresden Lock and Dam**




DUE TO VENDOR CHANGE IN 2005, < VALUES ARE LLD VALUES JANUARY THROUGH JUNE 2005 AND MDC VALUES AFTER JULY 2005

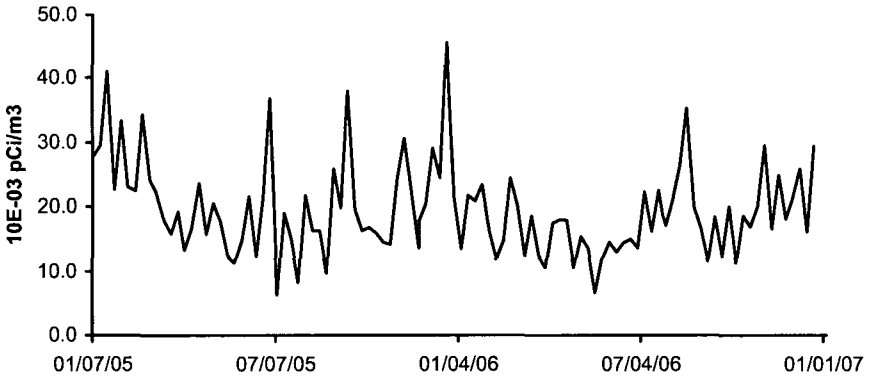
# FIGURE C-6
# AIR PARTICULATES - GROSS BETA - STATIONS D-01 and D-02 COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004



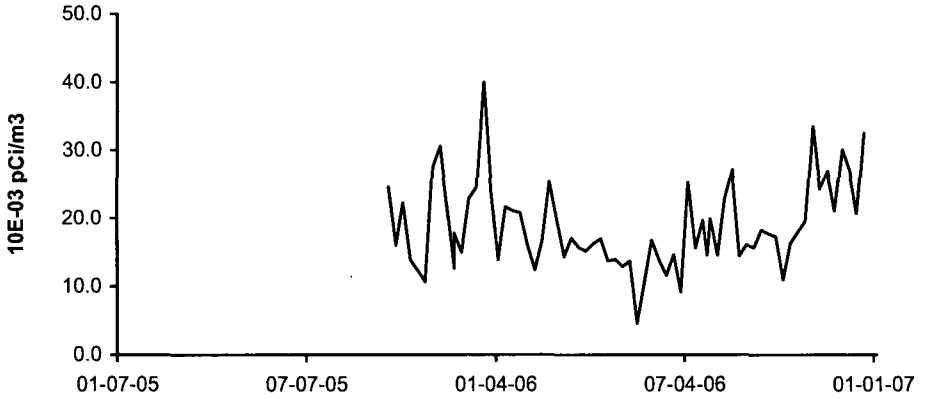



# FIGURE C-6 (cont.)
# AIR PARTICULATES - GROSS BETA - STATIONS D-01 and D-02 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-01 Onsite Station 1**



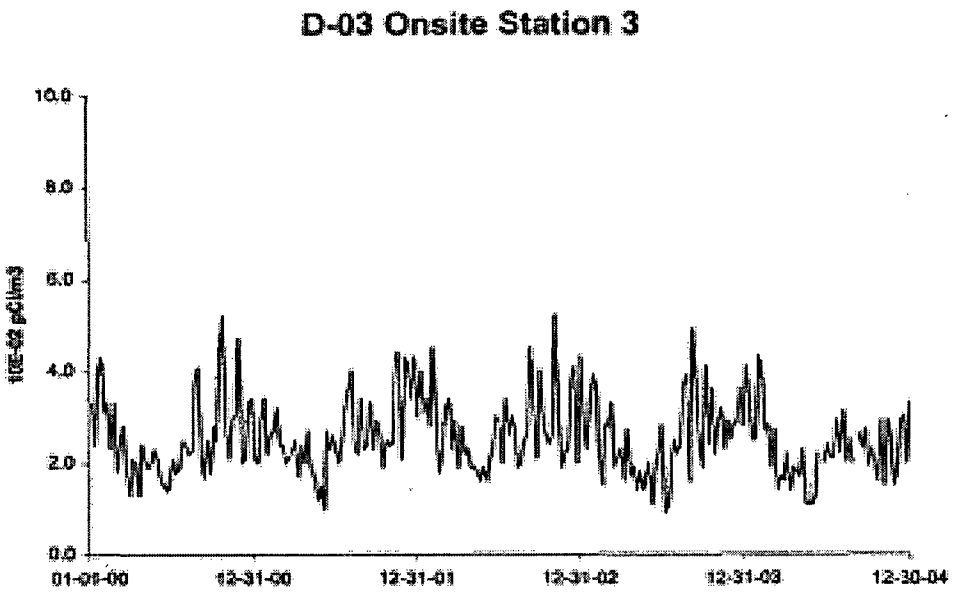

**D-02 Onsite Station 2**

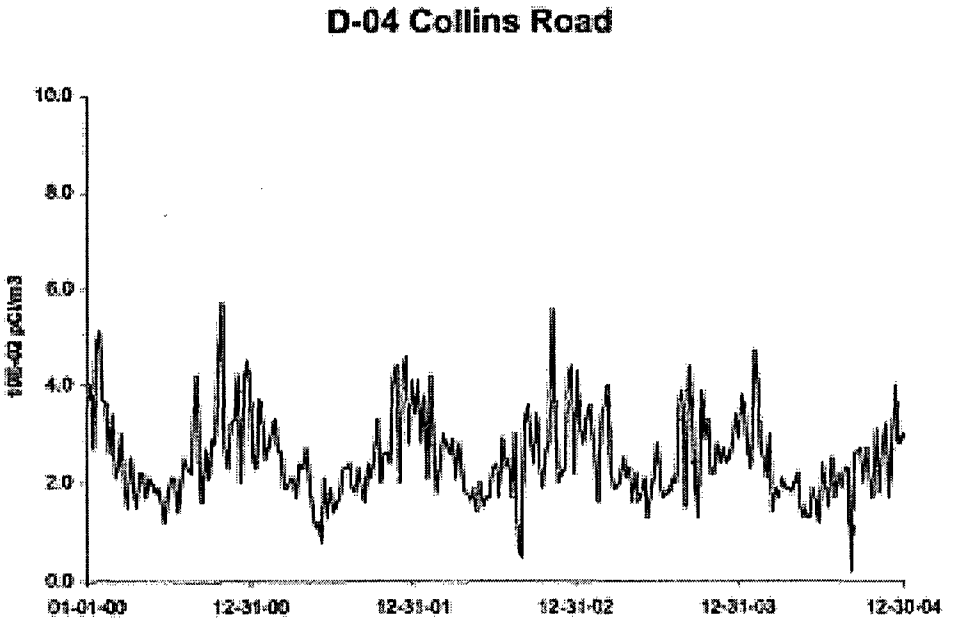



D-02 No samples; power was restored on 09-16-05.

DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

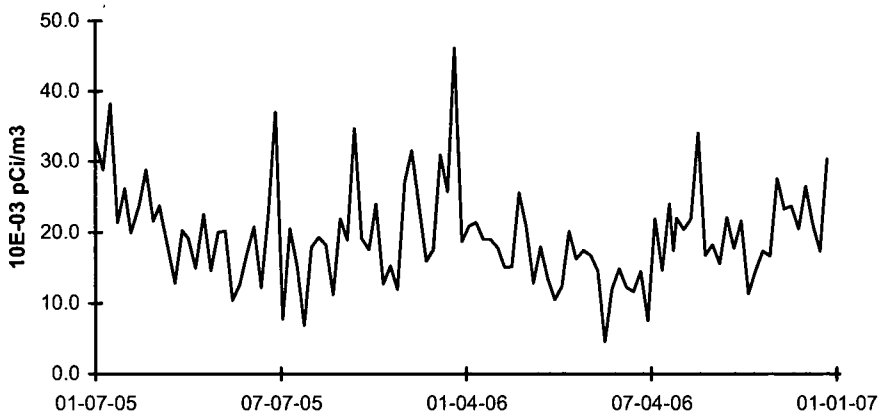
# FIGURE C-7
# AIR PARTICULATES - GROSS BETA - STATIONS D-03 and D-04 COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004



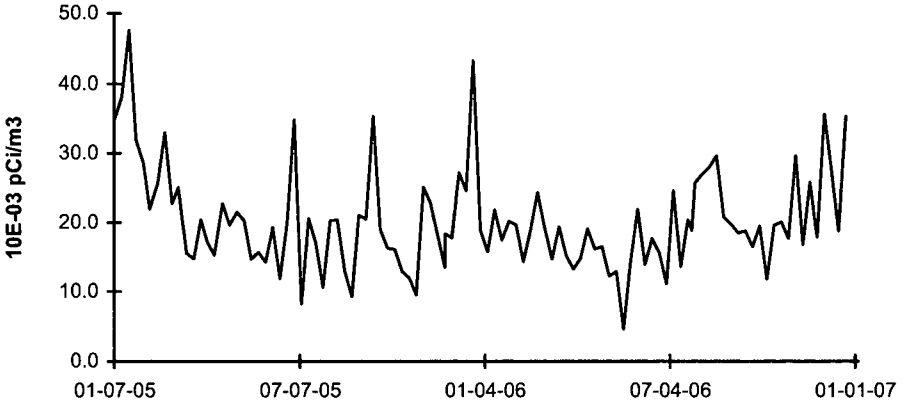



# FIGURE C-7 (cont.)
# AIR PARTICULATES - GROSS BETA - STATIONS D-03 and D-04 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-03 Onsite Station 3**

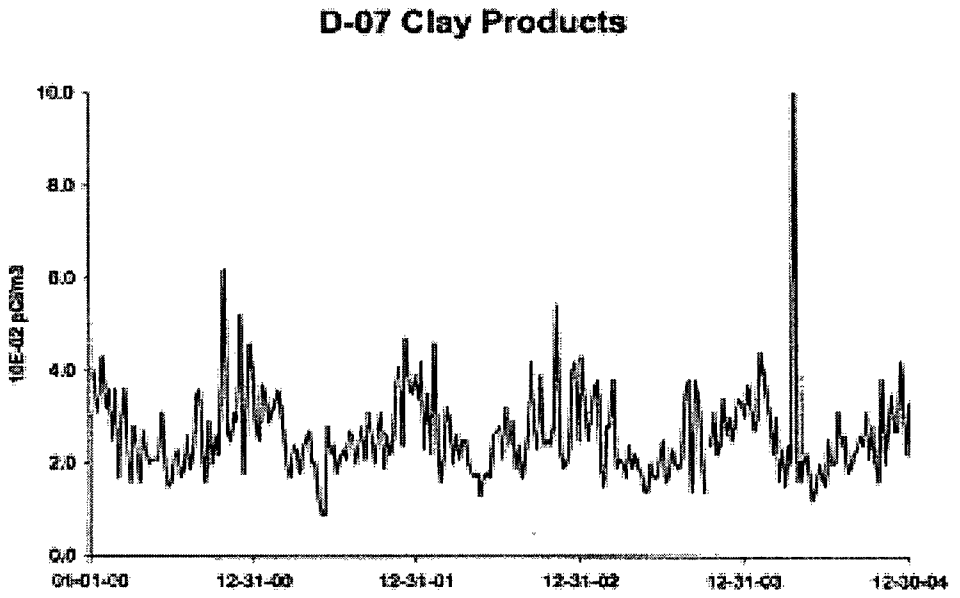


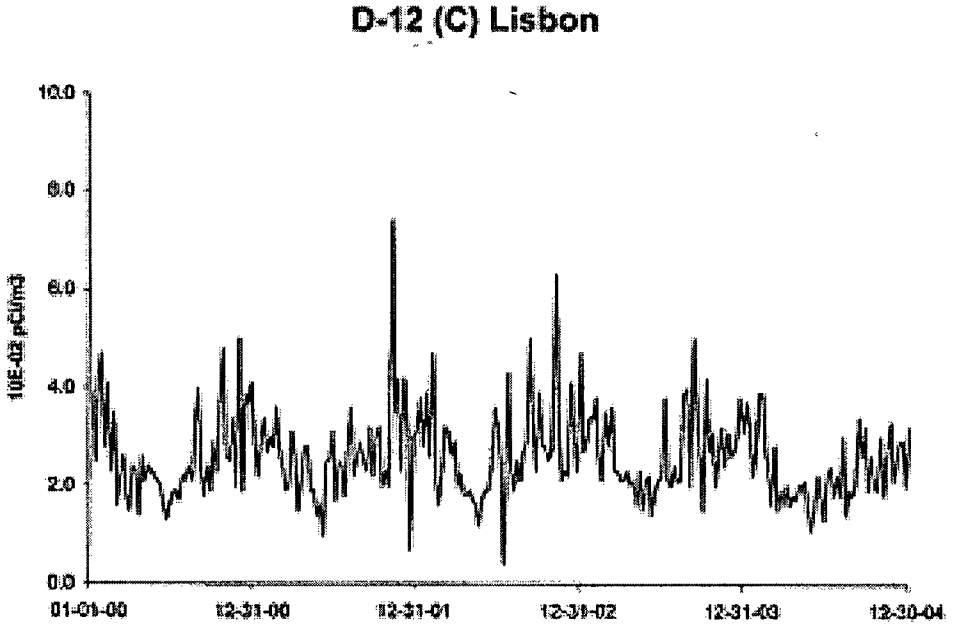

**D-04 Collins Road**




DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

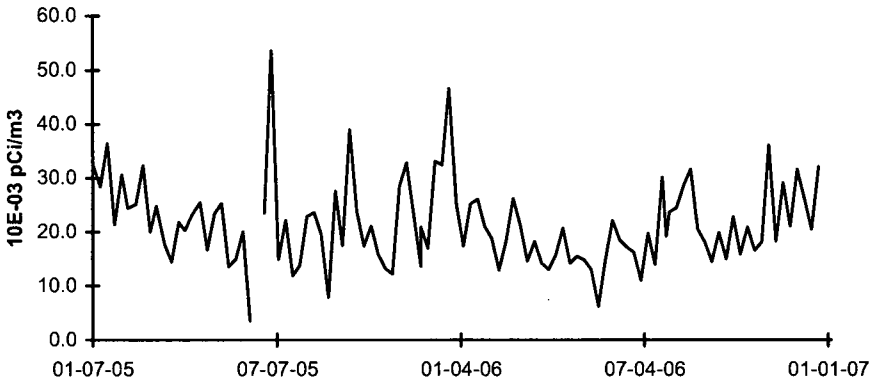
# FIGURE C-8
# AIR PARTICULATES - GROSS BETA - STATIONS D-07 and D-12 (C) COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004



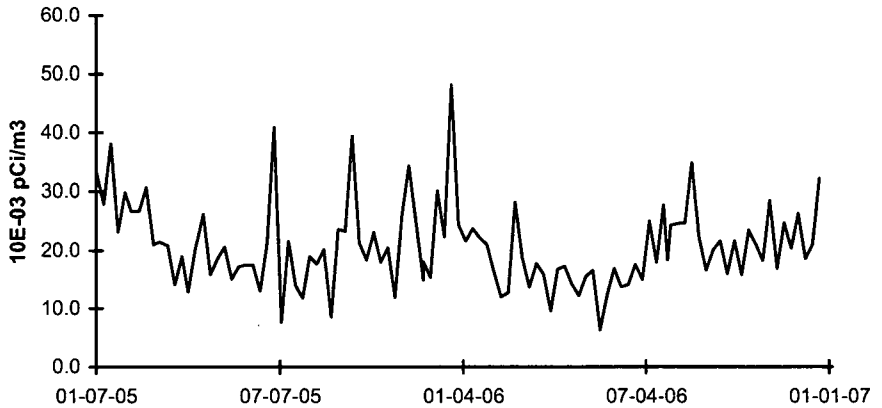
# FIGURE C-8 (cont.)
# AIR PARTICULATES - GROSS BETA - STATIONS D-07 and D-12 (C) COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-07 Clay Products**




06/10/05 - 06/17/05 no sample due to pump malfunction

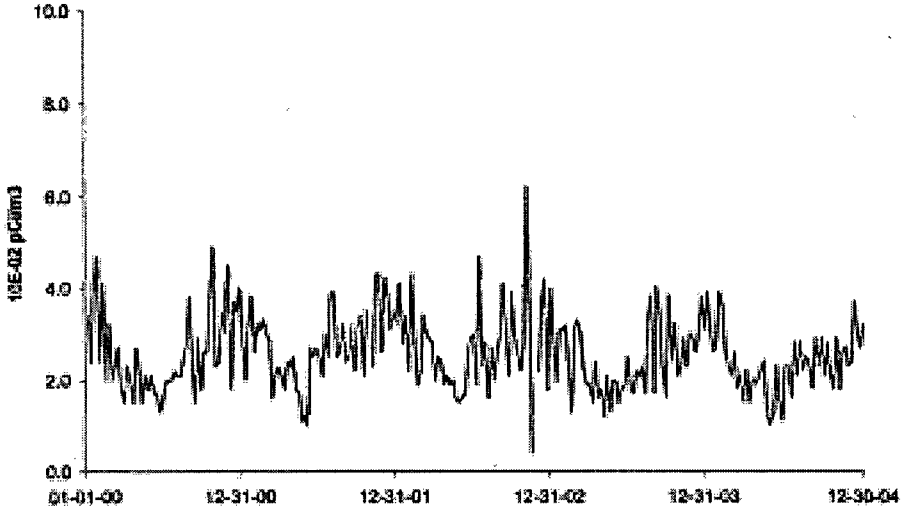
**D-12 (C) Lisbon**



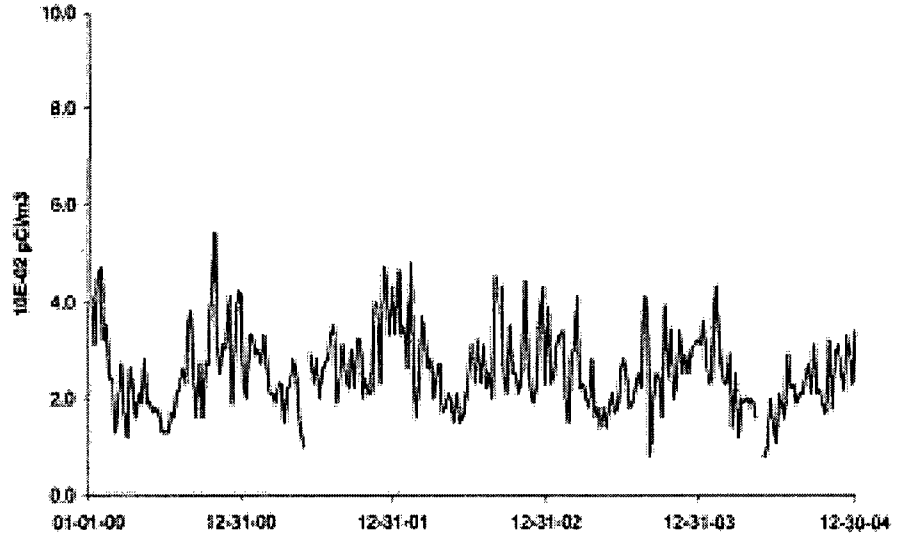

DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

# FIGURE C-9
# AIR PARTICULATES - GROSS BETA - STATIONS D-45 and D-53 COLLECTED IN THE VICINITY OF DNPS, 2000 - 2004

**D-45 McKinley Woods Road**

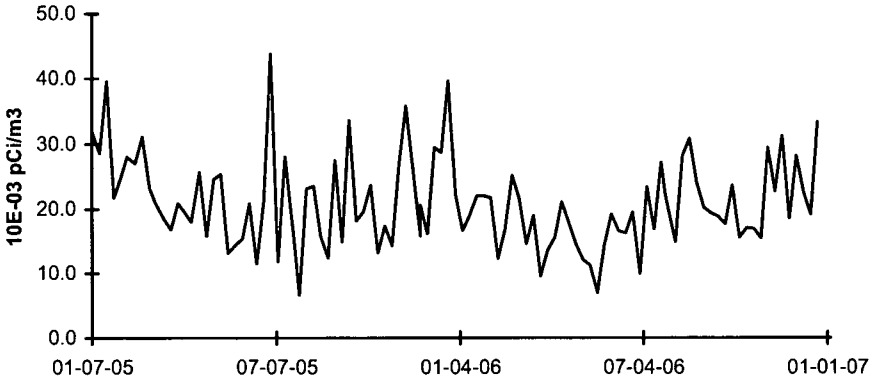



**D-53 Grundy County Road**

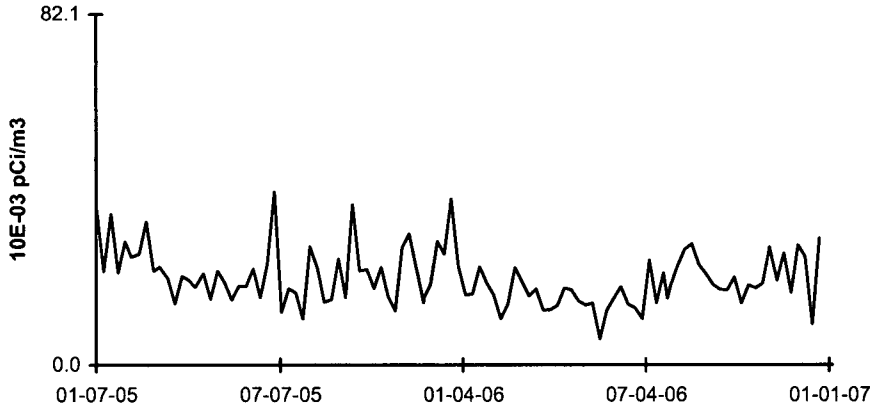


# FIGURE C-9 (cont.)
# AIR PARTICULATES - GROSS BETA - STATIONS D-45 and D-53 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-45 McKinley Woods Road**



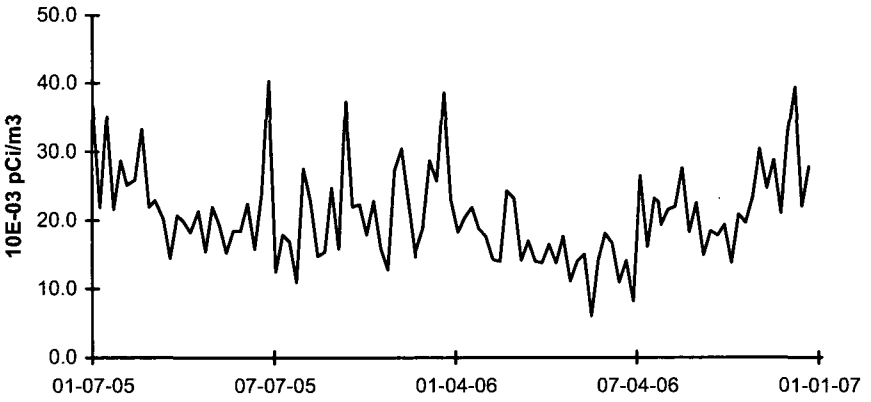

**D-53 Grundy County Road**



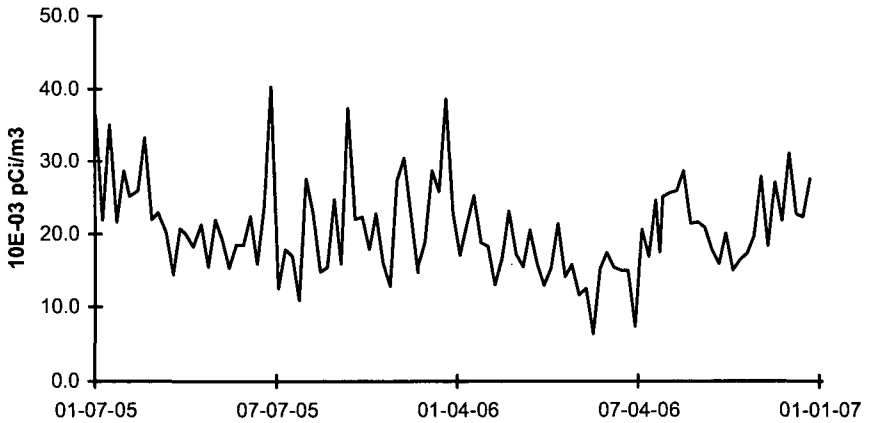

DUE TO VENDOR CHANGE, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

# FIGURE C-10
# AIR PARTICULATES - GROSS BETA - STATIONS D-08 and D-10 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-08 Prairie Park**



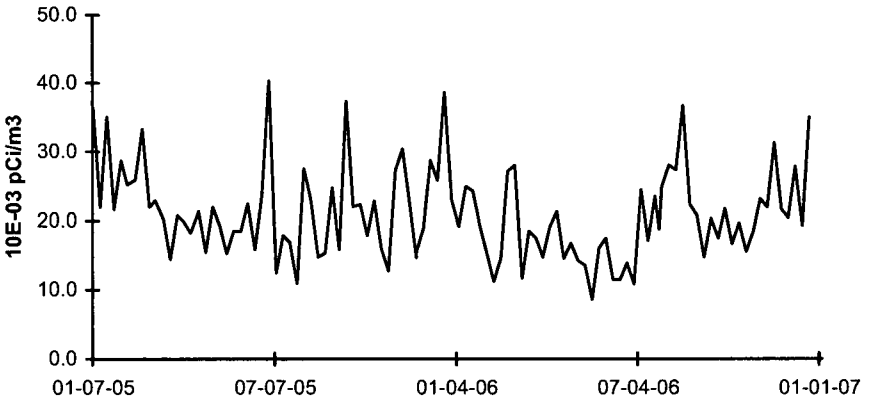

**D-10 Goose Lake Village**



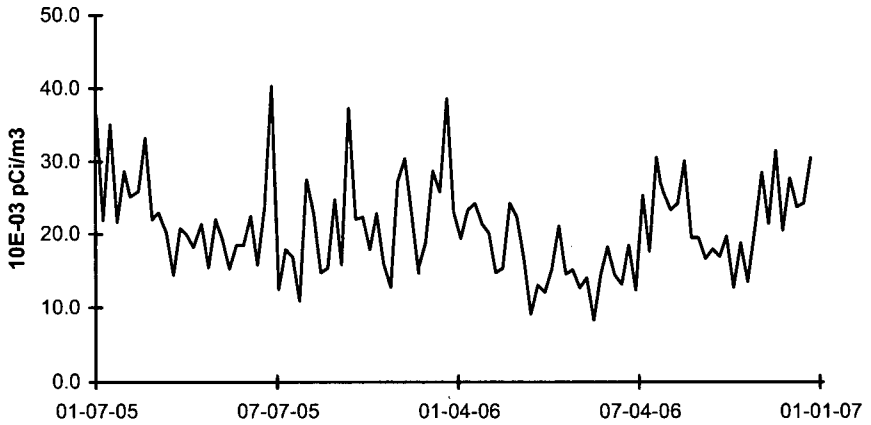

DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

# FIGURE C-11
# AIR PARTICULATES - GROSS BETA - STATIONS D-13 and D-14 COLLECTED IN THE VICINITY OF DNPS, 2005 - 2006

**D-13 Minooka**



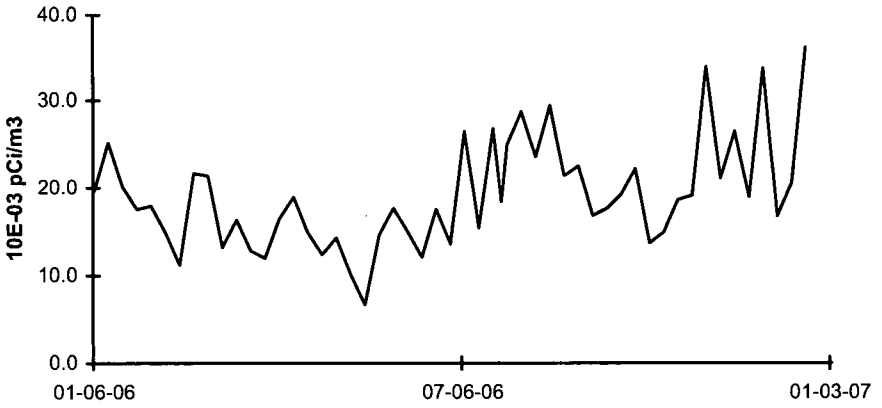

**D-14 Channahon**



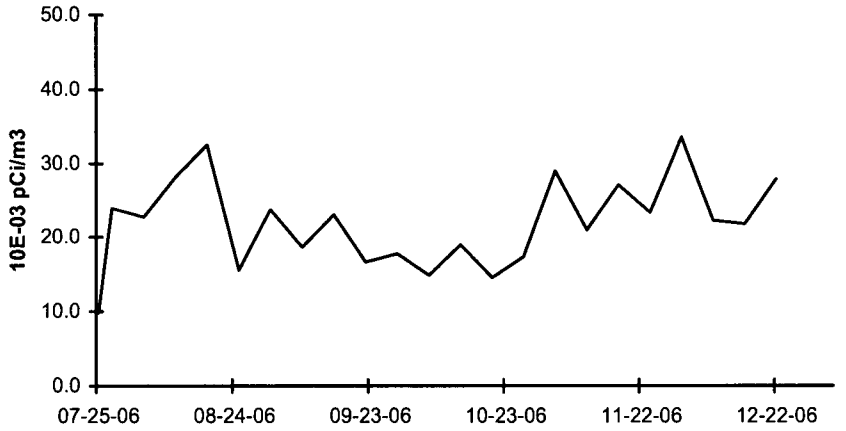

DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCI/M3 TO E-03 PCI/M3

# FIGURE C-12
# AIR PARTICULATES - GROSS BETA - STATIONS D-55 and D-56 COLLECTED IN THE VICINITY OF DNPS, 2006

**D-55 Ridge Road**




**D-56 Wildfeather**




D-55 NEW STATION 01/06/06
D-56 NEW STATION 07/25/06

Intentionally left blank

# APPENDIX D

# INTER-LABORATORY COMPARISON PROGRAM

**TABLE D-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 1 OF 3)**

| Month/Year | Identification Number | Matrix | Nuclide | Units | Reported Value (a) | Known Value (b) | Ratio (c) TBE/Analytics | Evaluation (d) |
|---|---|---|---|---|---|---|---|---|
| March 2006 | E4964-396 | Milk | Sr-89 | pCi/L | 91.5 | 99.2 | 0.92 | A |
| | | | Sr-90 | pCi/L | 12.2 | 10.8 | 1.13 | A |
| | E4965-396 | Milk | I-131 | pCi/L | 74.4 | 78.0 | 0.95 | A |
| | | | Ce-141 | pCi/L | 95.1 | 104 | 0.91 | A |
| | | | Cr-51 | pCi/L | 278 | 280 | 0.99 | A |
| | | | Cs-134 | pCi/L | 103 | 121 | 0.85 | A |
| | | | Cs-137 | pCi/L | 87.6 | 88.8 | 0.99 | A |
| | | | Co-58 | pCi/L | 93.9 | 105 | 0.89 | A |
| | | | Mn-54 | pCi/L | 90.0 | 93.3 | 0.96 | A |
| | | | Fe-59 | pCi/L | 83.0 | 86.6 | 0.96 | A |
| | | | Zn-65 | pCi/L | 178 | 176 | 1.01 | A |
| | | | Co-60 | pCi/L | 118 | 128 | 0.92 | A |
| | E4967-396 | AP | Ce-141 | pCi | 89.9 | 74 | 1.21 | W |
| | | | Cr-51 | pCi | 253 | 200 | 1.27 | W |
| | | | Cs-134 | pCi | 71.5 | 86.1 | 0.83 | A |
| | | | Cs-137 | pCi | 67.5 | 63.3 | 1.07 | A |
| | | | Co-58 | pCi | 79.7 | 74.6 | 1.07 | A |
| | | | Mn-54 | pCi | 74.9 | 67 | 1.12 | A |
| | | | Fe-59 | pCi | 75.5 | 61.8 | 1.22 | W |
| | | | Zn-65 | pCi | 146 | 126 | 1.16 | A |
| | | | Co-60 | pCi | 91.2 | 91 | 1.00 | A |
| | E4966-396 | Charcoal | I-131 | pCi | 87.4 | 86.2 | 1.01 | A |
| June 2006 | E5018-396 | Milk | Sr-89 | pCi/L | 118 | 129 | 0.91 | A |
| | | | Sr-90 | pCi/L | 9.29 | 9.74 | 0.95 | A |
| | E5019-396 | Milk | I-131 | pCi/L | 49.9 | 63.2 | 0.79 | W |
| | | | Ce-141 | pCi/L | 174 | 184 | 0.95 | A |
| | | | Cr-51 | pCi/L | 266 | 259 | 1.03 | A |
| | | | Cs-134 | pCi/L | 111 | 127 | 0.88 | A |
| | | | Cs-137 | pCi/L | 116 | 117 | 0.99 | A |
| | | | Co-58 | pCi/L | 101 | 100 | 1.01 | A |
| | | | Mn-54 | pCi/L | 144 | 146 | 0.98 | A |
| | | | Fe-59 | pCi/L | 96.7 | 93.6 | 1.03 | A |
| | | | Zn-65 | pCi/L | 182 | 185 | 0.98 | A |
| | | | Co-60 | pCi/L | 126 | 129 | 0.98 | A |
| | E5021-396 | AP | Ce-141 | pCi | 113 | 124 | 0.91 | A |
| | | | Cr-51 | pCi | 176 | 174 | 1.01 | A |
| | | | Cs-134 | pCi | 63.7 | 85.1 | 0.75 | W |
| | | | Cs-137 | pCi | 76.8 | 79.0 | 0.97 | A |
| | | | Co-58 | pCi | 63.1 | 67.4 | 0.94 | A |
| | | | Mn-54 | pCi | 102 | 99 | 1.04 | A |
| | | | Fe-59 | pCi | 64.6 | 62.9 | 1.03 | A |
| | | | Zn-65 | pCi | 131 | 125 | 1.05 | A |
| | | | Co-60 | pCi | 81.6 | 86.5 | 0.94 | A |
| | E5020-396 | Charcoal | I-131 | pCi | 65.4 | 65.9 | 0.99 | A |

**TABLE D-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 2 OF 3)**

| Month/Year | Identification Number | Matrix | Nuclide | Units | Reported Value (a) | Known Value (b) | Ratio (c) TBE/Analytics | Evaluation (d) |
|---|---|---|---|---|---|---|---|---|
| September 2006 | E5120-396 | Milk | Sr-89 | pCi/L | 90.3 | 89.2 | 1.01 | A |
| | | | Sr-90 | pCi/L | 11.6 | 12.4 | 0.94 | A |
| | E5121-396 | Milk | I-131 | pCi/L | 67.8 | 73.8 | 0.92 | A |
| | | | Ce-141 | pCi/L | 85.0 | 86.0 | 0.99 | A |
| | | | Cr-51 | pCi/L | 263 | 282 | 0.93 | A |
| | | | Cs-134 | pCi/L | 74.7 | 85.0 | 0.88 | A |
| | | | Cs-137 | pCi/L | 172 | 175 | 0.98 | A |
| | | | Co-58 | pCi/L | 107 | 109 | 0.98 | A |
| | | | Mn-54 | pCi/L | 110 | 113 | 0.98 | A |
| | | | Fe-59 | pCi/L | 46.6 | 43.7 | 1.07 | A |
| | | | Zn-65 | pCi/L | 144 | 145 | 0.99 | A |
| | | | Co-60 | pCi/L | 127 | 134 | 0.95 | A |
| | E5123-396 | AP | Ce-141 | pCi | 67.1 | 66.4 | 1.01 | A |
| | | | Cr-51 | pCi | 223 | 217 | 1.03 | A |
| | | | Cs-134 | pCi | 51.7 | 65.6 | 0.79 | W |
| | | | Cs-137 | pCi | 134 | 135.0 | 0.99 | A |
| | | | Co-58 | pCi | 84.8 | 84.3 | 1.01 | A |
| | | | Mn-54 | pCi | 95.2 | 87 | 1.10 | A |
| | | | Fe-59 | pCi | 41.6 | 33.7 | 1.23 | W |
| | | | Zn-65 | pCi | 123 | 112 | 1.10 | A |
| | | | Co-60 | pCi | 98.9 | 103 | 0.96 | A |
| | | | Co-57 | pCi | 0.922 | (1) | NA | NA |
| | E5122-396 | Charcoal | I-131 | pCi | 77.7 | 90.7 | 0.86 | A |
| December 2006 | E5172-396 | Milk | Sr-89 | pCi/L | 72.4 | 72.0 | 1.01 | A |
| | | | Sr-90 | pCi/L | 7.05 | 5.90 | 1.19 | A |
| | E5173-396 | Milk | I-131 | pCi/L | 71.9 | 70.8 | 1.02 | A |
| | | | Ce-141 | pCi/L | 268 | 294 | 0.91 | A |
| | | | Cr-51 | pCi/L | 420 | 433 | 0.97 | A |
| | | | Cs-134 | pCi/L | 128 | 147 | 0.87 | A |
| | | | Cs-137 | pCi/L | 231 | 237 | 0.97 | A |
| | | | Co-58 | pCi/L | 82.0 | 83.8 | 0.98 | A |
| | | | Mn-54 | pCi/L | 113 | 111 | 1.02 | A |
| | | | Fe-59 | pCi/L | 79.8 | 79.7 | 1.00 | A |
| | | | Zn-65 | pCi/L | 170 | 164 | 1.04 | A |
| | | | Co-60 | pCi/L | 265 | 281 | 0.94 | A |
| | E5175-396 | AP | Ce-141 | pCi | 220 | 210 | 1.05 | A |
| | | | Cr-51 | pCi | 343 | 309 | 1.11 | A |
| | | | Cs-134 | pCi | 90.8 | 105 | 0.86 | A |
| | | | Cs-137 | pCi | 185 | 169.0 | 1.09 | A |
| | | | Co-58 | pCi | 65.0 | 59.7 | 1.09 | A |
| | | | Mn-54 | pCi | 90.6 | 79 | 1.15 | A |
| | | | Fe-59 | pCi | 70.7 | 56.7 | 1.25 | W |
| | | | Zn-65 | pCi | 136 | 117 | 1.16 | A |
| | | | Co-60 | pCi | 208 | 200 | 1.04 | A |

**TABLE D-1** **ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 3 OF 3)**

| Month/Year | Identification Number | Matrix | Nuclide | Units | Reported Value (a) | Known Value (b) | Ratio (c) TBE/Analytics | Evaluation (d) |
|---|---|---|---|---|---|---|---|---|
| December 2006 | E5174-396 | Charcoal | I-131 | pCi | 77.4 | 85.4 | 0.91 | A |

*(1) Impurity detected but not measured by Analytics.*

*(a) Teledyne Brown Engineering reported result.*

*(b) The Analytics known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.*

*(c) Ratio of Teledyne Brown Engineering to Analytics results.*

*(d) Analytics evaluation based on TBE internal QC limits: A= Acceptable. Reported result falls within ratio limits of 0.80-1.20. W-Acceptable with warning. Reported result falls within 0.70-0.80 or 1.20-1.30. N = Not Acceptable. Reported result falls outside the ratio limits of < 0.70 and > 1.30.*

**TABLE D-2** **ERA ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 1 OF 1)**

| Month/Year | Identification Number | Media | Nuclide | Units | Reported Value (a) | Known Value (b) | Control Limits | Evaluation (c) |
|---|---|---|---|---|---|---|---|---|
| May 2006 | Rad 65 | Water | Sr-89 | pCi/L | 30.2 | 32.4 | 23.6 - 41.1 | A |
| | | | Sr-90 | pCi/L | 8.74 | 9.00 | 0.340 - 17.7 | A |
| | | | Ba-133 | pCi/L | 10.9 | 10.0 | 1.34 - 18.7 | A |
| | | | Cs-134 | pCi/L | 39.7 | 43.4 | 34.7 - 52.1 | A |
| | | | Cs-137 | pCi/L | 199 | 214 | 195 - 233 | A |
| | | | Co-60 | pCi/L | 111 | 113.0 | 103 - 123 | A |
| | | | Zn-65 | pCi/L | 146 | 152 | 126 - 178 | A |
| | | | Gr-A | pCi/L | 22.9 | 21.3 | 12.1 - 30.5 | A |
| | | | Gr-B | pCi/L | 23.7 | 23.0 | 14.3 - 31.7 | A |
| | | | Ra-226 | pCi/L | 2.64 | 3.02 | 2.23 - 3.81 | A |
| | | | U-Nat | pCi/L | 74.9 | 69.1 | 57.1 - 81.1 | A |
| | | | H-3 | pCi/L | 7950 | 8130 | 6720 - 9540 | A |
| | Rad 65 | Water | I-131 | pCi/L | 18.2 | 19.1 | 13.9 - 24.3 | A |
| November 2006 | Rad 67 | Water | Sr-89 | pCi/L | 40.0 | 39.9 | 31.2 - 48.6 | A |
| | | | Sr-90 | pCi/L | 16.2 | 16.0 | 7.34 - 24.7 | A |
| | | | Ba-133 | pCi/L | 65.0 | 70.2 | 58.1 - 82.3 | A |
| | | | Cs-134 | pCi/L | 27.4 | 29.9 | 21.2 - 38.6 | A |
| | | | Cs-137 | pCi/L | 74.4 | 78.2 | 69.5 - 86.9 | A |
| | | | Co-60 | pCi/L | 61.6 | 62.3 | 53.6 - 71.0 | A |
| | | | Zn-65 | pCi/L | 277 | 277 | 229 - 325 | A |
| | | | Gr-A | pCi/L | 23.3 | 28.7 | 16.3 - 41.1 | A |
| | | | Gr-B | pCi/L | 22.0 | 20.9 | 12.2 - 29.6 | A |
| | | | U-Nat | pCi/L | 3.18 | 3.20 | 0.00 - 8.40 | A |
| | | | H-3 | pCi/L | 2930 | 3050 | 2430 - 3670 | A |
| | | Water | I-131 | pCi/L | 19.8 | 22.1 | 16.9 - 27.3 | A |

*(a) Teledyne Brown Engineering reported result.*

*(b) The ERA known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.*

*(c) ERA evaluation: A=acceptable. Reported result falls within the Warning Limits. NA=not acceptable. Reported result falls outside of the Control Limits. CE=check for Error. Reported result falls within the Control Limits and outside of the Warning Limit.*

**TABLE D-3 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 1 OF 3)**

| Month/Year | Identification Number | Media | Nuclide | Units | Reported Value (a) | Known Value (b) | Acceptance Range | Evaluation (c) |
|---|---|---|---|---|---|---|---|---|
| January 2006 | 06-MaW15 | Water | Am-241 | Bq/L | 1.29 | 1.30 | 0.91 - 1.69 | A |
| | | | Cs-134 | Bq/L | 79.2 | 95.1 | 66.57 - 123.63 | A |
| | | | Cs-137 | Bq/L | -0.188 | | | A |
| | | | Co-57 | Bq/L | 151 | 166.12 | 116.28 - 215.96 | A |
| | | | Co-60 | Bq/L | 141 | 153.50 | 107.45 - 199.55 | A |
| | | | H-3 | Bq/L | 988 | 952.01 | 666.41 - 1237.61 | A |
| | | | Fe-55 | Bq/L | 106.0 | 129.60 | 90.72 - 168.48 | A |
| | | | Mn-54 | Bq/L | 297 | 315.00 | 220.50 - 409.50 | A |
| | | | Ni-63 | Bq/L | 61.5 | 60.34 | 44.24 - 78.44 | A |
| | | | Pu-238 | Bq/L | 0.961 | 0.91 | 0.64 - 1.18 | A |
| | | | Pu-239/240 | Bq/L | 0.00965 | 0.00710 | (1) | A |
| | | | Sr-90 | Bq/L | 12.6 | 13.16 | 9.21- 17.11 | A |
| | | | Tc-99 | Bq/L | 22.5 | 23.38 | 16.37 - 30.39 | A |
| | | | U-234/233 | Bq/L | 2.20 | 2.09 | 1.46 - 2.72 | A |
| | | | U-238 | Bq/L | 2.23 | 2.17 | 1.52 - 2.82 | A |
| | | | Zn-65 | Bq/L | 219 | 228.16 | 159.71 - 296.61 | A |
| | 06-GrW15 | Water | Gr-A | Bq/L | 0.575 | 0.581 | >0.0 - 1.162 | A |
| | | | Gr-B | Bq/L | 1.52 | 1.13 | 0.56 - 1.70 | A |
| | 06-MaS15 | Soil | Am-241 | Bq/kg | 48.8 | 57.08 | 39.96 - 74.20 | A |
| | | | Cs-134 | Bq/kg | 15.9 | | | N (2) |
| | | | Cs-137 | Bq/kg | 370 | 339.69 | 237.78 - 441.60 | A |
| | | | Co-57 | Bq/kg | 667 | 656.29 | 459.40 - 853.18 | A |
| | | | Co-60 | Bq/kg | 478 | 447.10 | 312.97 - 581.23 | A |
| | | | Mn-54 | Bq/kg | 384 | 346.77 | 242.74 - 450.80 | A |
| | | | Ni-63 | Bq/kg | 394 | 323.51 | 226.46 - 420.56 | W |
| | | | K-40 | Bq/kg | 667 | 604 | 423 - 785 | A |
| | | | Sr-90 | Bq/kg | 253 | 314.35 | 220.04 - 408.66 | A |
| | | | Tc-99 | Bq/kg | 146 | 154.76 | 108.33 - 201.19 | A |
| | | | Zn-65 | Bq/kg | 740 | 657.36 | 460.15 - 854.57 | A |
| | 06-RdF15 | AP | Am-241 | Bq/sample | 0.0850 | 0.093 | 0.065 - 0.121 | A |
| | | | Cs-134 | Bq/sample | 2.34 | 2.934 | 2.054 - 3.814 | A |
| | | | Cs-137 | Bq/sample | 2.45 | 2.531 | 1.772 - 3.290 | A |
| | | | Co-57 | Bq/sample | 3.87 | 4.096 | 2.867 - 5.325 | A |
| | | | Co-60 | Bq/sample | 2.12 | 2.186 | 1.530 - 2.842 | A |
| | | | Mn-54 | Bq/sample | 0.0206 | | not spiked | A |
| | | | Pu-238 | Bq/sample | 0.0766 | 0.067 | 0.047 - 0.087 | A |
| | | | Pu-239/240 | Bq/sample | 0.00520 | 0.00041 | (1) | A |
| | | | Sr-90 | Bq/sample | 0.761 | 0.792 | 0.554 - 1.030 | A |
| | | | U-234/233 | Bq/sample | 0.0217 | 0.020 | 0.014 - 0.026 | A |
| | | | U-238 | Bq/sample | 0.0220 | 0.021 | 0.015 - 0.027 | A |
| | | | Zn-65 | Bq/sample | 3.86 | 3.423 | 2.396 - 4.450 | A |
| | 06-GrF15 | AP | Gr-A | Bq/sample | 0.257 | 0.361 | >0.0 - 0.722 | A |
| | | | Gr-B | Bq/sample | 0.398 | 0.481 | 0.241 - 0.722 | A |

**TABLE D-3 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 2 OF 3)**

| Month/Year | Identification Number | Media | Nuclide | Units | Reported Value (a) | Known Value (b) | Acceptance Range | Evaluation (c) |
|---|---|---|---|---|---|---|---|---|
| January 2006 | 06-RdV15 | Vegetation | Am-241 | Bq/sample | 0.156 | 0.156 | 0.109 - 0.203 | A |
| | | | Cs-134 | Bq/sample | 0.369 | | not spiked | A |
| | | | Cs-137 | Bq/sample | 3.15 | 3.074 | 2.152 - 3.996 | A |
| | | | Co-57 | Bq/sample | 10.1 | 8.578 | 6.005 - 11.151 | A |
| | | | Co-60 | Bq/sample | 4.69 | 4.520 | 3.164 - 5.876 | A |
| | | | Mn-54 | Bq/sample | 6.53 | 6.247 | 4.373 - 8.121 | A |
| | | | Pu-238 | Bq/sample | 0.183 | 0.137 | 0.096 - 0.178 | N (3) |
| | | | Pu-239/240 | Bq/sample | 0.111 | 0.164 | 0.115 - 0.213 | N (3) |
| | | | Sr-90 | Bq/sample | 2.22 | 1.561 | 1.093 - 2.029 | N (3) |
| | | | U-234/233 | Bq/sample | 0.208 | 0.208 | 0.146 - 0.270 | A |
| | | | U-238 | Bq/sample | 0.176 | 0.216 | 0.151 - 0.281 | A |
| | | | Zn-65 | Bq/sample | 10.5 | 9.798 | 6.859 - 12.737 | A |
| July 2006 | 06-MaW16 | Water | Am-241 | Bq/L | 2.09 | 2.31 | 1.62 - 3.00 | A |
| | | | Cs-134 | Bq/L | 99.8 | 112.82 | 78.98 - 146.66 | A |
| | | | Cs-137 | Bq/L | 191 | 196.14 | 137.30 - 254.98 | A |
| | | | Co-57 | Bq/L | 203 | 213.08 | 149.16 - 277.00 | A |
| | | | Co-60 | Bq/L | 46.2 | 47.5 | 33.2 - 61.8 | A |
| | | | H-3 | Bq/L | 471 | 428.85 | 300.20 - 557.50 | A |
| | | | Fe-55 | Bq/L | 173 | 165.4 | 115.8 - 215.0 | A |
| | | | Ni-63 | Bq/L | 109 | 118.62 | 83.03 - 154.21 | A |
| | | | Pu-238 | Bq/L | 1.50 | 1.39 | 0.97 - 1.81 | A |
| | | | Pu-239/240 | Bq/L | 2.01 | 1.94 | 1.36 - 2.52 | A |
| | | | Sr-90 | Bq/L | 13.7 | 15.69 | 10.98- 20.40 | A |
| | | | Tc-99 | Bq/L | 29.0 | 27.15 | 19.00 - 35.29 | A |
| | | | U-234/233 | Bq/L | 2.19 | 2.15 | 1.50 - 2.80 | A |
| | | | U-238 | Bq/L | 2.25 | 2.22 | 1.55 - 2.89 | A |
| | | | Zn-65 | Bq/L | 178 | 176.37 | 123.46 - 229.28 | A |
| | 06-GrW16 | Water | Gr-A | Bq/L | 1.52 | 1.033 | >0.0 - 2.066 | A |
| | | | Gr-B | Bq/L | 1.18 | 1.03 | 0.52 - 1.54 | A |
| | 06-MaS16 | Soil | Am-241 | Bq/kg | 83.6 | 105.47 | 73.83 - 137.11 | W |
| | | | Cs-134 | Bq/kg | 393 | 452.13 | 316.49 - 587.77 | A |
| | | | Cs-137 | Bq/kg | 522 | 525.73 | 368.01 - 683.45 | A |
| | | | Co-57 | Bq/kg | 636 | 676.33 | 473.43 - 879.23 | A |
| | | | Co-60 | Bq/kg | 3.78 | 1.98 | | A (4) |
| | | | Mn-54 | Bq/kg | 598 | 594.25 | 415.98 - 772.52 | A |
| | | | Ni-63 | Bq/kg | 571 | 627.3 | 470.6 - 874.0 | A |
| | | | Pu-238 | Bq/kg | 71.2 | 82 | 57 - 107 | A |
| | | | Pu-239240 | Bq/kg | 0.487 | 0.93 | | A (4) |
| | | | K-40 | Bq/kg | 615 | 604 | 423 - 785 | A |
| | | | Sr-90 | Bq/kg | 178 | 223.3 | 156.3 - 290.3 | W |
| | | | Tc-99 | Bq/kg | 175 | 218.01 | 152.61 - 283.41 | A |
| | | | U-234/233 | Bq/kg | 119 | 152.44 | 106.71 - 198.17 | W |
| | | | U-238 | Bq/kg | 115 | 158.73 | 111.11 -206.35 | W |
| | | | Zn-65 | Bq/kg | 937 | 903.61 | 632.53 - 1174.69 | A |

**TABLE D-3 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)**
**TELEDYNE BROWN ENGINEERING, 2006**
**(PAGE 3 OF 3)**

| Month/Year | Identification Number | Media | Nuclide | Units | Reported Value (a) | Known Value (b) | Acceptance Range | Evaluation (c) |
|---|---|---|---|---|---|---|---|---|
| July 2006 | 06-RdF16 | AP | Am-241 | Bq/sample | 0.124 | 0.142 | 0.099 - 0.185 | A |
| | | | Cs-134 | Bq/sample | 2.62 | 3.147 | 2.203 - 4.091 | A |
| | | | Cs-137 | Bq/sample | 1.98 | 1.805 | 1.263 - 2.346 | A |
| | | | Co-57 | Bq/sample | 2.65 | 2.582 | 1.807 - 3.357 | A |
| | | | Co-60 | Bq/sample | 1.63 | 1.577 | 1.104 - 2.050 | A |
| | | | Mn-54 | Bq/sample | 2.10 | 1.92 | 1.34 - 2.50 | A |
| | | | Pu-238 | Bq/sample | 0.118 | 0.118 | 0.083 - 0.153 | A |
| | | | Pu-239/240 | Bq/sample | 0.00822 | | not spiked | A |
| | | | Sr-90 | Bq/sample | 0.549 | 0.62 | 0.43 - 0.81 | A |
| | | | U-234/233 | Bq/sample | 0.140 | 0.134 | 0.094 - 0.174 | A |
| | | | U-238 | Bq/sample | 0.136 | 0.139 | 0.097 - 0.181 | A |
| | | | Zn-65 | Bq/sample | -0.163 | | not spiked | A |
| | 06-GrF16 | AP | Gr-A | Bq/sample | 0.134 | 0.290 | >0.0 - 0.580 | A |
| | | | Gr-B | Bq/sample | 0.358 | 0.359 | 0.180 - 0.538 | A |

*(1) False positive test*

*(2) Evaluated as a false positive by MAPEP although we considered the result a non-detect due to the peak not being identified by the gamma software. For Cs-134, MAPEP suggests the Bi-214 is not being differentiated from the Cs-134 peak.*

*(3) Sr samples analyzed in triplicate and one high result of 2.43 pCi/kg biased the submitted results on the high side. We were unable to determine the cause for the higher result. Since we do not analyze vegetation for isotpic Pu, no NCR was initiated for the Pu failure. MAPEP suggest pyrosulfate fusion preparation prior to analysis for isotopic Pu in vegetation samples.*

*(4) Not detected, reported a statistically zero result. (False positive test)*

*(a) Teledyne Brown Engineering reported result.*

*(b) The MAPEP known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.*

*(c) DOE/MAPEP evaluation: A=acceptable, W=acceptable with warning, N=not acceptable.*

**TABLE D-4 ERA[a] STATISTICAL SUMMARY PROFICIENCY TESTING PROGRAM ENVIRONMENTAL, INC., 2006**



| Lab Code | Date | Concentration (pCi/L) | | | | |
|---|---|---|---|---|---|---|
| | | Analysis | Laboratory Result[b] | ERA Result[c] | Control Limits | Acceptance |
| STW-1078 | 01/16/06 | Sr-89 | 49.9 ± 3.5 | 50.2 | 41.5 - 58.9 | Pass |
| STW-1078 | 01/16/06 | Sr-90 | 31.5 ± 1.5 | 30.7 | 22.0 - 39.4 | Pass |
| STW-1079 | 01/16/06 | Ba-133 | 86.5 ± 4.1 | 95.0 | 78.6 - 111.0 | Pass |
| STW-1079 | 01/16/06 | Co-60 | 96.3 ± 4.1 | 95.3 | 86.6 - 104.0 | Pass |
| STW-1079 | 01/16/06 | Cs-134 | 22.6 ± 3.0 | 23.1 | 14.4 - 31.8 | Pass |
| STW-1079 | 01/16/06 | Cs-137 | 109.0 ± 5.9 | 111.0 | 101.0 - 121.0 | Pass |
| STW-1079 | 01/16/06 | Zn-65 | 198.0 ± 11.2 | 192.0 | 159.0 - 225.0 | Pass |
| STW-1080 | 01/16/06 | Gr. Alpha | 10.8 ± 1.4 | 9.6 | 1.0 - 18.3 | Pass |
| STW-1080 | 01/16/06 | Gr. Beta | 56.9 ± 1.9 | 61.9 | 44.6 - 79.2 | Pass |
| STW-1081 | 01/16/06 | Ra-226 | 4.3 ± 0.4 | 4.6 | 3.4 - 5.8 | Pass |
| STW-1081 | 01/16/06 | Ra-228 | 7.1 ± 1.8 | 6.6 | 3.7 - 9.5 | Pass |
| STW-1081 | 01/16/06 | Uranium | 20.7 ± 0.5 | 22.1 | 16.9 - 27.3 | Pass |
| STW-1088 | 04/10/06 | Sr-89 | 29.0 ± 1.8 | 32.4 | 23.7 - 41.1 | Pass |
| STW-1088 | 04/10/06 | Sr-90 | 8.7 ± 1.0 | 9.0 | 0.3 - 17.7 | Pass |
| STW-1089 | 04/10/06 | Ba-133 | 10.3 ± 0.4 | 10.0 | 1.3 - 18.7 | Pass |
| STW-1089 | 04/10/06 | Co-60 | 114.0 ± 2.8 | 113.0 | 103.0 - 123.0 | Pass |
| STW-1089 | 04/10/06 | Cs-134 | 41.9 ± 1.4 | 43.4 | 34.7 - 52.1 | Pass |
| STW-1089 | 04/10/06 | Cs-137 | 208.0 ± 1.1 | 214.0 | 195.0 - 233.0 | Pass |
| STW-1089 | 04/10/06 | Zn-65 | 154.0 ± 0.8 | 152.0 | 126.0 - 178.0 | Pass |
| STW-1090 | 04/10/06 | Gr. Alpha | 13.4 ± 1.1 | 21.3 | 12.1 - 30.5 | Pass |
| STW-1090 | 04/10/06 | Gr. Beta | 27.7 ± 2.1 | 23.0 | 14.3 - 31.7 | Pass |
| STW-1091 | 04/10/06 | I-131 | 22.0 ± 0.3 | 19.1 | 13.9 - 24.3 | Pass |
| STW-1092 | 04/10/06 | H-3 | 7960.0 ± 57.0 | 8130.0 | 6720.0 - 9540.0 | Pass |
| STW-1092 | 04/10/06 | Ra-226 | 2.9 ± 0.4 | 3.0 | 2.2 - 3.8 | Pass |
| STW-1092 | 04/10/06 | Ra-228 | 20.9 ± 1.2 | 19.1 | 10.8 - 27.4 | Pass |
| STW-1092 | 04/10/06 | Uranium | 68.6 ± 3.4 | 69.1 | 57.1 - 81.1 | Pass |
| STW-1094 | 07/10/06 | Sr-89 | 15.9 ± 0.7 | 19.7 | 11.0 - 28.4 | Pass |
| STW-1094 | 07/10/06 | Sr-90 | 24.3 ± 0.4 | 25.9 | 17.2 - 34.6 | Pass |
| STW-1095 | 07/10/06 | Ba-133 | 94.9 ± 8.9 | 88.1 | 72.9 - 103.0 | Pass |
| STW-1095 | 07/10/06 | Co-60 | 104.0 ± 1.8 | 99.7 | 91.0 - 108.0 | Pass |
| STW-1095 | 07/10/06 | Cs-134 | 48.7 ± 1.3 | 54.1 | 45.4 - 62.8 | Pass |
| STW-1095 | 07/10/06 | Cs-137 | 236.0 ± 3.0 | 238.0 | 217.0 - 259.0 | Pass |
| STW-1095 | 07/10/06 | Zn-65 | 126.0 ± 8.0 | 121.0 | 100.0 - 142.0 | Pass |
| STW-1096 | 07/10/06 | Gr. Alpha | 10.9 ± 1.0 | 10.0 | 1.3 - 18.6 | Pass |
| STW-1096 | 07/10/06 | Gr. Beta | 9.7 ± 0.4 | 8.9 | 0.2 - 17.5 | Pass |
| STW-1097 | 07/10/06 | Ra-226 | 11.0 ± 0.5 | 10.7 | 7.9 - 13.5 | Pass |
| STW-1097 | 07/10/06 | Ra-228 | 12.2 ± 0.8 | 10.7 | 6.1 - 15.3 | Pass |
| STW-1097 | 07/10/06 | Uranium | 43.4 ± 0.1 | 40.3 | 33.3 - 47.3 | Pass |

**TABLE D-4 ERA[a] STATISTICAL SUMMARY PROFICIENCY TESTING PROGRAM ENVIRONMENTAL, INC., 2006**



| Lab Code | Date | Analysis | Concentration (pCi/L) Laboratory Result[b] | ERA Result[c] | Control Limits | Acceptance |
|---|---|---|---|---|---|---|
| STW-1104 | 10/06/06 | Sr-89 | 38.4 ± 1.3 | 39.9 | 31.2 - 45.7 | Pass |
| STW-1104 | 10/06/06 | Sr-90 | 15.5 ± 0.5 | 16.0 | 7.3 - 24.7 | Pass |
| STW-1105 | 10/06/06 | Ba-133 | 64.9 ± 2.8 | 70.2 | 58.1 - 82.3 | Pass |
| STW-1105 | 10/06/06 | Co-60 | 61.6 ± 1.0 | 62.3 | 53.6 - 71.0 | Pass |
| STW-1105 | 10/06/06 | Cs-134 | 29.0 ± 0.9 | 29.9 | 21.2 - 38.6 | Pass |
| STW-1105 | 10/06/06 | Cs-137 | 77.8 ± 2.4 | 78.2 | 69.5 - 86.9 | Pass |
| STW-1105 | 10/06/06 | Zn-65 | 293.0 ± 2.4 | 277.0 | 229.0 - 325.0 | Pass |
| STW-1106 | 10/06/06 | Gr. Alpha | 23.9 ± 2.5 | 28.7 | 16.3 - 41.1 | Pass |
| STW-1106 | 10/06/06 | Gr. Beta | 23.7 ± 1.4 | 20.9 | 12.2 - 29.6 | Pass |
| STW-1107 [d] | 10/06/06 | I-131 | 28.4 ± 1.2 | 22.1 | 16.9 - 27.3 | Fail |
| STW-1108 | 10/06/06 | Ra-226 | 14.5 ± 0.5 | 14.4 | 10.7 - 18.1 | Pass |
| STW-1108 | 10/06/06 | Ra-228 | 6.6 ± 0.4 | 5.9 | 3.3 - 8.4 | Pass |
| STW-1108 | 10/06/06 | Uranium | 2.9 ± 0.1 | 3.2 | 0.0 - 8.4 | Pass |
| STW-1109 | 10/06/06 | H-3 | 3000.0 ± 142.0 | 3050.0 | 2430.0 - 3670.0 | Pass |

[a] Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the crosscheck program for proficiency testing in drinking water conducted by Environmental Resources Associates (ERA).

[b] Unless otherwise indicated, the laboratory result is given as the mean ± standard deviation for three determinations.

[c] Results are presented as the known values, expected laboratory precision (1 sigma, 1 determination) and control limits as provided by ERA.

[d] The reported result was an average of three analyses, results ranged from 25.36 to 29.23 pCi/L. A fourth analysis was performed, result of analysis, 24.89 pCi/L.

**TABLE D-5 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)[a] ENVIRONMENTAL, INC., 2006**



| Lab Code[c] | Date | Analysis | Concentration[b] Laboratory result | Known Activity | Control Limits[d] | Acceptance |
|---|---|---|---|---|---|---|
| STVE-1082 | 01/01/06 | Am-241 | 0.16 ± 0.06 | 0.16 | 0.11 - 0.20 | Pass |
| STVE-1082 | 01/01/06 | Co-57 | 10.40 ± 0.20 | 8.58 | 6.00 - 11.15 | Pass |
| STVE-1082 | 01/01/06 | Co-60 | 5.00 ± 0.20 | 4.52 | 3.16 - 5.88 | Pass |
| STVE-1082[e] | 01/01/06 | Cs-134 | < 0.20 | 0.00 | | Pass |
| STVE-1082 | 01/01/06 | Cs-137 | 3.40 ± 0.20 | 3.07 | 2.15 - 4.00 | Pass |
| STVE-1082 | 01/01/06 | Mn-54 | 6.90 ± 0.20 | 6.25 | 4.37 - 8.12 | Pass |
| STVE-1082[f] | 01/01/06 | Pu-238 | 0.08 ± 0.03 | 0.14 | 0.10 - 0.18 | Fail |
| STVE-1082 | 01/01/06 | Pu-239/40 | 0.17 ± 0.03 | 0.16 | 0.11 - 0.21 | Pass |
| STVE-1082 | 01/01/06 | Sr-90 | 1.40 ± 0.20 | 1.56 | 1.09 - 2.03 | Pass |
| STVE-1082 | 01/01/06 | U-233/4 | 0.24 ± 0.05 | 0.21 | 0.15 - 0.27 | Pass |
| STVE-1082 | 01/01/06 | U-238 | 0.19 ± 0.04 | 0.22 | 0.15 - 0.28 | Pass |
| STVE-1082 | 01/01/06 | Zn-65 | 11.10 ± 0.50 | 9.80 | 6.86 - 12.74 | Pass |
| STSO-1083 | 01/01/06 | Am-241 | 54.60 ± 5.50 | 57.08 | 39.96 - 74.20 | Pass |
| STSO-1083 | 01/01/06 | Co-57 | 762.90 ± 12.70 | 656.29 | 459.40 - 853.18 | Pass |
| STSO-1083 | 01/01/06 | Co-60 | 504.90 ± 3.10 | 447.10 | 312.97 - 581.23 | Pass |
| STSO-1083[e] | 01/01/06 | Cs-134 | < 1.70 | 0.00 | | Pass |
| STSO-1083 | 01/01/06 | Cs-137 | 406.50 ± 3.70 | 339.69 | 237.78 - 441.60 | Pass |
| STSO-1083 | 01/01/06 | K-40 | 719.20 ± 18.40 | 604.00 | 422.80 - 785.20 | Pass |
| STSO-1083 | 01/01/06 | Mn-54 | 415.60 ± 4.80 | 346.77 | 242.74 - 450.80 | Pass |
| STSO-1083 | 01/01/06 | Ni-63 | 261.40 ± 14.70 | 323.51 | 226.46 - 420.56 | Pass |
| STVE-1083[f] | 01/01/06 | Pu-238 | 14.60 ± 2.90 | 61.15 | 42.81 - 79.50 | Fail |
| STVE-1083[f] | 01/01/06 | Pu-239/40 | 14.60 ± 2.40 | 45.85 | 32.09 - 59.61 | Fail |
| STVE-1083[f] | 01/01/06 | U-233/4 | 13.50 ± 1.70 | 37.00 | 25.90 - 48.10 | Fail |
| STVE-1083[f] | 01/01/06 | U-238 | 15.40 ± 1.80 | 38.85 | 27.20 - 50.50 | Fail |
| STSO-1083 | 01/01/06 | Zn-65 | 783.40 ± 7.00 | 657.36 | 460.15 - 854.57 | Pass |
| STAP-1084 | 01/01/06 | Gr. Alpha | 0.26 ± 0.02 | 0.36 | 0.00 - 0.72 | Pass |
| STAP-1084 | 01/01/06 | Gr. Beta | 0.51 ± 0.03 | 0.48 | 0.24 - 0.72 | Pass |
| STAP-1085 | 01/01/06 | Am-241 | 0.12 ± 0.02 | 0.09 | 0.07 - 0.12 | Pass |
| STAP-1085 | 01/01/06 | Co-57 | 4.32 ± 0.10 | 4.10 | 2.87 - 5.32 | Pass |
| STAP-1085 | 01/01/06 | Co-60 | 2.24 ± 0.16 | 2.19 | 1.53 - 2.84 | Pass |
| STAP-1085 | 01/01/06 | Cs-134 | 2.96 ± 0.19 | 2.93 | 2.05 - 3.81 | Pass |
| STAP-1085 | 01/01/06 | Cs-137 | 2.64 ± 0.20 | 2.53 | 1.77 - 3.29 | Pass |
| STAP-1085[f] | 01/01/06 | Pu-238 | 0.03 ± 0.01 | 0.07 | 0.05 - 0.09 | Fail |
| STAP-1085[e] | 01/01/06 | Pu-239/40 | < 0.01 | 0.00 | | Pass |
| STAP-1085 | 01/01/06 | Sr-90 | 0.77 ± 0.21 | 0.79 | 0.55 - 1.03 | Pass |
| STAP-1085 | 01/01/06 | U-233/4 | 0.03 ± 0.01 | 0.02 | 0.01 - 0.03 | Pass |
| STAP-1085 | 01/01/06 | U-238 | 0.02 ± 0.01 | 0.02 | 0.01 - 0.03 | Pass |
| STAP-1085 | 01/01/06 | Zn-65 | 3.94 ± 0.44 | 3.42 | 2.40 - 4.45 | Pass |

**TABLE D-5 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)[a]**
**ENVIRONMENTAL, INC., 2006**



| | | Concentration [b] | | | | |
|---|---|---|---|---|---|---|
| Lab Code[c] | Date | Analysis | Laboratory result | Known Activity | Control Limits [d] | Acceptance |
| STW-1086 | 01/01/06 | Am-241 | 1.29 ± 0.05 | 1.30 | 0.91 - 1.69 | Pass |
| STW-1086 | 01/01/06 | Co-57 | 177.10 ± 1.00 | 166.12 | 116.28 - 215.96 | Pass |
| STW-1086 | 01/01/06 | Co-60 | 158.30 ± 1.00 | 153.50 | 107.45 - 199.55 | Pass |
| STW-1086 | 01/01/06 | Cs-134 | 96.40 ± 1.50 | 95.10 | 66.57 - 123.63 | Pass |
| STW-1086 [e] | 01/01/06 | Cs-137 | < 0.80 | 0.00 | | Pass |
| STW-1086 | 01/01/06 | Fe-55 | 102.50 ± 18.10 | 129.60 | 90.72 - 168.48 | Pass |
| STW-1086 | 01/01/06 | H-3 | 956.60 ± 16.50 | 952.01 | 666.41 - 1238.00 | Pass |
| STW-1086 | 01/01/06 | Mn-54 | 335.30 ± 2.20 | 315.00 | 220.50 - 409.50 | Pass |
| STW-1086 | 01/01/06 | Ni-63 | 62.90 ± 3.60 | 60.34 | 42.24 - 78.44 | Pass |
| STW-1086 | 01/01/06 | Pu-238 | 0.96 ± 0.07 | 0.91 | 0.70 - 1.30 | Pass |
| STW-1086 [e] | 01/01/06 | Pu-239/40 | < 0.20 | 0.00 | | Pass |
| STW-1086 | 01/01/06 | Sr-90 | 12.80 ± 1.60 | 13.16 | 9.21 - 17.11 | Pass |
| STW-1086 | 01/01/06 | Tc-99 | 22.30 ± 1.20 | 23.38 | 16.37 - 30.39 | Pass |
| STW-1086 | 01/01/06 | U-233/4 | 2.02 ± 0.12 | 2.09 | 1.46 - 2.72 | Pass |
| STW-1086 | 01/01/06 | U-238 | 2.03 ± 0.12 | 2.17 | 1.52 - 2.82 | Pass |
| STW-1086 | 01/01/06 | Zn-65 | 249.50 ± 3.40 | 228.16 | 159.71 - 296.61 | Pass |
| STW-1087 | 01/01/06 | Gr. Alpha | 0.59 ± 0.10 | 0.58 | 0.00 - 1.16 | Pass |
| STW-1087 | 01/01/06 | Gr. Beta | 1.69 ± 0.07 | 1.13 | 0.56 - 1.70 | Pass |
| STVE-1098 [e] | 07/01/06 | Co-57 | < 0.14 | 0.00 | | Pass |
| STVE-1098 [g] | 07/01/06 | Co-60 | 6.89 ± 0.17 | 5.81 | 4.06 - 7.55 | Pass |
| STVE-1098 | 07/01/06 | Cs-134 | 8.46 ± 0.16 | 7.49 | 5.24 - 9.73 | Pass |
| STVE-1098 | 07/01/06 | Cs-137 | 6.87 ± 0.29 | 5.50 | 3.85 - 7.14 | Pass |
| STVE-1098 | 07/01/06 | Mn-54 | 10.36 ± 0.29 | 8.35 | 5.85 - 10.86 | Pass |
| STVE-1098 | 07/01/06 | Zn-65 | 7.46 ± 0.50 | 5.98 | 4.19 - 7.78 | Pass |
| STSO-1099 | 07/01/06 | Am-241 | 130.00 ± 11.60 | 105.47 | 73.83 - 137.11 | Pass |
| STSO-1099 | 07/01/06 | Co-57 | 784.90 ± 3.80 | 676.33 | 473.43 - 879.23 | Pass |
| STSO-1099 | 07/01/06 | Co-60 | 2.10 ± 0.90 | 1.98 | 0.00 - 5.00 | Pass |
| STSO-1099 | 07/01/06 | Cs-134 | 500.70 ± 7.40 | 452.13 | 316.49 - 587.77 | Pass |
| STSO-1099 | 07/01/06 | Cs-137 | 624.20 ± 4.90 | 525.73 | 368.01 - 683.45 | Pass |
| STSO-1099 | 07/01/06 | K-40 | 701.30 ± 3.40 | 604.00 | 423.00 - 785.00 | Pass |
| STSO-1099 | 07/01/06 | Mn-54 | 699.20 ± 5.20 | 594.25 | 415.98 - 772.52 | Pass |
| STSO-1099 | 07/01/06 | Ni-63 | 614.40 ± 17.10 | 672.30 | 470.60 - 874.00 | Pass |
| STSO-1099 | 07/01/06 | Pu-238 | 79.90 ± 5.80 | 82.00 | 57.00 - 107.00 | Pass |
| STSO-1099 [e] | 07/01/06 | Pu-239/40 | < 0.70 | 0.00 | | Pass |
| STSO-1099 | 07/01/06 | U-233/4 | 150.50 ± 5.90 | 152.44 | 106.71 - 198.17 | Pass |
| STSO-1099 | 07/01/06 | U-238 | 151.60 ± 6.00 | 158.73 | 111.11 - 206.35 | Pass |
| STSO-1099 | 07/01/06 | Zn-65 | 1021.90 ± 9.20 | 903.61 | 632.53 - 1175.00 | Pass |

**TABLE D-5 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)[a] ENVIRONMENTAL, INC., 2006**



| | | Concentration [b] | | | | |
|---|---|---|---|---|---|---|
| Lab Code[c] | Date | Analysis | Laboratory result | Known Activity | Control Limits [d] | Acceptance |
| STAP-1100 | 07/01/06 | Am-241 | 0.16 ± 0.03 | 0.14 | 0.10 - 0.19 | Pass |
| STAP-1100 | 07/01/06 | Co-57 | 2.17 ± 0.06 | 2.58 | 1.81 - 3.36 | Pass |
| STAP-1100 | 07/01/06 | Co-60 | 1.38 ± 0.07 | 1.58 | 1.10 - 2.05 | Pass |
| STAP-1100 | 07/01/06 | Cs-134 | 2.52 ± 0.13 | 3.15 | 2.20 - 4.09 | Pass |
| STAP-1100 | 07/01/06 | Cs-137 | 1.64 ± 0.08 | 1.81 | 1.26 - 2.35 | Pass |
| STAP-1100 | 07/01/06 | Mn-54 | 1.76 ± 0.18 | 1.92 | 1.34 - 2.50 | Pass |
| STAP-1100 | 07/01/06 | Pu-238 | 0.09 ± 0.02 | 0.12 | 0.08 - 0.15 | Pass |
| STAP-1100 | 07/01/06 | Sr-90 | 0.66 ± 0.21 | 0.62 | 0.43 - 0.81 | Pass |
| STAP-1100 | 07/01/06 | U-233/4 | 0.15 ± 0.02 | 0.13 | 0.09 - 0.17 | Pass |
| STAP-1100 | 07/01/06 | U-238 | 0.13 ± 0.02 | 0.14 | 0.10 - 0.18 | Pass |
| STAP-1100 [e] | 07/01/06 | Zn-65 | < 0.07 | 0.00 | | Pass |
| STAP-1101 | 07/01/06 | Gr. Alpha | 0.08 ± 0.03 | 0.29 | 0.00 - 0.58 | Pass |
| STAP-1101 | 07/01/06 | Gr. Beta | 0.41 ± 0.05 | 0.36 | 0.18 - 0.54 | Pass |
| STW-1102 | 07/01/06 | Gr. Alpha | 0.76 ± 0.07 | 1.03 | 0.00 - 2.07 | Pass |
| STW-1102 | 07/01/06 | Gr. Beta | 1.23 ± 0.06 | 1.03 | 0.52 - 1.54 | Pass |
| STW-1103 | 07/01/06 | Am-241 | 1.86 ± 0.09 | 2.31 | 1.62 - 3.00 | Pass |
| STW-1103 | 07/01/06 | Co-57 | 224.10 ± 1.20 | 213.08 | 149.16 - 277.00 | Pass |
| STW-1103 | 07/01/06 | Co-60 | 49.40 ± 0.50 | 47.50 | 33.20 - 61.80 | Pass |
| STW-1103 | 07/01/06 | Cs-134 | 112.70 ± 0.90 | 112.82 | 78.97 - 146.66 | Pass |
| STW-1103 | 07/01/06 | Cs-137 | 206.60 ± 1.40 | 196.14 | 137.30 - 254.98 | Pass |
| STW-1103 | 07/01/06 | Fe-55 | 138.40 ± 5.40 | 165.40 | 115.80 - 215.00 | Pass |
| STW-1103 | 07/01/06 | H-3 | 446.50 ± 11.80 | 428.85 | 300.20 - 557.50 | Pass |
| STW-1103 [e] | 07/01/06 | Mn-54 | < 0.30 | 0.00 | | Pass |
| STW-1103 | 07/01/06 | Ni-63 | 116.70 ± 3.60 | 118.62 | 83.03 - 154.21 | Pass |
| STW-1103 | 07/01/06 | Pu-238 | 1.27 ± 0.07 | 1.39 | 0.97 - 1.81 | Pass |
| STW-1103 | 07/01/06 | Pu-239/40 | 1.67 ± 0.08 | 1.94 | 1.36 - 2.52 | Pass |
| STW-1103 | 07/01/06 | Sr-90 | 16.40 ± 1.90 | 15.69 | 10.98 - 20.40 | Pass |
| STW-1103 | 07/01/06 | Tc-99 | 29.40 ± 1.10 | 27.15 | 19.00 - 35.29 | Pass |
| STW-1103 | 07/01/06 | U-233/4 | 1.97 ± 0.08 | 2.15 | 1.50 - 2.80 | Pass |
| STW-1103 | 07/01/06 | U-238 | 1.97 ± 0.08 | 2.22 | 1.55 - 2.89 | Pass |
| STW-1103 | 07/01/06 | Zn-65 | 192.50 ± 2.40 | 176.37 | 123.46 - 229.28 | Pass |

[a] Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the Department of Energy's Mixed Analyte Performance Evaluation Program, Idaho Operations office, Idaho Falls, Idaho

[b] Results are reported in units of Bq/kg (soil), Bq/L (water) or Bq/total sample (filters, vegetation).

[c] Laboratory codes as follows: STW (water), STAP (air filter), STSO (soil), STVE (vegetation).

[d] MAPEP results are presented as the known values and expected laboratory precision (1 sigma, 1 determination) and control limits as defined by the MAPEP.

[e] Included in the MAPEP as a false positive.

[f] Difficulties with the analyses for transuranics isotopes in solid samples (Filters, Soil and vegetation), were attributed to incomplete dissolution of the samples. Soil samples were repeated, results of reanalyses: Pu-238, 53.1 ± 5.3 bq/kg. Pu-239/240, 42.4 ± 4.7 bq/kg. U-233/4, 33.3 ± 3.5 bq/kg. U-238, 35.5 ± 3.6 bq/kg.

[g] The July vegetation sample was provided in two separate geometries, (100 ml. and 500 ml.). Results reported here used the 500 ml. standard size geometry. Results for the 100 ml. geometry showed approximately a 15% higher bias.

# APPENDIX E

# ERRATA DATA

There is no errata data for 2006.

Intentionally left blank

# APPENDIX F

# EFFLUENT DATA

TABLE OF CONTENTS

Table of Contents (cont.)

# INTRODUCTION

The Dresden Station is located approximately twelve miles southwest of Joliet, Illinois at the confluence of the Des Plaines and Illinois Rivers where they form the Illinois River. The station uses two boiling water reactors (Units 2 and 3, G.E. design) to generate electricity. Unit 1, which began operating in 1960 and had a rated power output of 200 megawatts electrical (MWe), was shut down permanently on August 31, 1984 and is currently being decommissioned. Unit 2 net rated power output was increased to 912 MWe in 2001; Unit 3 net rated power output was increased to 912 MWe in 2002. The station has been designed to keep releases to the environment at levels below those specified in the regulations.

Liquid effluents from Dresden Station are diluted and released to the Illinois River in controlled batches after radioassay of each batch. Gaseous effluents are released to the atmosphere after treatment to permit decay of short-lived noble gases. Releases to the atmosphere are calculated on the basis of analyses of weekly grab samples of noble gases as well as continuously collected samples of iodine and particulate activity sampled during the course of the year. The results of effluent analyses are used to calculate dose to the public and are reported to the Nuclear Regulatory Commission as required per Technical Specifications. Airborne concentrations of noble gases, iodines, and particulate radioactivity in offsite areas are calculated using isotopic composition of effluent and meteorological data.

Environmental monitoring is conducted by sampling at indicator and control (background) locations in the vicinity of the Dresden Station to measure changes in radiation or radioactivity levels that may be attributable to station operations. If significant changes attributable to Dresden Station are measured, these changes are correlated with effluent releases. External gamma radiation exposure from turbine shine and released noble gases and internal dose from I-131 in milk are the critical pathways at this site; however, a comprehensive environmental monitoring program is conducted which includes many other pathways which are less significant in terms of public dose.

## SUMMARY

Calculations based on gaseous and liquid effluents, Illinois River Flow, meteorological data and hydrogen addition activities indicate that public dose due to radioactive material attributable to Dresden Station during the period does not exceed regulatory or Offsite Dose Calculation Manual (ODCM) limits.

The Total Effective Dose Equivalent (TEDE) for the period due to licensed activities at Dresden Station calculated for the maximally exposed individual is 8.23E+00 mrem. The annual limit on TEDE is 100 mrem. This value is largely dominated by the direct radiation constituent from the Unit 2 and Unit 3 turbines (8.22E+00 mrem). The balance of the calculated maximum dose is due to exposure from radionuclides released from the Station in liquid and gaseous effluents.

The assessment of radiation doses to the public is performed in accordance with the ODCM. The results of these analyses confirm that the station is operating in compliance with 10CFR50 Appendix I, 10CFR20 and 40CFR190.

## 1.0 EFFLUENTS

### 1.1 Gaseous Effluents to the Atmosphere

Measured concentrations of noble gases, radioiodine, and particulate radioactivity with half-lives greater than eight days released to the atmosphere during the year, are listed in Table 1.1-1. A total of 2.59E+02 curies of noble gases with a maximum quarterly average release rate of 2.23E+01 µCi/sec were released from Dresden Units 1, 2, and 3.

A total of 5.03E-04 curies of I-131 were released during the year with a maximum average quarterly release rate of 2.06E-05 µCi/sec.

A total of 3.16E-03 curies of particulate activity with half lives greater than eight days were released as airborne particulate matter with a maximum quarterly average release rate of 2.34E-04 µCi/sec. Alpha-emitting radionuclides were below LLD for the period. Also, 2.29E+01 curies of tritium were released with a maximum quarterly average release rate of 1.31E+00 µCi/sec.

### 1.2 Liquids Released to Illinois River

Measured concentrations and isotopic composition of radioactivity released in liquid effluents during the year are listed in Table 1.2-1.

A total of 8.45E+06 liters of radioactive liquid waste containing 3.13E-02 curies of fission and activation products (excluding tritium, noble gases and gross alpha) were discharged from the station. These wastes were released at a maximum quarterly diluted average concentration of 6.40E-08 µCi/ml from the station. During the same period, 1.10E+01 curies of tritium were released with a maximum quarterly average diluted concentration of 4.64E-05 µCi/ml. Alpha-emitting radionuclides were below LLD.

## 2.0 SOLID RADIOACTIVE WASTE

Solid radioactive wastes were shipped by truck to the Barnwell disposal facility, the Envirocare disposal facility or to waste processors. For more detail, refer the Dresden Station 2006 Annual Radioactive Effluent Release Report.

## 3.0 DOSE TO MAN

### 3.1 Gaseous Effluent Pathways

#### 3.1.1 Noble Gases

To demonstrate compliance with the applicable regulations regarding public radiation dose due to gaseous effluents from Dresden Stations, two methods are reported in the following sections. Both methods employ measured isotopic composition and release rates from the stations.

"Historical meteorological data" are used in ODCM required calculations performed at least every 31 days. These data use a ten-year average (1/1/1978-12/31/1987) for Dresden Station. Actual "concurrent meteorological data" are also used to calculate the quarterly release information using actual meteorological data for the period.

##### 3.1.1.1 Gamma Air and Total Body Dose

Offsite Gamma air and total body dose rates are shown in Table 3.1-1 and were calculated based on measured released rate, isotopic composition of the noble gases, and average meteorological data for the period. Doses based on concurrent meteorological data are shown in Table 3.4-1.

Based on measured effluents and historical meteorological data, the maximum total body dose (from all units) to an individual is calculated to be 7.54E-03 mrem for the year (Table 3.1-1) for the year, with an occupancy or shielding factor of 0.7 included. The maximum total body dose from all units based on measured effluents and concurrent meteorological data would be 5.57E-03 mrem (Table 3.4-1). The maximum gamma air dose based on measured effluents and historical meteorological data was 5.87E-03 mrad (Table 3.1-1) and 1.24E-02 mrad based on concurrent meteorological data (Table 3.4-1).

##### 3.1.1.2 Beta Air and Skin Dose

The range of beta particles in air is relatively small

(on the order of a few meters or less); consequently, plumes of gaseous effluents may be considered "infinite" for purpose of calculating the dose from beta radiation incident on the skin. However, the actual dose to sensitive skin tissues is difficult to calculate due to the effect of the beta particle energies, thickness of inert skin and clothing covering sensitive tissues. For purposes of this report the skin is assumed to have a thickness of 7.0 mg/cm$^2$ and an occupancy factor of 1.0 is used. The skin dose from beta and gamma radiation based on measured effluents and historical meteorological data for the year was 4.98E-03 mrem (Table 3.1-1) and 6.64E-03 mrem based on concurrent meteorological data (Table 3.4-1).

The maximum offsite beta air dose based on measured effluents and historical meteorological data for the year was 6.65E-04 mrad (Table 3.1-1) and 1.28E-03 mrad based on concurrent meteorological data (Table 3.4-1).

### 3.1.2 Radioactive Iodine

The human thyroid exhibits a significant capacity to concentrate ingested or inhaled iodine. The radioiodine, I-131, released during routine operation of the station, may be made available to man resulting in a dose to the thyroid. The principal pathway of interest for this radionuclide is ingestion of radioiodine in milk. Calculations made in previous years indicate that contributions to doses from inhalation of I-131 and I-133, and from ingestion of I-133 in milk are negligible.

#### 3.1.2.1 Dose to Thyroid

The hypothetical thyroid dose to the maximum exposed individual living near the station via ingestion of milk was calculated. The radionuclide considered was I-131 and the source of milk was taken to be the nearest dairy farm with the cows pastured from May through October. The maximum thyroid dose did not exceed 2.67E-02 mrem during the year (Table 3.1-1[child]).

## 3.2 Liquid Effluent Pathways

The three principal pathways for potential dose to man from liquid waste effluents are ingestion of potable water, ingesting aquatic foods, and exposure while on the shoreline. Not all of these pathways are applicable at a given time or station, but a reasonable approximation of the dose can be made by adjusting the dose formula for season of the year or type and degree of use of the aquatic environment. NRC developed equations* were used to calculate the doses to the whole body, lower GI tracts, thyroid, bone, and skin; specific parameters for use in the equations are given in the Dresden Station Offsite Dose Calculation Manual. The maximum whole body and organ dose for the year was 3.38E-04 mrem and 5.26E-04 mrem, respectively (adult, Table 3.2-1).

## 3.3 Assessment of Dose to Member of Public

During the period January to December, 2006, Dresden Station did not exceed the following limits as shown in Table 3.1-1 and Table 3.2-1 (based on historical meteorological data) and as shown in Table 3.4-1 (based on concurrent meteorological data), and

- The RETS limits on dose or dose commitment to a member of the public due to radioactive materials in liquid effluents from each reactor unit (1.5 mrem to the total body or 5 mrem to any organ during any calendar year; 3 mrem to the total body or 10 mrem to any organ during the calendar year).

- The RETS limits on air dose in noble gases released in gaseous effluents to a member of the public from each reactor unit (5 mrad for gamma radiation or 10 mrad for beta radiation during any calendar quarter; 10 mrad for gamma radiation or 20 mrad for beta radiation during a calendar year).

- The RETS limits on dose to a member of the public due to Iodine-131, Iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each reactor unit (7.5 mrem to any organ during any calendar quarter; 15 mrem to any organ during any calendar year).

- The 10CFR20 limit on Total Effective Dose Equivalent to individual members of the public (100 mrem) during any calendar year.

### 3.4 40CFR190 Compliance

Due to the proximity of Dresden Station to General Electric Morris Operations (GEMO), potential dose from that facility to a member of the public is considered when evaluating compliance with 40CFR190 requirements. The maximum calculated potential dose from the GEMO facility in 2006 was 4.25E-01 mrem. Combined with the maximum calculated potential dose from Dresden, the limits of 40CFR190 are not approached or exceeded by any individual in the general environment between the two facilities.

## 4.0 SITE METEOROLOGY

A summary of the site meteorological measurements taken during each calendar quarter of the year is given in Appendix G. The data are presented as cumulative joint frequency distributions of the wind direction for the 35' and 300' levels and wind speed class by atmospheric stability class determined from the temperature difference between the 150' and 35' and between the 300' and 35' levels, respectively. Data recovery for these measurements was 99.7% during 2006.

---

*Nuclear Regulatory Commission, Regulatory Guide 1.109 (Rev. 1)

Intentionally left blank

# APPENDIX F-1

# DATA TABLES AND FIGURES

## Table 1.1-1

### GASEOUS EFFLUENTS SUMMATION OF ALL GASEOUS RELEASES

DRESDEN NUCLEAR POWER STATION
January Through December 2006

DOCKET NUMBERS: 50-010/50-237/50-249

| | Units | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Est. Total Error, % |
|---|---|---|---|---|---|---|
| A. Fission & activation gases | | | | | | |
| 1. Total release | Ci | 8.35E+00 | 7.71E+00 | 6.59E+01 | 1.77E+02 | 1.24E+01 |
| 2. Average release rate for period | µCi/sec | 1.07E+00 | 9.81E-01 | 8.29E+00 | 2.23E+01 | |
| B. Iodines | | | | | | |
| 1. Total iodine-131 | Ci | 6.80E-05 | 1.15E-04 | 1.57E-04 | 1.64E-04 | 3.08E+01 |
| 2. Average release rate for period (I-131) | µCi/sec | 8.74E-06 | 1.46E-05 | 1.97E-05 | 2.06E-05 | |
| C. Particulates | | | | | | |
| 1. Particulates with half-lives > 8 days | Ci | 3.74E-04 | 2.04E-04 | 7.19E-04 | 1.86E-03 | 2.80E+01 |
| 2. Average release rate for period | µCi/sec | 4.81E-05 | 2.59E-05 | 9.04E-05 | 2.34E-04 | |
| 3. Gross alpha radioactivity | Ci | <LLD | <LLD | <LLD | <LLD | |
| D. Tritium | | | | | | |
| 1. Total release | Ci | 4.43E+00 | 4.91E+00 | 1.04E+01 | 3.16E+00 | 7.55E+00 |
| 2. Average release rate for period | µCi/sec | 5.70E-01 | 6.25E-01 | 1.31E+00 | 3.97E-01 | |

## Table 1.2-1

### LIQUID EFFLUENTS SUMMATION OF ALL LIQUID RELEASES

DRESDEN NUCLEAR POWER STATION
January Through December 2006

DOCKET NUMBERS: 50-010/50-237/50-249

| | Units | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Est. Total Error, % |
|---|---|---|---|---|---|---|
| A. Fission and activation products | | | | | | |
| 1. Total release (not including H-3, gases, alpha) | Ci | 2.42E-03 | 1.63E-03 | 1.92E-02 | 8.10E-03 | 1.83E+01 |
| 2. Average diluted concentration during period | µCi/ml | 2.38E-08 | 2.52E-09 | 6.40E-08 | 2.16E-08 | |
| B. Tritium | | | | | | |
| 1. Total release | Ci | 4.72E+00 | 2.96E+00 | 5.74E-01 | 2.78E+00 | 2.37E+00 |
| 2. Average diluted concentration during period | µCi/ml | 4.64E-05 | 4.57E-06 | 1.92E-06 | 7.44E-06 | |
| C. Dissolved and entrained gases | | | | | | |
| 1. Total release | Ci | <LLD | <LLD | <LLD | <LLD | 2.03E+01 |
| 2. Average diluted concentration during period | µCi/ml | <LLD | <LLD | <LLD | <LLD | |
| D. Gross alpha activity | | | | | | |
| 1. Total release | Ci | <LLD | <LLD | <LLD | <LLD | 2.00E+01 |
| E. Volume of waste released (prior to dilution) | Liters | 6.75E+05 | 3.91E+06 | 1.63E+06 | 2.23E+06 | 1.00E+00 |
| F. Volume of dilution water used during period | Liters | 1.01E+08 | 6.43E+08 | 2.98E+08 | 3.72E+08 | 5.00E+00 |

## Table 3.1-1

## MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

DRESDEN NUCLEAR POWER STATION
January Through December 2006

DOCKET NUMBERS: 50-010/50-237/50-249

1. Unit 1

| | Quarterly Limit | Maximum Doses from Airborne Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Gamma Air (mrad) | 5.0 mrad | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 10.0 mrad | 0.00E+00 (e) |
| Beta Air (mrad) | 10.0 mrad | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 20.0 mrad | 0.00E+00 (e) |
| Total Body (mrem) | 2.5 mrem | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 5.0 mrem | 0.00E+00 (e) |
| Skin (mrem) | 7.5 mrem | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 0.00E+00(e) | 15.0 mrem | 0.00E+00 (e) |
| Organ (mrem) | 7.5 mrem | 2.17E-06(c) | 6.17E-06(t) | 4.81E-06(c) | 7.84E-04(i,c) | 15.0 mrem | 7.94E-04 (c) |
| Critical Organ | | Lung | GI_LLI | GI_LLI | Liver (i) Bone (c) | | Liver |

2. Unit 2

| | Quarterly Limit | Maximum Doses from Airborne Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Gamma Air (mrad) | 5.0 mrad | 5.86E-05 (e) | 6.00E-05 (e) | 1.50E-03 (e) | 3.81E-03 (e) | 10.0 mrad | 5.43E-03 (e) |
| Beta Air (mrad) | 10.0 mrad | 3.67E-06 (e) | 3.68E-06 (e) | 1.02E-04 (e) | 5.34E-04 (e) | 20.0 mrad | 6.38E-04 (e) |
| Total Body (mrem) | 2.5 mrem | 4.42E-05 (e) | 4.53E-05 (e) | 1.78E-03 (e) | 5.36E-03 (e) | 5.0 mrem | 7.21E-03 (e) |
| Skin (mrem) | 7.5 mrem | 4.84E-05 (e) | 4.96E-05 (e) | 1.25E-03 (e) | 3.26E-03 (e) | 15.0 mrem | 4.61E-03 (e) |
| Organ (mrem) | 7.5 mrem | 4.79E-04 (a) | 3.94E-03 (c) | 8.32E-03 (c) | 1.52E-03 (c) | 15.0 mrem | 1.42E-02 (c) |
| Critical Organ | | GI_LLI | Thyroid | Thyroid | Thyroid | | Thyroid |

3. Unit 3

| | Quarterly Limit | Maximum Doses from Airborne Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Gamma Air (mrad) | 5.0 mrad | 1.14E-04 (e) | 1.08E-04 (e) | 1.08E-04 (e) | 1.12E-04 (e) | 10.0 mrad | 4.43E-04 (e) |
| Beta Air (mrad) | 10.0 mrad | 7.33E-06 (e) | 6.67E-06 (e) | 6.38E-06 (e) | 6.17E-06 (e) | 20.0 mrad | 2.66E-05 (e) |
| Total Body (mrem) | 2.5 mrem | 8.63E-05 (e) | 8.14E-05 (e) | 8.18E-05 (e) | 8.45E-05 (e) | 5.0 mrem | 3.34E-04 (e) |
| Skin (mrem) | 7.5 mrem | 9.45E-05 (e) | 8.90E-05 (e) | 8.92E-05 (e) | 9.20E-05 (e) | 15.0 mrem | 3.65E-04 (e) |
| Organ (mrem) | 7.5 mrem | 5.18E-04 (a) | 3.34E-03 (c) | 7.36E-03 (c) | 1.44E-03 (c) | 15.0 mrem | 1.25E-02 (c) |
| Critical Organ | | GI_LLI | Thyroid | Thyroid | Thyroid | | Thyroid |

* The doses reported include abnormal and unmonitored releases. These doses are the highest among the four analyzed receptors as described in parentheses [(i)=infant, (c)=child, (t)=teenager, (a)=adult, (e)=every receptor has the same value.

## Table 3.2-1

## MAXIMUM DOSES RESULTING FROM LIQUID EFFLUENTS

DRESDEN NUCLEAR POWER STATION
January Through December 2006

DOCKET NUMBERS: 50-010/50-237/50-249

1. Unit 1

| | Quarterly Limit | Maximum Doses from Liquid Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Total Body (mrem) | 1.5 mrem | None | None | None | None | 3.0 mrem | None |
| Organ (mrem) | 5.0 mrem | None | None | None | None | 10.0 mrem | None |
| Critical Organ | | None | None | None | None | | None |

2. Unit 2

| | Quarterly Limit | Maximum Doses from Liquid Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Total Body (mrem) | 1.5 mrem | 1.36E-05 (c) | 2.52E-05 (a) | 8.40E-05 (a) | 4.53E-05 (a) | 3.0 mrem | 1.66E-04 (a) |
| Organ (mrem) | 5.0 mrem | 1.97E-05 (a) | 3.60E-05 (c) | 1.30E-04 (t) | 8.29E-05 (a) | 10.0 mrem | 2.60E-04 (a) |
| Critical Organ | | GI_LLI | Liver | Liver | Liver | | Liver |

3. Unit 3

| | Quarterly Limit | Maximum Doses from Liquid Releases | | | | Yearly Limit | Annual Dose |
|---|---|---|---|---|---|---|---|
| | | 1st QTR | 2nd QTR | 3rd QTR | 4th QTR | | |
| Total Body (mrem) | 1.5 mrem | 1.45E-05 (c) | 2.52E-05 (a) | 8.40E-05 (a) | 5.03E-05 (a) | 3.0 mrem | 1.72E-04 (a) |
| Organ (mrem) | 5.0 mrem | 2.03E-05 (a) | 3.60E-05 (c) | 1.30E-04 (t) | 8.78E-05 (a) | 10.0 mrem | 2.66E-04 (a) |
| Critical Organ | | GI_LLI | Liver | Liver | Liver | | Liver |

* The doses reported include abnormal and unmonitored releases. These doses are the highest among the four analyzed receptors as described in parentheses [(i)=infant, (c)=child, (t)=teenager, (a)=adult, (e)=every receptor has the same value].

## Table 3.3-1

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT ONE

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

1. 10 CFR 20.1301 (a)(1) Compliance

| | | |
|---|---|---|
| Total Effective Dose Equivalent, mrem/yr | | 7.87E-04 |
| 10 CFR 20.1301 (a)(1) limit | mrem/yr | 100.0 |
| | % of limit | 0.00 |

Compliance Summary - 10CFR20

| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | % of Limit |
|---|---|---|---|---|---|
| TEDE | 2.14E-06 | 5.85E-06 | 4.43E-06 | 7.76E-04 | 0.00 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.3-1 (continued)

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT ONE

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

| | | Dose (mrem) | Limit (mrem) | % of Limit |
|---|---|---|---|---|
| Whole Body | Plume | 0.00E+00 | | |
| (DDE) | Skyshine | 0.00E+00 | | |
| | Ground | 7.77E-04 | | |
| | Total | 7.77E-04 | 25.0 | 0.00 |
| Organ Dose | Thyroid | 9.20E-06 | 75.0 | 0.00 |
| (CDE) | Gonads | 1.03E-05 | 25.0 | 0.00 |
| | Breast | 9.12E-06 | 25.0 | 0.00 |
| | Lung | 9.66E-06 | 25.0 | 0.00 |
| | Marrow | 9.66E-06 | 25.0 | 0.00 |
| | Bone | 9.22E-06 | 25.0 | 0.00 |
| | Remainder | 1.11E-05 | 25.0 | 0.00 |
| | CEDE | 1.01E-05 | | |
| | TEDE | 7.87E-04 | 100.0 | 0.00 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.3-1 (continued)

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT TWO

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

1. 10 CFR 20.1301 (a)(1) Compliance

| | | |
|---|---|---|
| Total Effective Dose Equivalent, mrem/yr | | 4.15E+00 |
| 10 CFR 20.1301 (a)(1) limit | mrem/yr | 100.0 |
| | % of limit | 4.15 |

Compliance Summary - 10CFR20

| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | % of Limit |
|---|---|---|---|---|---|
| TEDE | 1.07E+00 | 1.07E+00 | 1.06E+00 | 9.51E-01 | 4.15 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.3-1 (continued)

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT TWO

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

| | | Dose (mrem) | Limit (mrem) | % of Limit |
|---|---|---|---|---|
| Whole Body | Plume | 7.21E-03 | | |
| (DDE) | Skyshine | 4.14E+00 | | |
| | Ground | 5.96E-04 | | |
| | Total | 4.14E+00 | 25.0 | 16.57 |
| Organ Dose | Thyroid | 5.80E-03 | 75.0 | 0.01 |
| (CDE) | Gonads | 5.62E-03 | 25.0 | 0.02 |
| | Breast | 5.58E-03 | 25.0 | 0.02 |
| | Lung | 5.59E-03 | 25.0 | 0.02 |
| | Marrow | 5.60E-03 | 25.0 | 0.02 |
| | Bone | 5.60E-03 | 25.0 | 0.02 |
| | Remainder | 5.67E-03 | 25.0 | 0.02 |
| | CEDE | 5.63E-03 | | |
| | TEDE | 4.15E+00 | 100.0 | 4.15 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.3-1 (continued)

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT THREE

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

1. 10 CFR 20.1301 (a)(1) Compliance

| | | |
|---|---|---|
| Total Effective Dose Equivalent, mrem/yr | | 4.08E+00 |
| 10 CFR 20.1301 (a)(1) limit | mrem/yr | 100.0 |
| | % of limit | 4.08 |

Compliance Summary - 10CFR20

| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | % of Limit |
|---|---|---|---|---|---|
| TEDE | 1.07E+00 | 1.08E+00 | 1.09E+00 | 8.47E-01 | 4.08 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.3-1 (continued)

## 10 CFR 20 COMPLIANCE ASSESSMENT

DRESDEN STATION UNIT THREE

PERIOD OF ASSESSMENT 01/01/06 TO 12/31/06

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

| | | Dose (mrem) | Limit (mrem) | % of Limit |
|---|---|---|---|---|
| Whole Body | Plume | 3.34E-04 | | |
| (DDE) | Skyshine | 4.08E+00 | | |
| | Ground | 7.87E-04 | | |
| | Total | 4.08E+00 | 25.0 | 16.31 |
| Organ Dose | Thyroid | 5.17E-03 | 75.0 | 0.01 |
| (CDE) | Gonads | 5.02E-03 | 25.0 | 0.02 |
| | Breast | 4.99E-03 | 25.0 | 0.02 |
| | Lung | 5.00E-03 | 25.0 | 0.02 |
| | Marrow | 5.01E-03 | 25.0 | 0.02 |
| | Bone | 5.00E-03 | 25.0 | 0.02 |
| | Remainder | 5.08E-03 | 25.0 | 0.02 |
| | CEDE | 5.03E-03 | | |
| | TEDE | 4.08E+00 | 100.0 | 4.08 |

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

## Table 3.4-1

## MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES BASED ON CONCURRENT METEOROLOGICAL DATA

Dresden Station - Unit 1

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

2006

| TYPE OF DOSE | FIRST QUARTER | SECOND QUARTER | THIRD QUARTER | FOURTH QUARTER | ANNUAL |
|---|---|---|---|---|---|
| GAMMA AIR (mrad) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) |
| BETA AIR (mrad) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) | 0.000E+00( N ) |
| WHOLE BODY (mrem) | 1.383E-06(ESE) | 1.103e-06(ESE) | 5.750E-07(NNE) | 2.264E-04(SSE) | 2.288E-04(SSE) |
| SKIN (mrem) | 1.624E-06(ESE) | 1.297E-06(ESE) | 6.760E-07(NNE) | 2.645E-04(SSE) | 2.673E-04(SSE) |
| ORGAN (mrem) | 8.250E-08(SSE) | 1.219E-07(SSE) | 9.594E-08( N ) | 7.750E-06( N ) | 7.750E-06( N ) |
| CRITICAL PERSON | Teenager | Teenager | Teenager | Child | Child |
| CRITICAL ORGAN | Lung | Lung | Lung | Bone | Bone |

COMPLIANCE STATUS

| TYPE OF DOSE | 10 CFR 50 APP. I QUARTERLY OBJECTIVE | % OF APP. I | 10 CFR 50 APP.I YEARLY OBJECTIVE | % OF APP. I |
|---|---|---|---|---|
| GAMMA AIR (mrad) | 5.0 | 0.00 | 10.0 | 0.00 |
| BETA AIR (mrad) | 10.0 | 0.00 | 20.0 | 0.00 |
| WHOLE BODY (mrem) | 2.5 | 0.01 | 5.0 | 0.01 |
| SKIN (mrem) | 7.5 | 0.00 | 15.0 | 0.00 |
| ORGAN (mrem) | 7.5 | 0.00 | 15.0 | 0.00 |
| CRITICAL PERSON | | Child | | Child |
| CRITICAL ORGAN | | Bone | | Bone |

Calculation used release data from the following:
Unit 1 - Ground
Unit 1 - Vent
Unit 1 - Chimney

## Table 3.4-1 (continued)

# MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES BASED ON CONCURRENT METEOROLOGICAL DATA

Dresden Station - Unit 2

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

2006

| TYPE OF DOSE | FIRST QUARTER | SECOND QUARTER | THIRD QUARTER | FOURTH QUARTER | ANNUAL |
|---|---|---|---|---|---|
| GAMMA AIR (mrad) | 9.500E-05(SSE) | 1.100E-04(SSW) | 2.910E-03(NNW) | 8.503E-03(NNW) | 1.158E-02(NNW) |
| BETA AIR (mrad) | 1.360E-05(ESE) | 1.550E-05( SW) | 3.200E-04(WSW) | 9.255E-04( N ) | 1.190E-03( N ) |
| WHOLE BODY (mrem) | 9.029E-05(SSE) | 7.856E-05(SSE) | 1.272E-03(NNE) | 3.255E-03(SSE) | 4.636E-03(SSE) |
| SKIN (mrem) | 1.120E-04(SSE) | 9.715E-05(SSE) | 1.552E-03(NNE) | 3.965E-03(NNW) | 5.525E-03(SSE) |
| ORGAN (mrem) | 5.023E-05(SSE) | 2.099E-05(NNW) | 3.830E-05( N ) | 2.369E-05(NNW) | 1.075E-04(NNW) |
| CRITICAL PERSON | Teenager | Teenager | Teenager | Teenager | Teenager |
| CRITICAL ORGAN | Lung | Lung | Lung | Lung | Lung |

COMPLIANCE STATUS

| TYPE OF DOSE | 10 CFR 50 APP. I QUARTERLY OBJECTIVE | % OF APP. I | 10 CFR 50 APP.I YEARLY OBJECTIVE | % OF APP. I |
|---|---|---|---|---|
| GAMMA AIR (mrad) | 5.0 | 0.17 | 10.0 | 0.12 |
| BETA AIR (mrad) | 10.0 | 0.01 | 20.0 | 0.01 |
| WHOLE BODY (mrem) | 2.5 | 0.13 | 5.0 | 0.09 |
| SKIN (mrem) | 7.5 | 0.05 | 15.0 | 0.04 |
| ORGAN (mrem) | 7.5 | 0.00 | 15.0 | 0.00 |
| CRITICAL PERSON | | Teenager | | Teenager |
| CRITICAL ORGAN | | Lung | | Lung |

Calculation used release data from the following:
- Unit 2 - Ground
- Unit 2 - Vent
- Unit 2 - Chimney

## Table 3.4-1 (continued)

# MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES BASED ON CONCURRENT METEOROLOGICAL DATA

Dresden Station - Unit 3

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

2006

| TYPE OF DOSE | FIRST QUARTER | SECOND QUARTER | THIRD QUARTER | FOURTH QUARTER | ANNUAL |
|---|---|---|---|---|---|
| GAMMA AIR (mrad) | 1.890E-04(SSE) | 2.020E-04(SSW) | 2.530E-04(NNW) | 2.800E-04(NNW) | 8.580E-04(NNW) |
| BETA AIR (mrad) | 2.790E-05(ESE) | 2.930E-05( SW) | 3.270E-05(WSW) | 2.480E-05( N ) | 8.560E-05( N ) |
| WHOLE BODY (mrem) | 1.517E-04(SSE) | 1.222E-04(SSE) | 1.552E-04(NNE) | 3.408E-04( N ) | 7.041E-04(SSE) |
| SKIN (mrem) | 1.887E-04(SSE) | 1.533E-04(SSE) | 1.906E-04(NNE) | 4.156E-04( N ) | 8.527E-04(SSE) |
| ORGAN (mrem) | 5.264E-05(SSE) | 1.768E-05(SSE) | 3.417E-05( N ) | 4.043E-05(NNW) | 1.176E-04(NNW) |
| CRITICAL PERSON | Teenager | Teenager | Teenager | Teenager | Teenager |
| CRITICAL ORGAN | Lung | Thyroid | Lung | Lung | Lung |

COMPLIANCE STATUS

| TYPE OF DOSE | 10 CFR 50 APP. I QUARTERLY OBJECTIVE | % OF APP. I | 10 CFR 50 APP.I YEARLY OBJECTIVE | % OF APP. I |
|---|---|---|---|---|
| GAMMA AIR (mrad) | 5.0 | 0.01 | 10.0 | 0.01 |
| BETA AIR (mrad) | 10.0 | 0.00 | 20.0 | 0.00 |
| WHOLE BODY (mrem) | 2.5 | 0.01 | 5.0 | 0.01 |
| SKIN (mrem) | 7.5 | 0.01 | 15.0 | 0.01 |
| ORGAN (mrem) | 7.5 | 0.00 | 15.0 | 0.00 |
| CRITICAL PERSON | | Teenager | | Teenager |
| CRITICAL ORGAN | | Lung | | Lung |

Calculation used release data from the following:
- Unit 3 - Ground
- Unit 3 - Vent
- Unit 3 - Chimney

Data Recovery (priority parameters) 99.7%

# APPENDIX G

# METEOROLOGICAL DATA

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Extremely Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 12 | 17 | 1 | 0 | 0 | 30 |
| NNE | 0 | 10 | 7 | 3 | 0 | 0 | 20 |
| NE | 0 | 7 | 2 | 1 | 0 | 0 | 10 |
| ENE | 0 | 2 | 10 | 0 | 0 | 0 | 12 |
| E | 0 | 1 | 4 | 4 | 0 | 0 | 9 |
| ESE | 0 | 1 | 1 | 3 | 0 | 0 | 5 |
| SE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SSE | 0 | 0 | 0 | 13 | 2 | 0 | 15 |
| S | 0 | 0 | 5 | 3 | 0 | 0 | 8 |
| SSW | 0 | 0 | 1 | 4 | 2 | 1 | 8 |
| SW | 0 | 0 | 0 | 5 | 3 | 2 | 10 |
| WSW | 0 | 3 | 15 | 3 | 1 | 0 | 22 |
| W | 0 | 4 | 3 | 4 | 1 | 0 | 12 |
| WNW | 0 | 5 | 18 | 6 | 3 | 0 | 32 |
| NW | 0 | 3 | 20 | 2 | 0 | 0 | 25 |
| NNW | 0 | 13 | 17 | 3 | 0 | 0 | 33 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 61 | 120 | 57 | 12 | 3 | 253 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Moderately Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| NNE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| NE | 0 | 4 | 0 | 1 | 0 | 0 | 5 |
| ENE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| E | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSE | 0 | 0 | 3 | 4 | 1 | 0 | 8 |
| S | 0 | 0 | 3 | 2 | 0 | 0 | 5 |
| SSW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| WSW | 0 | 3 | 2 | 0 | 2 | 1 | 8 |
| W | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| WNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NW | 0 | 5 | 2 | 0 | 0 | 0 | 7 |
| NNW | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 24 | 20 | 12 | 3 | 1 | 60 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Slightly Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| NNE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ENE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| E | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SE | 0 | 1 | 0 | 3 | 0 | 0 | 4 |
| SSE | 0 | 1 | 2 | 3 | 1 | 0 | 7 |
| S | 0 | 1 | 4 | 3 | 0 | 0 | 8 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 6 | 5 | 0 | 2 | 0 | 13 |
| W | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| WNW | 0 | 2 | 3 | 2 | 0 | 0 | 7 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 20 | 25 | 14 | 3 | 0 | 62 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Neutral - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 4 | 26 | 10 | 0 | 0 | 0 | 40 |
| NNE | 1 | 20 | 12 | 0 | 0 | 0 | 33 |
| NE | 3 | 14 | 31 | 9 | 0 | 0 | 57 |
| ENE | 2 | 9 | 15 | 0 | 0 | 0 | 26 |
| E | 3 | 21 | 24 | 0 | 0 | 0 | 48 |
| ESE | 3 | 19 | 23 | 7 | 0 | 0 | 52 |
| SE | 1 | 7 | 13 | 6 | 0 | 0 | 27 |
| SSE | 0 | 1 | 15 | 11 | 4 | 0 | 31 |
| S | 1 | 5 | 12 | 15 | 3 | 0 | 36 |
| SSW | 1 | 3 | 10 | 14 | 1 | 0 | 29 |
| SW | 4 | 3 | 9 | 9 | 0 | 0 | 25 |
| WSW | 1 | 11 | 13 | 10 | 2 | 0 | 37 |
| W | 2 | 21 | 37 | 20 | 12 | 0 | 92 |
| WNW | 2 | 26 | 64 | 12 | 0 | 0 | 104 |
| NW | 4 | 22 | 50 | 11 | 0 | 0 | 87 |
| NNW | 1 | 20 | 42 | 5 | 0 | 0 | 68 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 33 | 228 | 380 | 129 | 22 | 0 | 792 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Slightly Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 10 | 23 | 6 | 0 | 0 | 0 | 39 |
| NNE | 14 | 15 | 3 | 0 | 0 | 0 | 32 |
| NE | 7 | 8 | 6 | 0 | 0 | 0 | 21 |
| ENE | 7 | 17 | 0 | 0 | 0 | 0 | 24 |
| E | 3 | 27 | 22 | 1 | 0 | 0 | 53 |
| ESE | 6 | 21 | 16 | 4 | 0 | 0 | 47 |
| SE | 0 | 10 | 24 | 4 | 0 | 0 | 38 |
| SSE | 2 | 27 | 36 | 16 | 1 | 0 | 82 |
| S | 7 | 19 | 41 | 7 | 1 | 0 | 75 |
| SSW | 5 | 15 | 19 | 8 | 1 | 0 | 48 |
| SW | 4 | 12 | 16 | 4 | 0 | 0 | 36 |
| WSW | 2 | 3 | 3 | 3 | 0 | 0 | 11 |
| W | 12 | 31 | 7 | 1 | 1 | 0 | 52 |
| WNW | 15 | 40 | 14 | 4 | 0 | 0 | 73 |
| NW | 22 | 46 | 11 | 1 | 0 | 0 | 80 |
| NNW | 14 | 30 | 17 | 12 | 0 | 0 | 73 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 130 | 344 | 241 | 65 | 4 | 0 | 784 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Moderately Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 6 | 4 | 0 | 0 | 0 | 0 | 10 |
| SE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SSE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| S | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| SSW | 7 | 9 | 2 | 0 | 0 | 0 | 18 |
| SW | 7 | 18 | 1 | 0 | 0 | 0 | 26 |
| WSW | 6 | 9 | 1 | 0 | 0 | 0 | 16 |
| W | 7 | 2 | 0 | 0 | 0 | 0 | 9 |
| WNW | 4 | 3 | 0 | 0 | 0 | 0 | 7 |
| NW | 7 | 1 | 0 | 0 | 0 | 0 | 8 |
| NNW | 4 | 7 | 0 | 0 | 0 | 0 | 11 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 63 | 55 | 4 | 0 | 0 | 0 | 122 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Extremely Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SW | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| W | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| WNW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNW | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 18 | 0 | 0 | 0 | 0 | 26 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Extremely Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 4 | 4 | 0 | 0 | 8 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 1 | 1 | 3 | 5 |
| WSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| W | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| WNW | 0 | 0 | 1 | 3 | 2 | 3 | 9 |
| NW | 0 | 0 | 1 | 5 | 0 | 0 | 6 |
| NNW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 9 | 17 | 6 | 8 | 40 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Moderately Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 2 | 1 | 1 | 1 | 0 | 5 |
| NNE | 0 | 1 | 3 | 3 | 1 | 0 | 8 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| E | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| ESE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| S | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSW | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| SW | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| WSW | 0 | 0 | 3 | 1 | 1 | 0 | 5 |
| W | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| WNW | 0 | 0 | 4 | 4 | 3 | 0 | 11 |
| NW | 0 | 1 | 1 | 5 | 2 | 0 | 9 |
| NNW | 0 | 0 | 7 | 3 | 2 | 0 | 12 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 5 | 23 | 22 | 13 | 4 | 67 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Slightly Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 2 | 5 | 6 | 1 | 0 | 14 |
| NNE | 0 | 3 | 4 | 0 | 3 | 0 | 10 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 5 | 3 | 1 | 0 | 9 |
| E | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| ESE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SE | 0 | 1 | 0 | 3 | 1 | 0 | 5 |
| SSE | 0 | 0 | 0 | 4 | 3 | 1 | 8 |
| S | 0 | 0 | 3 | 1 | 4 | 0 | 8 |
| SSW | 0 | 0 | 0 | 2 | 3 | 2 | 7 |
| SW | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| WSW | 0 | 1 | 7 | 2 | 1 | 0 | 11 |
| W | 0 | 0 | 3 | 2 | 2 | 0 | 7 |
| WNW | 0 | 0 | 4 | 5 | 2 | 1 | 12 |
| NW | 0 | 0 | 2 | 6 | 0 | 0 | 8 |
| NNW | 0 | 0 | 3 | 4 | 0 | 1 | 8 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 9 | 37 | 41 | 24 | 6 | 117 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Neutral - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 5 | 25 | 30 | 6 | 0 | 67 |
| NNE | 0 | 5 | 24 | 25 | 6 | 0 | 60 |
| NE | 0 | 8 | 17 | 30 | 14 | 0 | 69 |
| ENE | 1 | 2 | 30 | 20 | 6 | 0 | 59 |
| E | 0 | 8 | 22 | 24 | 10 | 0 | 64 |
| ESE | 0 | 5 | 9 | 14 | 18 | 1 | 47 |
| SE | 0 | 2 | 19 | 11 | 15 | 0 | 47 |
| SSE | 0 | 1 | 11 | 23 | 16 | 6 | 57 |
| S | 0 | 2 | 12 | 21 | 26 | 5 | 66 |
| SSW | 1 | 4 | 5 | 9 | 12 | 3 | 34 |
| SW | 1 | 3 | 4 | 8 | 20 | 2 | 38 |
| WSW | 0 | 7 | 23 | 10 | 8 | 13 | 61 |
| W | 1 | 7 | 22 | 25 | 23 | 24 | 102 |
| WNW | 1 | 3 | 29 | 55 | 40 | 13 | 141 |
| NW | 1 | 4 | 25 | 53 | 30 | 4 | 117 |
| NNW | 1 | 9 | 20 | 43 | 29 | 14 | 116 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 75 | 297 | 401 | 279 | 85 | 1145 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 22
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Slightly Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 4 | 9 | 12 | 6 | 0 | 31 |
| NNE | 0 | 3 | 25 | 11 | 1 | 0 | 40 |
| NE | 1 | 8 | 4 | 2 | 0 | 0 | 15 |
| ENE | 1 | 7 | 6 | 0 | 0 | 0 | 14 |
| E | 1 | 2 | 8 | 16 | 2 | 0 | 29 |
| ESE | 2 | 1 | 7 | 14 | 10 | 0 | 34 |
| SE | 2 | 8 | 13 | 27 | 4 | 0 | 54 |
| SSE | 3 | 6 | 8 | 18 | 16 | 8 | 59 |
| S | 0 | 3 | 3 | 38 | 18 | 5 | 67 |
| SSW | 0 | 2 | 4 | 26 | 18 | 6 | 56 |
| SW | 1 | 1 | 5 | 27 | 8 | 1 | 43 |
| WSW | 0 | 3 | 7 | 4 | 5 | 2 | 21 |
| W | 0 | 1 | 11 | 19 | 1 | 0 | 32 |
| WNW | 3 | 2 | 8 | 19 | 5 | 0 | 37 |
| NW | 2 | 1 | 19 | 32 | 4 | 0 | 58 |
| NNW | 1 | 2 | 18 | 14 | 4 | 0 | 39 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17 | 54 | 155 | 279 | 102 | 22 | 629 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 6
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Moderately Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 0 | 4 | 6 | 0 | 0 | 11 |
| NNE | 0 | 2 | 4 | 4 | 0 | 0 | 10 |
| NE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ENE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| SE | 1 | 1 | 0 | 2 | 0 | 0 | 4 |
| SSE | 0 | 2 | 5 | 2 | 0 | 0 | 9 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SW | 2 | 2 | 0 | 2 | 1 | 0 | 7 |
| WSW | 0 | 0 | 4 | 13 | 0 | 0 | 17 |
| W | 0 | 1 | 2 | 13 | 0 | 0 | 16 |
| WNW | 0 | 6 | 4 | 1 | 1 | 0 | 12 |
| NW | 0 | 2 | 5 | 5 | 0 | 0 | 12 |
| NNW | 0 | 1 | 2 | 3 | 0 | 0 | 6 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 20 | 35 | 54 | 2 | 0 | 116 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: January - March 2006
Stability Class - Extremely Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WSW | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 1 | 3 | 7 | 1 | 0 | 12 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Extremely Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 4 | 30 | 2 | 0 | 0 | 0 | 36 |
| NNE | 3 | 26 | 9 | 2 | 0 | 0 | 40 |
| NE | 3 | 47 | 16 | 3 | 0 | 0 | 69 |
| ENE | 0 | 26 | 7 | 0 | 0 | 0 | 33 |
| E | 0 | 6 | 10 | 2 | 0 | 0 | 18 |
| ESE | 0 | 0 | 5 | 8 | 0 | 0 | 13 |
| SE | 0 | 6 | 7 | 5 | 0 | 0 | 18 |
| SSE | 0 | 13 | 1 | 4 | 0 | 0 | 18 |
| S | 1 | 4 | 19 | 9 | 2 | 0 | 35 |
| SSW | 1 | 3 | 17 | 8 | 0 | 0 | 29 |
| SW | 1 | 3 | 8 | 2 | 0 | 0 | 14 |
| WSW | 1 | 7 | 16 | 2 | 0 | 0 | 26 |
| W | 0 | 8 | 6 | 8 | 0 | 0 | 22 |
| WNW | 1 | 10 | 31 | 15 | 0 | 0 | 57 |
| NW | 1 | 17 | 18 | 4 | 0 | 0 | 40 |
| NNW | 1 | 29 | 7 | 0 | 0 | 0 | 37 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17 | 235 | 179 | 72 | 2 | 0 | 505 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Moderately Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| NNE | 2 | 0 | 1 | 0 | 0 | 0 | 3 |
| NE | 2 | 8 | 2 | 0 | 0 | 0 | 12 |
| ENE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| E | 0 | 5 | 1 | 0 | 0 | 0 | 6 |
| ESE | 1 | 1 | 5 | 0 | 0 | 0 | 7 |
| SE | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| SSE | 1 | 6 | 1 | 2 | 0 | 0 | 10 |
| S | 3 | 2 | 0 | 5 | 0 | 0 | 10 |
| SSW | 1 | 1 | 3 | 0 | 0 | 0 | 5 |
| SW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| WSW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| W | 1 | 1 | 4 | 0 | 0 | 0 | 6 |
| WNW | 0 | 4 | 5 | 1 | 0 | 0 | 10 |
| NW | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| NNW | 2 | 1 | 2 | 0 | 0 | 0 | 5 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 18 | 36 | 33 | 9 | 0 | 0 | 96 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Slightly Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NNE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NE | 1 | 7 | 1 | 0 | 0 | 0 | 9 |
| ENE | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| E | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| ESE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SE | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| SSE | 0 | 1 | 2 | 2 | 0 | 0 | 5 |
| S | 1 | 3 | 3 | 0 | 0 | 0 | 7 |
| SSW | 0 | 1 | 5 | 1 | 0 | 0 | 7 |
| SW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| WSW | 0 | 5 | 2 | 2 | 0 | 0 | 9 |
| W | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| WNW | 0 | 6 | 0 | 1 | 0 | 0 | 7 |
| NW | 1 | 3 | 2 | 2 | 0 | 0 | 8 |
| NNW | 4 | 1 | 0 | 0 | 0 | 0 | 5 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 10 | 36 | 23 | 9 | 0 | 0 | 78 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Neutral - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 8 | 1 | 0 | 0 | 0 | 11 |
| NNE | 3 | 14 | 14 | 7 | 0 | 0 | 38 |
| NE | 7 | 50 | 30 | 4 | 0 | 0 | 91 |
| ENE | 3 | 27 | 8 | 1 | 0 | 0 | 39 |
| E | 3 | 14 | 22 | 16 | 0 | 0 | 55 |
| ESE | 2 | 4 | 19 | 24 | 9 | 0 | 58 |
| SE | 0 | 7 | 12 | 12 | 9 | 2 | 42 |
| SSE | 3 | 8 | 22 | 12 | 2 | 0 | 47 |
| S | 3 | 6 | 18 | 13 | 6 | 0 | 46 |
| SSW | 2 | 3 | 14 | 3 | 0 | 0 | 22 |
| SW | 5 | 4 | 10 | 4 | 0 | 0 | 23 |
| WSW | 6 | 14 | 6 | 0 | 0 | 0 | 26 |
| W | 2 | 25 | 13 | 7 | 0 | 0 | 47 |
| WNW | 6 | 16 | 24 | 10 | 0 | 0 | 56 |
| NW | 4 | 10 | 11 | 8 | 0 | 0 | 33 |
| NNW | 9 | 10 | 0 | 0 | 1 | 0 | 20 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 60 | 220 | 224 | 121 | 27 | 2 | 654 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Slightly Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 24 | 4 | 0 | 0 | 0 | 0 | 28 |
| NNE | 20 | 7 | 0 | 1 | 0 | 0 | 28 |
| NE | 14 | 21 | 2 | 0 | 0 | 0 | 37 |
| ENE | 3 | 21 | 1 | 0 | 0 | 0 | 25 |
| E | 7 | 21 | 11 | 0 | 0 | 0 | 39 |
| ESE | 3 | 9 | 10 | 1 | 0 | 0 | 23 |
| SE | 4 | 11 | 10 | 3 | 0 | 0 | 28 |
| SSE | 1 | 31 | 20 | 2 | 0 | 0 | 54 |
| S | 10 | 28 | 23 | 3 | 1 | 0 | 65 |
| SSW | 8 | 16 | 3 | 7 | 0 | 0 | 34 |
| SW | 10 | 13 | 3 | 2 | 0 | 0 | 28 |
| WSW | 4 | 6 | 1 | 0 | 0 | 0 | 11 |
| W | 9 | 25 | 0 | 0 | 0 | 0 | 34 |
| WNW | 10 | 21 | 9 | 0 | 0 | 0 | 40 |
| NW | 19 | 20 | 6 | 0 | 0 | 0 | 45 |
| NNW | 15 | 14 | 0 | 0 | 0 | 0 | 29 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 161 | 268 | 99 | 19 | 1 | 0 | 548 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Moderately Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 8 | 2 | 0 | 0 | 0 | 0 | 10 |
| NNE | 7 | 1 | 0 | 0 | 0 | 0 | 8 |
| NE | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| ESE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SE | 3 | 8 | 4 | 0 | 0 | 0 | 15 |
| SSE | 4 | 6 | 1 | 0 | 0 | 0 | 11 |
| S | 5 | 10 | 0 | 0 | 0 | 0 | 15 |
| SSW | 10 | 5 | 0 | 0 | 0 | 0 | 15 |
| SW | 9 | 14 | 0 | 0 | 0 | 0 | 23 |
| WSW | 11 | 9 | 0 | 0 | 0 | 0 | 20 |
| W | 8 | 7 | 0 | 0 | 0 | 0 | 15 |
| WNW | 7 | 2 | 0 | 0 | 0 | 0 | 9 |
| NW | 27 | 5 | 0 | 0 | 0 | 0 | 32 |
| NNW | 23 | 2 | 0 | 0 | 0 | 0 | 25 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 126 | 75 | 5 | 0 | 0 | 0 | 206 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Extremely Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSW | 5 | 2 | 0 | 0 | 0 | 0 | 7 |
| SW | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| WSW | 6 | 3 | 0 | 0 | 0 | 0 | 9 |
| W | 4 | 2 | 0 | 0 | 0 | 0 | 6 |
| WNW | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| NW | 7 | 1 | 0 | 0 | 0 | 0 | 8 |
| NNW | 9 | 0 | 0 | 0 | 0 | 0 | 9 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 47 | 14 | 0 | 0 | 0 | 0 | 61 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Extremely Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 4 | 3 | 0 | 0 | 7 |
| NNE | 0 | 2 | 3 | 4 | 1 | 0 | 10 |
| NE | 0 | 1 | 2 | 1 | 1 | 0 | 5 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 1 | 6 | 3 | 10 |
| NW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| NNW | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 3 | 15 | 14 | 9 | 3 | 44 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Moderately Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 2 | 4 | 3 | 0 | 0 | 9 |
| NNE | 0 | 2 | 9 | 3 | 1 | 2 | 17 |
| NE | 0 | 3 | 6 | 5 | 1 | 0 | 15 |
| ENE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| E | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 2 | 3 | 0 | 5 |
| SE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 1 | 2 | 0 | 3 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| W | 0 | 1 | 0 | 0 | 2 | 0 | 3 |
| WNW | 0 | 0 | 1 | 10 | 5 | 0 | 16 |
| NW | 0 | 0 | 2 | 4 | 1 | 2 | 9 |
| NNW | 0 | 2 | 0 | 3 | 0 | 0 | 5 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 12 | 29 | 34 | 15 | 4 | 94 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Slightly Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 4 | 7 | 1 | 0 | 0 | 12 |
| NNE | 0 | 4 | 4 | 3 | 1 | 0 | 12 |
| NE | 0 | 4 | 7 | 5 | 0 | 0 | 16 |
| ENE | 0 | 2 | 8 | 1 | 0 | 0 | 11 |
| E | 0 | 1 | 4 | 2 | 0 | 0 | 7 |
| ESE | 0 | 0 | 0 | 3 | 1 | 1 | 5 |
| SE | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| SSE | 0 | 3 | 0 | 2 | 0 | 0 | 5 |
| S | 1 | 0 | 1 | 3 | 2 | 2 | 9 |
| SSW | 0 | 1 | 1 | 5 | 1 | 0 | 8 |
| SW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| WSW | 0 | 0 | 4 | 2 | 3 | 0 | 9 |
| W | 0 | 0 | 0 | 3 | 3 | 0 | 6 |
| WNW | 0 | 0 | 3 | 7 | 1 | 0 | 11 |
| NW | 0 | 0 | 3 | 6 | 2 | 0 | 11 |
| NNW | 0 | 3 | 4 | 5 | 1 | 0 | 13 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 24 | 50 | 49 | 16 | 3 | 143 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Neutral - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 11 | 9 | 5 | 1 | 0 | 26 |
| NNE | 2 | 10 | 16 | 22 | 10 | 8 | 68 |
| NE | 1 | 12 | 39 | 44 | 11 | 4 | 111 |
| ENE | 0 | 18 | 34 | 9 | 2 | 1 | 64 |
| E | 2 | 9 | 27 | 10 | 6 | 7 | 61 |
| ESE | 0 | 4 | 3 | 15 | 24 | 13 | 59 |
| SE | 2 | 3 | 8 | 20 | 10 | 13 | 56 |
| SSE | 0 | 12 | 12 | 20 | 11 | 4 | 59 |
| S | 3 | 6 | 17 | 27 | 14 | 7 | 74 |
| SSW | 4 | 5 | 12 | 27 | 5 | 0 | 53 |
| SW | 2 | 6 | 2 | 14 | 9 | 2 | 35 |
| WSW | 3 | 6 | 20 | 11 | 2 | 1 | 43 |
| W | 0 | 8 | 23 | 13 | 5 | 5 | 54 |
| WNW | 1 | 11 | 21 | 23 | 27 | 10 | 93 |
| NW | 6 | 10 | 13 | 21 | 9 | 7 | 66 |
| NNW | 0 | 16 | 8 | 8 | 3 | 2 | 37 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 26 | 147 | 264 | 289 | 149 | 84 | 959 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 4
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Slightly Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 6 | 9 | 4 | 0 | 0 | 21 |
| NNE | 1 | 8 | 24 | 8 | 1 | 0 | 42 |
| NE | 2 | 11 | 21 | 10 | 1 | 0 | 45 |
| ENE | 0 | 11 | 14 | 0 | 0 | 0 | 25 |
| E | 3 | 2 | 19 | 10 | 7 | 2 | 43 |
| ESE | 0 | 5 | 7 | 14 | 8 | 2 | 36 |
| SE | 1 | 3 | 7 | 12 | 5 | 1 | 29 |
| SSE | 1 | 3 | 12 | 21 | 9 | 1 | 47 |
| S | 2 | 4 | 11 | 40 | 34 | 10 | 101 |
| SSW | 2 | 5 | 7 | 20 | 4 | 8 | 46 |
| SW | 0 | 2 | 12 | 8 | 4 | 2 | 28 |
| WSW | 3 | 6 | 9 | 8 | 1 | 0 | 27 |
| W | 1 | 4 | 14 | 20 | 0 | 0 | 39 |
| WNW | 0 | 4 | 14 | 20 | 8 | 0 | 46 |
| NW | 0 | 0 | 12 | 26 | 5 | 0 | 43 |
| NNW | 0 | 4 | 14 | 17 | 0 | 0 | 35 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 18 | 78 | 206 | 238 | 87 | 26 | 653 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 3
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Moderately Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 3 | 7 | 6 | 0 | 0 | 17 |
| NNE | 2 | 4 | 7 | 8 | 2 | 0 | 23 |
| NE | 1 | 2 | 1 | 1 | 0 | 0 | 5 |
| ENE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| E | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| ESE | 2 | 1 | 4 | 1 | 0 | 0 | 8 |
| SE | 0 | 5 | 6 | 11 | 1 | 0 | 23 |
| SSE | 1 | 2 | 6 | 8 | 1 | 0 | 18 |
| S | 0 | 1 | 2 | 8 | 4 | 0 | 15 |
| SSW | 0 | 0 | 0 | 4 | 1 | 0 | 5 |
| SW | 2 | 1 | 2 | 15 | 2 | 0 | 22 |
| WSW | 2 | 1 | 6 | 9 | 0 | 0 | 18 |
| W | 1 | 4 | 5 | 6 | 0 | 0 | 16 |
| WNW | 1 | 1 | 5 | 4 | 3 | 0 | 14 |
| NW | 1 | 2 | 7 | 10 | 0 | 0 | 20 |
| NNW | 2 | 4 | 11 | 14 | 0 | 0 | 31 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 16 | 34 | 72 | 106 | 14 | 0 | 242 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 2
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: April - June 2006
Stability Class - Extremely Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| NNE | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSW | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| SW | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| WSW | 1 | 0 | 2 | 3 | 0 | 0 | 6 |
| W | 1 | 0 | 2 | 0 | 0 | 0 | 3 |
| WNW | 1 | 2 | 0 | 3 | 0 | 0 | 6 |
| NW | 0 | 2 | 0 | 3 | 0 | 0 | 5 |
| NNW | 0 | 0 | 2 | 2 | 1 | 0 | 5 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 6 | 12 | 16 | 1 | 0 | 39 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Extremely Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 9 | 3 | 0 | 0 | 0 | 12 |
| NNE | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| NE | 0 | 26 | 18 | 0 | 0 | 0 | 44 |
| ENE | 0 | 17 | 5 | 0 | 0 | 0 | 22 |
| E | 0 | 7 | 1 | 0 | 0 | 0 | 8 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 3 | 1 | 1 | 0 | 0 | 5 |
| S | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| SSW | 0 | 0 | 6 | 2 | 0 | 0 | 8 |
| SW | 0 | 0 | 9 | 6 | 0 | 0 | 15 |
| WSW | 0 | 1 | 7 | 0 | 0 | 0 | 8 |
| W | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| WNW | 0 | 4 | 5 | 0 | 0 | 0 | 9 |
| NW | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| NNW | 0 | 13 | 2 | 0 | 0 | 0 | 15 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 101 | 59 | 10 | 0 | 0 | 170 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Moderately Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| ENE | 0 | 5 | 2 | 0 | 0 | 0 | 7 |
| E | 1 | 3 | 1 | 0 | 0 | 0 | 5 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 2 | 0 | 1 | 1 | 0 | 0 | 4 |
| S | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| SSW | 0 | 1 | 5 | 2 | 0 | 0 | 8 |
| SW | 0 | 0 | 3 | 4 | 0 | 0 | 7 |
| WSW | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| W | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| WNW | 1 | 5 | 0 | 0 | 0 | 0 | 6 |
| NW | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| NNW | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 34 | 19 | 8 | 0 | 0 | 66 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Slightly Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 3 | 6 | 0 | 0 | 0 | 0 | 9 |
| NNE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 7 | 2 | 0 | 0 | 0 | 9 |
| ENE | 1 | 9 | 1 | 0 | 0 | 0 | 11 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| SE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SSE | 1 | 5 | 2 | 1 | 0 | 0 | 9 |
| S | 0 | 3 | 5 | 1 | 0 | 0 | 9 |
| SSW | 0 | 4 | 11 | 2 | 0 | 0 | 17 |
| SW | 0 | 2 | 5 | 1 | 0 | 0 | 8 |
| WSW | 0 | 6 | 4 | 0 | 0 | 0 | 10 |
| W | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| WNW | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| NW | 0 | 5 | 1 | 0 | 0 | 0 | 6 |
| NNW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 6 | 65 | 33 | 5 | 0 | 0 | 109 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Neutral - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 4 | 3 | 0 | 0 | 0 | 0 | 7 |
| NNE | 4 | 13 | 0 | 0 | 0 | 0 | 17 |
| NE | 2 | 30 | 17 | 0 | 0 | 0 | 49 |
| ENE | 6 | 27 | 9 | 0 | 0 | 0 | 42 |
| E | 2 | 32 | 8 | 0 | 0 | 0 | 42 |
| ESE | 4 | 11 | 11 | 0 | 0 | 0 | 26 |
| SE | 2 | 10 | 11 | 3 | 0 | 0 | 26 |
| SSE | 3 | 20 | 18 | 8 | 0 | 0 | 49 |
| S | 7 | 38 | 15 | 1 | 0 | 0 | 61 |
| SSW | 2 | 20 | 20 | 4 | 0 | 0 | 46 |
| SW | 3 | 21 | 22 | 8 | 0 | 0 | 54 |
| WSW | 1 | 31 | 8 | 1 | 0 | 0 | 41 |
| W | 4 | 29 | 13 | 1 | 0 | 0 | 47 |
| WNW | 2 | 24 | 12 | 0 | 0 | 0 | 38 |
| NW | 5 | 10 | 2 | 0 | 0 | 0 | 17 |
| NNW | 10 | 24 | 2 | 0 | 0 | 0 | 36 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 61 | 343 | 168 | 26 | 0 | 0 | 598 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Slightly Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 30 | 10 | 2 | 0 | 0 | 0 | 42 |
| NNE | 14 | 8 | 0 | 0 | 0 | 0 | 22 |
| NE | 20 | 76 | 5 | 0 | 0 | 0 | 101 |
| ENE | 9 | 44 | 1 | 0 | 0 | 0 | 54 |
| E | 14 | 42 | 3 | 0 | 0 | 0 | 59 |
| ESE | 9 | 26 | 7 | 2 | 0 | 0 | 44 |
| SE | 9 | 20 | 12 | 5 | 0 | 0 | 46 |
| SSE | 17 | 58 | 17 | 0 | 0 | 0 | 92 |
| S | 20 | 52 | 24 | 1 | 0 | 0 | 97 |
| SSW | 22 | 49 | 23 | 4 | 0 | 0 | 98 |
| SW | 13 | 37 | 10 | 1 | 0 | 0 | 61 |
| WSW | 3 | 18 | 8 | 0 | 0 | 0 | 29 |
| W | 8 | 22 | 8 | 0 | 0 | 0 | 38 |
| WNW | 10 | 29 | 6 | 0 | 0 | 0 | 45 |
| NW | 18 | 15 | 0 | 0 | 0 | 0 | 33 |
| NNW | 20 | 19 | 0 | 0 | 0 | 0 | 39 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 236 | 525 | 126 | 13 | 0 | 0 | 900 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Moderately Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| NNE | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 3 | 4 | 0 | 0 | 0 | 0 | 7 |
| E | 8 | 11 | 1 | 0 | 0 | 0 | 20 |
| ESE | 7 | 18 | 0 | 0 | 0 | 0 | 25 |
| SE | 13 | 4 | 2 | 0 | 0 | 0 | 19 |
| SSE | 9 | 5 | 0 | 0 | 0 | 0 | 14 |
| S | 7 | 11 | 1 | 0 | 0 | 0 | 19 |
| SSW | 8 | 7 | 0 | 0 | 0 | 0 | 15 |
| SW | 20 | 28 | 0 | 0 | 0 | 0 | 48 |
| WSW | 7 | 4 | 0 | 0 | 0 | 0 | 11 |
| W | 14 | 2 | 0 | 0 | 0 | 0 | 16 |
| WNW | 12 | 1 | 0 | 0 | 0 | 0 | 13 |
| NW | 10 | 0 | 0 | 0 | 0 | 0 | 10 |
| NNW | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 146 | 96 | 4 | 0 | 0 | 0 | 246 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Extremely Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NNE | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| SE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SSE | 6 | 1 | 0 | 0 | 0 | 0 | 7 |
| S | 9 | 1 | 0 | 0 | 0 | 0 | 10 |
| SSW | 8 | 1 | 0 | 0 | 0 | 0 | 9 |
| SW | 20 | 3 | 0 | 0 | 0 | 0 | 23 |
| WSW | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| W | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| WNW | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| NW | 9 | 0 | 0 | 0 | 0 | 0 | 9 |
| NNW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 84 | 7 | 0 | 0 | 0 | 0 | 91 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Extremely Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| ENE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 4 | 4 | 3 | 0 | 0 | 11 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Moderately Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| NNE | 0 | 0 | 1 | 4 | 0 | 0 | 5 |
| NE | 0 | 2 | 3 | 9 | 0 | 0 | 14 |
| ENE | 0 | 1 | 5 | 1 | 0 | 0 | 7 |
| E | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| S | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 5 | 17 | 22 | 2 | 0 | 46 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Slightly Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 0 | 2 | 0 | 0 | 0 | 3 |
| NNE | 0 | 2 | 7 | 2 | 0 | 0 | 11 |
| NE | 0 | 3 | 13 | 6 | 0 | 0 | 22 |
| ENE | 0 | 2 | 7 | 0 | 0 | 0 | 9 |
| E | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| ESE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 2 | 1 | 2 | 1 | 0 | 6 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 2 | 3 | 0 | 0 | 5 |
| SW | 0 | 0 | 3 | 5 | 1 | 0 | 9 |
| WSW | 0 | 3 | 3 | 2 | 0 | 0 | 8 |
| W | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| WNW | 0 | 0 | 7 | 5 | 0 | 0 | 12 |
| NW | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| NNW | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 16 | 55 | 30 | 2 | 0 | 104 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Neutral - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 8 | 16 | 9 | 1 | 1 | 36 |
| NNE | 0 | 4 | 17 | 11 | 5 | 0 | 37 |
| NE | 5 | 11 | 32 | 18 | 4 | 0 | 70 |
| ENE | 2 | 32 | 64 | 4 | 0 | 0 | 102 |
| E | 2 | 11 | 35 | 9 | 0 | 0 | 57 |
| ESE | 1 | 13 | 10 | 5 | 1 | 0 | 30 |
| SE | 1 | 6 | 11 | 10 | 6 | 1 | 35 |
| SSE | 2 | 24 | 23 | 19 | 7 | 1 | 76 |
| S | 2 | 28 | 28 | 14 | 3 | 1 | 76 |
| SSW | 2 | 17 | 28 | 31 | 9 | 0 | 87 |
| SW | 3 | 14 | 22 | 30 | 11 | 3 | 83 |
| WSW | 0 | 22 | 14 | 9 | 1 | 0 | 46 |
| W | 2 | 15 | 17 | 15 | 5 | 0 | 54 |
| WNW | 0 | 11 | 27 | 17 | 3 | 0 | 58 |
| NW | 2 | 13 | 13 | 6 | 2 | 0 | 36 |
| NNW | 3 | 19 | 13 | 20 | 0 | 0 | 55 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 28 | 248 | 370 | 227 | 58 | 7 | 938 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Slightly Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 3 | 11 | 6 | 0 | 0 | 21 |
| NNE | 0 | 2 | 15 | 17 | 3 | 0 | 37 |
| NE | 1 | 10 | 22 | 19 | 1 | 0 | 53 |
| ENE | 1 | 17 | 25 | 1 | 1 | 0 | 45 |
| E | 5 | 5 | 8 | 16 | 0 | 0 | 34 |
| ESE | 2 | 15 | 13 | 8 | 3 | 0 | 41 |
| SE | 1 | 12 | 27 | 25 | 3 | 1 | 69 |
| SSE | 1 | 12 | 24 | 19 | 6 | 0 | 62 |
| S | 2 | 9 | 25 | 43 | 9 | 0 | 88 |
| SSW | 1 | 6 | 33 | 40 | 18 | 1 | 99 |
| SW | 1 | 6 | 26 | 34 | 11 | 1 | 79 |
| WSW | 0 | 4 | 15 | 18 | 1 | 0 | 38 |
| W | 2 | 5 | 9 | 13 | 2 | 0 | 31 |
| WNW | 1 | 6 | 13 | 12 | 3 | 0 | 35 |
| NW | 0 | 4 | 7 | 9 | 0 | 0 | 20 |
| NNW | 0 | 4 | 18 | 13 | 1 | 0 | 36 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 19 | 120 | 291 | 293 | 62 | 3 | 788 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Moderately Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 1 | 5 | 2 | 0 | 0 | 8 |
| NNE | 1 | 4 | 3 | 5 | 0 | 0 | 13 |
| NE | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| ENE | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| E | 2 | 4 | 3 | 5 | 0 | 0 | 14 |
| ESE | 0 | 5 | 9 | 10 | 1 | 0 | 25 |
| SE | 1 | 3 | 8 | 8 | 2 | 0 | 22 |
| SSE | 2 | 1 | 10 | 3 | 0 | 0 | 16 |
| S | 2 | 5 | 1 | 5 | 1 | 0 | 14 |
| SSW | 1 | 5 | 7 | 7 | 4 | 0 | 24 |
| SW | 0 | 7 | 3 | 14 | 1 | 0 | 25 |
| WSW | 1 | 10 | 17 | 6 | 0 | 0 | 34 |
| W | 0 | 7 | 14 | 6 | 0 | 0 | 27 |
| WNW | 0 | 2 | 7 | 7 | 0 | 0 | 16 |
| NW | 0 | 2 | 3 | 12 | 0 | 0 | 17 |
| NNW | 1 | 3 | 1 | 2 | 0 | 0 | 7 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 11 | 66 | 95 | 92 | 9 | 0 | 273 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: July - September 2006
Stability Class - Extremely Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| SSW | 0 | 0 | 5 | 4 | 1 | 0 | 10 |
| SW | 0 | 0 | 4 | 1 | 0 | 0 | 5 |
| WSW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| W | 0 | 1 | 5 | 3 | 0 | 0 | 9 |
| WNW | 0 | 1 | 3 | 2 | 0 | 0 | 6 |
| NW | 0 | 2 | 2 | 3 | 0 | 0 | 7 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 7 | 25 | 14 | 1 | 0 | 47 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Extremely Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 1 | 3 | 5 | 0 | 0 | 0 | 9 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| S | 0 | 0 | 8 | 13 | 1 | 0 | 22 |
| SSW | 0 | 1 | 13 | 1 | 0 | 0 | 15 |
| SW | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| WSW | 0 | 0 | 1 | 0 | 4 | 0 | 5 |
| W | 0 | 0 | 3 | 5 | 0 | 0 | 8 |
| WNW | 0 | 3 | 3 | 2 | 0 | 0 | 8 |
| NW | 0 | 3 | 3 | 5 | 0 | 0 | 11 |
| NNW | 0 | 8 | 2 | 0 | 0 | 0 | 10 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 26 | 50 | 26 | 5 | 0 | 108 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Moderately Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SSE | 0 | 1 | 4 | 1 | 0 | 0 | 6 |
| S | 0 | 0 | 8 | 7 | 0 | 0 | 15 |
| SSW | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 0 | 0 | 3 | 0 | 1 | 0 | 4 |
| W | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| WNW | 0 | 0 | 3 | 5 | 1 | 0 | 9 |
| NW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| NNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 10 | 27 | 14 | 2 | 0 | 53 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Slightly Unstable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 2 | 1 | 3 | 0 | 0 | 6 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| SSE | 0 | 0 | 6 | 1 | 0 | 0 | 7 |
| S | 0 | 2 | 5 | 5 | 0 | 0 | 12 |
| SSW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SW | 0 | 1 | 0 | 3 | 0 | 0 | 4 |
| WSW | 1 | 2 | 3 | 1 | 1 | 0 | 8 |
| W | 0 | 2 | 4 | 3 | 0 | 0 | 9 |
| WNW | 0 | 1 | 5 | 1 | 0 | 0 | 7 |
| NW | 0 | 3 | 3 | 1 | 0 | 0 | 7 |
| NNW | 1 | 2 | 2 | 1 | 0 | 0 | 6 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 22 | 33 | 20 | 1 | 0 | 79 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Neutral - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 9 | 18 | 9 | 0 | 0 | 38 |
| NNE | 4 | 5 | 16 | 12 | 0 | 0 | 37 |
| NE | 3 | 18 | 17 | 6 | 0 | 0 | 44 |
| ENE | 1 | 14 | 4 | 0 | 0 | 0 | 19 |
| E | 2 | 19 | 30 | 2 | 0 | 0 | 53 |
| ESE | 2 | 8 | 23 | 4 | 2 | 0 | 39 |
| SE | 3 | 16 | 8 | 4 | 0 | 0 | 31 |
| SSE | 0 | 18 | 44 | 6 | 0 | 0 | 68 |
| S | 0 | 22 | 46 | 20 | 1 | 0 | 89 |
| SSW | 0 | 10 | 23 | 17 | 0 | 0 | 50 |
| SW | 4 | 10 | 9 | 12 | 0 | 0 | 35 |
| WSW | 2 | 11 | 6 | 9 | 0 | 0 | 28 |
| W | 2 | 17 | 59 | 19 | 1 | 0 | 98 |
| WNW | 1 | 10 | 34 | 8 | 0 | 0 | 53 |
| NW | 7 | 16 | 24 | 6 | 0 | 0 | 53 |
| NNW | 4 | 26 | 53 | 5 | 0 | 0 | 88 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 37 | 229 | 414 | 139 | 4 | 0 | 823 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Slightly Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| NNE | 4 | 14 | 6 | 2 | 0 | 0 | 26 |
| NE | 9 | 6 | 6 | 2 | 0 | 0 | 23 |
| ENE | 8 | 19 | 0 | 0 | 0 | 0 | 27 |
| E | 4 | 20 | 2 | 0 | 0 | 0 | 26 |
| ESE | 5 | 24 | 15 | 4 | 0 | 0 | 48 |
| SE | 9 | 27 | 26 | 3 | 0 | 0 | 65 |
| SSE | 7 | 55 | 52 | 8 | 0 | 0 | 122 |
| S | 4 | 44 | 56 | 17 | 1 | 0 | 122 |
| SSW | 6 | 33 | 24 | 9 | 3 | 0 | 75 |
| SW | 1 | 21 | 25 | 9 | 0 | 0 | 56 |
| WSW | 5 | 8 | 13 | 4 | 0 | 0 | 30 |
| W | 6 | 38 | 52 | 7 | 0 | 0 | 103 |
| WNW | 8 | 35 | 18 | 2 | 0 | 0 | 63 |
| NW | 12 | 20 | 11 | 0 | 0 | 0 | 43 |
| NNW | 5 | 21 | 6 | 1 | 0 | 0 | 33 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 95 | 389 | 312 | 68 | 4 | 0 | 868 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Moderately Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| NNE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| ESE | 2 | 31 | 2 | 0 | 0 | 0 | 35 |
| SE | 5 | 10 | 2 | 0 | 0 | 0 | 17 |
| SSE | 11 | 16 | 1 | 0 | 0 | 0 | 28 |
| S | 5 | 3 | 3 | 0 | 0 | 0 | 11 |
| SSW | 5 | 14 | 1 | 0 | 0 | 0 | 20 |
| SW | 1 | 16 | 9 | 0 | 0 | 0 | 26 |
| WSW | 3 | 5 | 2 | 0 | 0 | 0 | 10 |
| W | 1 | 6 | 0 | 0 | 0 | 0 | 7 |
| WNW | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| NW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| NNW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 44 | 112 | 20 | 0 | 0 | 0 | 176 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Extremely Stable - 150Ft-35Ft Delta-T (F)
Winds Measured at 35 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 1 | 5 | 0 | 0 | 0 | 0 | 6 |
| SE | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| SSE | 4 | 1 | 1 | 0 | 0 | 0 | 6 |
| S | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SSW | 4 | 1 | 0 | 0 | 0 | 0 | 5 |
| SW | 3 | 6 | 0 | 0 | 0 | 0 | 9 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| W | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| WNW | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| NW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 25 | 18 | 1 | 0 | 0 | 0 | 44 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Extremely Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| W | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 2 | 0 | 3 | 5 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Moderately Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| W | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| WNW | 0 | 0 | 1 | 1 | 0 | 2 | 4 |
| NW | 0 | 0 | 2 | 1 | 1 | 0 | 4 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 5 | 10 | 2 | 3 | 20 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Slightly Unstable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| ENE | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SSE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| S | 0 | 0 | 2 | 4 | 1 | 0 | 7 |
| SSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WSW | 0 | 0 | 3 | 0 | 0 | 1 | 4 |
| W | 0 | 0 | 2 | 1 | 3 | 2 | 8 |
| WNW | 0 | 0 | 3 | 1 | 1 | 5 | 10 |
| NW | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| NNW | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 7 | 20 | 11 | 5 | 9 | 52 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Neutral - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 5 | 12 | 28 | 10 | 9 | 65 |
| NNE | 3 | 5 | 6 | 15 | 13 | 18 | 60 |
| NE | 0 | 4 | 7 | 18 | 10 | 1 | 40 |
| ENE | 2 | 7 | 18 | 4 | 0 | 0 | 31 |
| E | 1 | 2 | 11 | 23 | 6 | 1 | 44 |
| ESE | 0 | 4 | 7 | 19 | 5 | 4 | 39 |
| SE | 0 | 8 | 11 | 6 | 6 | 1 | 32 |
| SSE | 2 | 9 | 25 | 49 | 5 | 0 | 90 |
| S | 0 | 9 | 39 | 48 | 31 | 10 | 137 |
| SSW | 2 | 13 | 37 | 25 | 17 | 5 | 99 |
| SW | 0 | 7 | 15 | 8 | 13 | 4 | 47 |
| WSW | 1 | 9 | 9 | 7 | 4 | 8 | 38 |
| W | 0 | 7 | 19 | 45 | 38 | 4 | 113 |
| WNW | 1 | 2 | 16 | 33 | 24 | 6 | 82 |
| NW | 2 | 7 | 21 | 25 | 17 | 3 | 75 |
| NNW | 0 | 12 | 31 | 38 | 28 | 1 | 110 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 15 | 110 | 284 | 391 | 227 | 75 | 1102 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 15
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Slightly Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 2 | 0 | 2 | 3 | 2 | 0 | 9 |
| NNE | 1 | 1 | 1 | 8 | 2 | 0 | 13 |
| NE | 0 | 3 | 2 | 2 | 0 | 0 | 7 |
| ENE | 1 | 7 | 14 | 0 | 0 | 0 | 22 |
| E | 2 | 1 | 4 | 2 | 1 | 0 | 10 |
| ESE | 3 | 3 | 10 | 12 | 3 | 0 | 31 |
| SE | 0 | 5 | 13 | 32 | 1 | 0 | 51 |
| SSE | 4 | 7 | 22 | 45 | 13 | 3 | 94 |
| S | 1 | 5 | 19 | 54 | 48 | 11 | 138 |
| SSW | 2 | 2 | 15 | 59 | 22 | 4 | 104 |
| SW | 1 | 0 | 15 | 14 | 19 | 3 | 52 |
| WSW | 1 | 4 | 20 | 19 | 14 | 4 | 62 |
| W | 0 | 6 | 15 | 36 | 23 | 0 | 80 |
| WNW | 0 | 3 | 4 | 27 | 11 | 0 | 45 |
| NW | 1 | 3 | 12 | 25 | 3 | 0 | 44 |
| NNW | 1 | 0 | 10 | 12 | 2 | 0 | 25 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 20 | 50 | 178 | 350 | 164 | 25 | 787 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 4
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Moderately Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| ESE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| SE | 0 | 4 | 6 | 12 | 1 | 0 | 23 |
| SSE | 0 | 0 | 11 | 25 | 0 | 0 | 36 |
| S | 2 | 2 | 2 | 8 | 5 | 0 | 19 |
| SSW | 2 | 3 | 2 | 8 | 1 | 0 | 16 |
| SW | 0 | 1 | 5 | 8 | 6 | 0 | 20 |
| WSW | 1 | 3 | 3 | 2 | 0 | 0 | 9 |
| W | 0 | 3 | 16 | 6 | 0 | 0 | 25 |
| WNW | 0 | 0 | 2 | 4 | 0 | 0 | 6 |
| NW | 0 | 0 | 4 | 3 | 0 | 0 | 7 |
| NNW | 1 | 0 | 1 | 4 | 0 | 0 | 6 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 6 | 20 | 53 | 88 | 13 | 0 | 180 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 5

Dresden Nuclear Station

Period of Record: October - December2006
Stability Class - Extremely Stable - 300Ft-35Ft Delta-T (F)
Winds Measured at 300 Feet

| Wind Direction | Wind Speed (in mph) 1-3 | 4-7 | 8-12 | 13-18 | 19-24 | > 24 | Total |
|---|---|---|---|---|---|---|---|
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| S | 0 | 2 | 1 | 2 | 0 | 0 | 5 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 1 | 2 | 4 | 2 | 0 | 0 | 9 |
| WSW | 1 | 2 | 2 | 0 | 0 | 0 | 5 |
| W | 2 | 0 | 6 | 0 | 0 | 0 | 8 |
| WNW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| Variable | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 9 | 13 | 6 | 2 | 0 | 38 |

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 5

# APPENDIX H

# ANNUAL RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM REPORT (ARGPPR)