

QUAD CITIES NUCLEAR POWER STATION UNITS 1 and 2

Annual Radiological
Environmental Operating Report

1 January Through 31 December 2006

Prepared By

Teledyne Brown Engineering
Environmental Services



Nuclear

Quad Cities Nuclear Power Station
Cordova, IL 61242

May 2007

Table Of Contents

I. Summary and Conclusions	1
II. Introduction	2
A. Objectives of the REMP	2
B. Implementation of the Objectives	2
III. Program Description	2
A. Sample Collection	2
B. Sample Analysis	4
C. Data Interpretation	5
D. Program Exceptions	6
E. Program Changes	8
IV. Results and Discussion	8
A. Aquatic Environment	8
1. Surface Water	8
2. Ground Water	9
3. Fish	9
4. Sediment	10
B. Atmospheric Environment	10
1. Airborne	10
a. Air Particulates	10
b. Airborne Iodine	11
2. Terrestrial	11
a. Milk	11
b. Food Products	12
C. Ambient Gamma Radiation	12
D. Interim Spent Fuel Storage	12
E. Land Use Survey	12
F. Errata Data	13
G. Summary of Results – Inter-laboratory Comparison Program	13

Appendices

Appendix A Radiological Environmental Monitoring Report Summary

Tables

Table A-1	Radiological Environmental Monitoring Program for Quad Cities Nuclear Power Station, 2006
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Appendix B Location Designation, Distance & Direction, and Sample Collection & Analytical Methods

Tables

Table B-1:	Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Quad Cities Nuclear Power Station, 2006
Table B-2:	Radiological Environmental Monitoring Program - Summary of Sample Collection and Analytical Methods, Quad Cities Nuclear Power Station, 2006

Figures

Figure B-1:	Quad Cities REMP Sampling Locations – 2 Mile Radius, 2006
Figure B-2:	Quad Cities REMP Sampling Locations – 9.3 Mile Radius, 2006

Appendix C Data Tables and Figures - Primary Laboratory

Tables

Table C-I.1	Concentrations of Gross Beta in Surface Water Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-I.2	Concentrations of Tritium in Surface Water Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-I.3	Concentrations of Gamma Emitters in Surface Water Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-II.1	Concentrations of Tritium in Ground Water Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-II.2	Concentrations of Gamma Emitters in Ground Water Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table C-III.1	Concentrations of Gamma Emitters in Fish Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-IV.1	Concentrations of Gamma Emitters in Sediment Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-V.1	Concentrations of Gross Beta in Air Particulate Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
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 Quad Cities Nuclear Power Station, 2006.
Table C-V.3	Concentrations of Gamma Emitters in Air Particulate Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-VI.1	Concentrations of I-131 in Air Iodine Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-VII.1	Concentrations of I-131 in Milk Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-VII.2	Concentrations of Gamma Emitters in Milk Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-VIII.1	Concentrations of Gamma Emitters in Food Products Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.
Table C-IX.1	Quarterly TLD Results for Quad Cities Nuclear Power Station, 2006.
Table C-IX.2	Mean Quarterly TLD Results for the Inner Ring, Outer Ring, Other and Control Locations for Quad Cities Nuclear Power Station, 2006.
Table C-IX.3	Summary of the Ambient Dosimetry Program for Quad Cities Nuclear Power Station, 2006.
Table C-X.1	Summary of Collection Dates for Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Figures

Figure C-1	Surface Water - Gross Beta – Stations Q-33 and Q-34 (C) Collected in the Vicinity of QCNPS, 2000 - 2006.
Figure C-2	Surface Water - Tritium – Stations Q-33 and Q-34 (C) Collected in the Vicinity of QCNPS, 2000 - 2006.
Figure C-3	Ground Water - Tritium – Station Q-35 and Q-36 Collected in the Vicinity of QCNPS, 2000 - 2006.
Figure C-4	Air Particulates - Gross Beta – Stations Q-01 and Q-02 Collected in the Vicinity of QCNPS, 2000 - 2006.
Figure C-5	Air Particulates - Gross Beta – Stations Q-03 and Q-04 Collected in the Vicinity of QCNPS, 2000 - 2006.

- Figure C-6 Air Particulates - Gross Beta – Station Q-07 (C) Collected in the Vicinity of QCNPS, 2000 - 2006.
- Figure C-7 Air Particulates - Gross Beta – Stations Q-13 and Q-16 Collected in the Vicinity of QCNPS, 2006.
- Figure C-8 Air Particulates - Gross Beta – Stations Q-37 and Q-38 Collected in the Vicinity of QCNPS, 2006.

Appendix D Inter-Laboratory Comparison Program

Tables

- Table D-1 Analytics Environmental Radioactivity Cross Check Program
Teledyne Brown Engineering, 2006
- Table D-2 ERA Environmental Radioactivity Cross Check Program
Teledyne Brown Engineering, 2006
- Table D-3 DOE's Mixed Analyte Performance Evaluation Program (MAPEP)
Teledyne Brown Engineering, 2006
- Table D-4 ERA Statistical Summary Proficiency Testing Program
Environmental, Inc., 2006
- Table D-5 DOE's Mixed Analyte Performance Evaluation Program (MAPEP)
Environmental, Inc., 2006

Appendix E Errata Data

Appendix F Effluent Data

Appendix G Meteorological Data

Appendix H Annual Radiological Groundwater Protection Program Report
(ARGPPR)

I. Summary and Conclusions

This report on the Radiological Environmental Monitoring Program (REMP) conducted for the Quad Cities Nuclear Power Station (QCNPS) by Exelon covers the period 1 January 2006 through 31 December 2006. During that time period, 1,422 analyses were performed on 1088 samples. In assessing all the data gathered for this report and comparing these results with preoperational data, it was concluded that the operation of QCNPS 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 fission or activation products were detected. Gross beta and tritium activities detected were consistent with those detected in previous years and consistent with the control stations.

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. No fission products or activation products were found in sediment.

Air particulate samples were analyzed for concentrations of gross beta and gamma emitting nuclides. No fission or activation products were detected.

High sensitivity I-131 analyses were performed on air samples. No I-131 was detected.

Cow milk samples were analyzed for concentrations of I-131 and gamma emitting nuclides. No I-131 was detected. Concentrations of naturally occurring isotopes were consistent with those detected in previous years. No fission or activation products were detected.

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.

II. Introduction

The Quad Cities Nuclear Power Station (QCNPS), consisting of two 2957 MWth boiling water reactor owned and operated by Exelon Corporation, is located in Cordova, Illinois along the Mississippi River. Unit No. 1 went critical on 16 March 1972. Unit No. 2 went critical on 02 December 1973. The site is located in northern Illinois, approximately 182 miles west of Chicago, Illinois.

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

A. Objective of the 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 QCNPS REMP were collected for Exelon Nuclear by Environmental Inc. (Midwest Labs). This section describes the general sampling methods used by Environmental Inc. to obtain environmental samples for the QCNPS REMP in 2006. Sample locations and

descriptions can be found in Table B-1 and Figures B-1 and B-2, Appendix B.

Aquatic Environment

The aquatic environment was evaluated by performing radiological analyses on samples of surface water, ground water, fish, and sediment. Surface water samples were collected weekly from two locations, Q-33 and Q-34 (Control). Ground water samples were collected quarterly from two locations, Q-35 and Q-36. All water samples were collected in new containers, which were rinsed with source water prior to collection.

Fish samples comprising the edible portions of commercially and recreationally important species were collected semiannually at two locations, Q-24 and Q-29 (Control). Sediment samples composed of recently deposited substrate were collected at one location semiannually, Q-39.

Atmospheric Environment

The atmospheric environment was evaluated by performing radiological analyses on samples of air particulate, airborne iodine, and milk. Airborne iodine and particulate samples were collected and analyzed at nine locations (Q-01, Q-02, Q-03, Q-04, Q-07, Q-13, Q-16, Q-37 and Q-38). The control location was Q-07. 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 particulate filters and air iodine samples were replaced weekly and sent to the laboratory for analysis.

Milk samples were collected biweekly at one location (Q-26) from May through October, and monthly from November through April. All samples were collected in new plastic containers from the bulk tank, preserved with sodium bisulfite, and shipped promptly to the laboratory.

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

Ambient Gamma Radiation

Direct radiation measurements were made using thermoluminescent

dosimeters (TLD). Each location consisted of 2 TLD sets. The TLD locations were placed on and around the QCNPS site as follows:

An inner ring consisting of 15 locations (Q-101, Q-102, Q-103, Q-104, Q-105, Q-106, Q-107, Q-108, Q-109, Q-111, Q-112, Q-113, Q-114, Q-115 and Q-116). These TLD are located in 15 of the 16 meteorological sectors in the general area of the site boundary (approximately 0.1 – 3 miles from the site). There are no TLDs located in the SSW sector because this sector is located over water.

An outer ring consisting of 16 locations (Q-201, Q-202, Q-203, Q-204, Q-205, Q-206, Q-207, Q-208, Q-209, Q-210, Q-211, Q-212, Q-213, Q-214, Q-215 and Q-216). These TLDs are located in each of the 16 meteorological sectors (approximately 3.7 – 5 miles from the site)

An other set consisting of eight locations (Q-01, Q-02, Q-03, Q-04, Q-13, Q-16, Q-37 and Q-38. The locations are at each of the air sample stations around the site.

The balance of one location (Q-07) is the control site.

The specific TLD locations were determined by the following criteria:

1. The presence of relatively dense population;
2. Site meteorological data taking into account distance and elevation for each of the sixteen–22 1/2 degree sectors around the site, where estimated annual dose from QCNPS, if any, would be most significant;
3. On hills free from local obstructions and within sight of the stack (where practical);
4. And near the closest dwelling to the stack in the prevailing downwind direction.

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 Environmental Inc. (Midwest Labs) to analyze the environmental samples for radioactivity for the QCNPS REMP in 2006 and the type of analyses. 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

The radiological and direct radiation data collected prior to Quad Cities Nuclear Power Station becoming operational were used as a baseline with which these operational data were compared. For the purpose of this report, Quad Cities 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 an *a priori* (a before the fact) estimate of a system (including instrumentation, procedure and sample type) and not as an *a posteriori* (after the fact) criteria for the presence of activity. All analyses were designed to achieve the required QCNPS detection capabilities for environmental sample analysis.

The minimum detectable concentration (MDC) is defined above with the exception that the measurement is an *a posteriori* (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 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 ground 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, sediment and air particulate nine nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Zr/Nb-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, Zr/Nb-95, Cs-134, Cs-137, Ba-140 and La-140 were reported.

For vegetation 10 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Zr/Nb-95, I-131, Cs-134, Cs-137 and Ba/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 QCNPS 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
A/I	Q-03	02/17/06	Filter frozen to sampling train; ripped during removal. Most particulate matter was recovered.
A/I	Q-03	02/25/06	AP/I holder found loose; no air going through.
A/I	Q-02	03/10/06	Low reading of 134.5 due to faulty pump; collector replaced pump.
WW	Q-35	04/14/06	Well water collection rescheduled for 04/21/06 per Exelon request.
WW	Q-36	04/14/06	Well water collection rescheduled for 04/21/06 per Exelon request.
SW	Q-34	05/05/06	Due to delay in counting and problems with the filter paper used in the I-131 low level analysis, the I-131 LLD was missed.
M	Q-26	06/02/06	I-131 LLD missed due to problem with the filter paper used in the analysis.
M	Q-26	06/30/06	I-131 LLD missed due to problem with the filter paper used in the analysis.
TLD	Other	06/30/06	Q-108-1 not exchanged for 3 rd quarter; 2 nd quarter TLD remained in field, causing TLD to read abnormally low for 3 rd quarter.
A/I	Q-13	08/12/06	Filter stuck to sampling train; slightly torn.
TLD	Other	12/29/06	Q-106-2 and Q-205-1 read greater than 3-sigma admin investigation limit from adjacent TLDs.

Table D-2 LISTING OF MISSED SAMPLES

Sample Type	Location Code	Collection Date	Reason
SW	Q-33	02/10/06	No sample; water frozen.
SW	Q-33	02/18/06	No sample; water frozen.
SW	Q-34	02/18/06	No sample; water frozen.
SW	Q-33	12/08/06	No sample; water frozen.
SW	Q-34	12/08/06	No sample; water frozen.

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

E. Program Changes

As of 01/01/06, Quad Cities started collecting the airborne iodine weekly instead of bi-weekly.

A new TLD (210-5) was put into service in December 2006, as part of Revision 7 of the ODCM. This TLD replaced 210-4

A separate program was instituted to monitor groundwater in the surrounding environs during 2006. This program and any sampling and analysis results are discussed in Appendix H, "Annual Radiological Groundwater Protection Program Report". This is NOT part of the REMP program.

IV. Results and Discussion

A. Aquatic Environment

1. Surface Water

Samples were taken weekly and composited monthly at two locations (Q-33 and Q-34). Of these locations only Q-33 located downstream, could be affected by Quad Cities' effluent releases. The following analyses were performed.

Gross Beta

Samples from all locations were analyzed for concentrations of gross beta (Table C-I.1, Appendix C). The values ranged from 2.7 to 8.0 pCi/l. Concentrations detected were consistent with those detected in previous years and the control location (Figure C-1, Appendix C). The required LLD was met.

Tritium

Quarterly composites of weekly collections were analyzed for tritium activity (Table C-I.2, Appendix C). The values ranged from <141 to <188 pCi/l (Figure C-2, Appendix C). The 2000 pCi/L OCDM and contractually required 200 pCi/L LLDs were met.

Gamma Spectrometry

Samples from both 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 (Q-35 and Q-36). Both locations could be affected by Quad Cities' effluent releases. The following analyses were performed:

Tritium

Quarterly grab samples from the locations were analyzed for tritium activity (Table C-II.1, Appendix C). The values ranged from <100 to <179 pCi/l (Figure C-3, Appendix C). The 2000 pCi/L OCDM and contractually required 200 pCi/L LLDs were met.

Gamma Spectrometry

Samples from all locations were analyzed for gamma emitting nuclides (Table C-II.2, Appendix C). No nuclides were detected.

3. Fish

Fish samples comprised of various commercially and recreationally important species were collected at two locations (Q-24 and Q-29) semiannually. Location Q-24 could be affected by Quad Cities' 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). No nuclides were detected and all required LLDs were met.

4. Sediment

Aquatic sediment samples were collected at one location (Q-39) semiannually. The location, located downstream, could be affected by Quad Cities' effluent releases. The following analysis was performed:

Gamma Spectrometry

Sediment samples from Q-39 were analyzed for gamma emitting nuclides (Table C–IV.1, Appendix C). No nuclides were detected and all required LLDs were met.

B. Atmospheric Environment

1. Airborne

a. Air Particulates

Continuous air particulate samples were collected from nine locations on a weekly basis. The nine locations were separated into three groups: Near site samplers within 4 km of the site (Q-01, Q-02, Q-03 and Q-04), far field samplers between 4 and 10 km from the site (Q-13, Q-16, Q-37, Q-38) and the Control sampler between 10 and 30 km from the site (Q-07). 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 QCNPS. The results from the near site locations (Group I) ranged from <5 to 36 E–3 pCi/m³ with a mean of 19 E–3 pCi/m³. The results from the far field locations (Group II) ranged from <5 to 34 E–3 pCi/m³ with a mean of 20 E–3

pCi/m³. The results from the Control location (Group III) ranged from 7 to 33 E-3 pCi/m³ with a mean of 20 E-3 pCi/m³. Comparison of the 2006 air particulate data with previous years data indicate no effects from the operation of QCNPS. In addition a comparison of the weekly mean values for 2006 indicate no notable differences among the three groups (Figures C-4 through C-6, Appendix C).

Gamma Spectrometry

Weekly samples were composited quarterly and analyzed for gamma emitting nuclides (Table C-V.3, Appendix C). No nuclides were detected and all required LLDs were met.

b. Airborne Iodine

Continuous air samples were collected from nine locations (Q-01, Q-02, Q-03, Q-04, Q-07, Q-13, Q-16, Q-37, and Q-38) and analyzed weekly for I-131 (Table C-VI.1, Appendix C). All results were less than the MDC and the required LLD was met.

2. Terrestrial

a. Milk

Samples were collected from one location (Q-26) 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 two samples. 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). No nuclides were detected and all required LLDs were met.

b. Food Products

Food product samples were collected at four locations plus a control location (Q-Quad 1 - Control, Q-Quad 1, Q-Quad 2, Q-Quad 3, and Q-Quad 4) annually during growing season. Four locations, (Q-Quad 1, Q-Quad 2, Q-Quad 3 and Q-Quad 4) could be affected by Quad Cities' 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 thermoluminescent dosimeters. Forty 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 data to the Control Location data, indicate that the ambient gamma radiation levels from all the locations were comparable.

D. Independent Spent Fuel Storage Installation

QCNPS commenced use of an Independent Spent Fuel Storage Installation (ISFSI) in Dec 2005. There were no measurable changes in ambient gamma and radiation level as a result of ISFSI operations.

E. Land Use Survey

A Land Use Survey conducted during August 2006 around QCNPS was performed by Environmental Inc. (Midwest Labs) for Exelon Nuclear to comply with the Quad Cities' Offsite Dose Calculation Manual. The purpose of the survey was to document the nearest resident and milk producing animals in each of the sixteen 22 ½ degree sectors around the site. There were no changes required to the QCNPS REMP, as a result of this survey. The results of this survey are summarized below.

Sector	Distance in Miles from QCNPS		
	Residence Miles	Livestock Miles	Milk Farm Miles
N	0.6	2.7	-
NNE	3.8	5.4	-
NE	1.3	-	-
ENE	2.9	2.9	-
E	2.3	2.7	-
ESE	2.8	3.1	3.1
SE	2.5	5.5	-
SSE	1.1	3.6	6.6
S	0.8	1.6	-
SSW	3.2	-	-
SW	2.9	3.3	-
WSW	2.2	2.2	-
W	2.6	4.3	4.6
WNW	2.7	3.8	-
NW	2.6	2.6	-
NNW	2.1	2.2	-

F. Errata Data

There were two typographical errors on Annual Summary table, page A-43, of the 2005 Annual Radiological Environmental Operating Report. These errors are described below. The corrected page from the report is contained in Appendix E of this report.

2005

The reported high TLD mean of 430 and the highest TLD station Q-209-1 were incorrect in the Annual Summary table, pg A-43.

The correct high TLD mean was 26.0 and the correct highest TLD station was Q-211-1.

G. Summary of Results – Inter-Laboratory Comparison Program

The primary and secondary laboratories 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 $\pm 20\%$ of the reference value. Performance is acceptable with warning when a mean result falls in the range from $\pm 20\%$ to $\pm 30\%$ of the reference value (i.e., $20\% < \text{bias} < 30\%$). 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, 20 out of 25 analytes met the specified acceptance criteria. Seven 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.

APPENDIX A

RADIOLOGICAL ENVIRONMENTAL MONITORING REPORT SUMMARY

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	GR-B	6	4	4.8 (3/3) (4.6/ 5.0)	4.9 (3/3) (4.5/ 5.4)	4.9 (3/3) (4.5/ 5.4)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	H-3	2	2000	188 (0/1) (<188)	187 (0/1) (<187)	188 (0/1) (<188)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	GAMMA MN-54	6	15	3 (0/3) (<3/<3)	2 (0/3) (<2/<3)	3 (0/3) (<3/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-58		15	3 (0/3) (<3/<3)	3 (0/3) (<2/<4)	3 (0/3) (<3/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	FE-59		30	7 (0/3) (<6/<7)	6 (0/3) (<4/<7)	7 (0/3) (<6/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-60		15	3 (0/3) (<2/<3)	2 (0/3) (<2/<3)	3 (0/3) (<2/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	ZN-65		30	6 (0/3) (<6/<7)	6 (0/3) (<4/<8)	6 (0/3) (<6/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	NB-95		15	3 (0/3) (<3/<3)	3 (0/3) (<2/<4)	3 (0/3) (<3/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 REPORTING PERIOD: 1ST QUARTER, 2006		INDICATOR CONTROL 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)	LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SURFACE WATER (PCI/LITER)	ZR-95		30	5 (0/3) (<5/<6)	5 (0/3) (<4/<6)	5 (0/3) (<5/<6)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	I-131		15	12 (0/3) (<10/<15)	10 (0/3) (<8/<11)	12 (0/3) (<10/<15)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-134		15	3 (0/3) (<3/<4)	3 (0/3) (<2/<4)	3 (0/3) (<3/<4)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-137		18	3 (0/3) (<3/<3)	3 (0/3) (<2/<3)	3 (0/3) (<3/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	BA-140		60	23 (0/3) (<21/<27)	20 (0/3) (<16/<24)	23 (0/3) (<21/<27)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	LA-140		15	8 (0/3) (<7/<8)	6 (0/3) (<5/<8)	8 (0/3) (<7/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
GROUND WATER (PCI/LITER)	H-3	2	2000	101 (0/2) (<100/<101)	N/A	101 (0/1) (<101)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	GAMMA MN-54	2	15	8 (0/2) (<7/<8)	N/A	8 (0/1) (<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CO-58		15	7 (0/2) (<6/<8)	N/A	8 (0/1) (<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	FE-59		30	14 (0/2) (<13/<14)	N/A	14 (0/1) (<14)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CO-60		15	8 (0/2) (<7/<9)	N/A	9 (0/1) (<9)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	ZN-65		30	18 (0/2) (<16/<21)	N/A	21 (0/1) (<21)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	NB-95		15	7 (0/2) (<7/<8)	N/A	8 (0/1) (<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	ZR-95		30	12 (0/2) (<12/<12)	N/A	12 (0/1) (<12)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	I-131		15	11 (0/2) (<10/<13)	N/A	13 (0/1) (<13)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CS-134		15	10 (0/2) (<9/<11)	N/A	11 (0/1) (<11)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CS-137		18	7 (0/2) (<6/<8)	N/A	8 (0/1) (<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	BA-140		60	33 (0/2) (<29/<36)	N/A	36 (0/1) (<36)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	LA-140		15	11 (0/2) (<11/<12)	N/A	12 (0/1) (<12)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	117	10	17 (103/104) (<5/30)	18 (13/13) (8/30)	18 (13/13) (10/30)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0
	GAMMA MN-54	9	N/A	5.9 (0/8) (< 3.6/< 7.6)	3.8 (0/1) (< 3.8)	7.6 (0/1) (< 7.6)	Q-37 INDICATOR MEREDOSIA ROAD 4.4 MILES ENE OF SITE	0
	CO-58		N/A	10.5 (0/8) (< 8.5/<12)	10.7 (0/1) (<10.7)	12 (0/1) (<12)	Q-01 INDICATOR ONSITE 1 0.5 MILES N OF SITE	0
	FE-59		N/A	29 (0/8) (<17/<37.9)	21.6 (0/1) (<21.6)	37.9 (0/1) (<37.9)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	CO-60		N/A	5.4 (0/8) (< 4.4/< 6.5)	6.9 (0/1) (< 6.9)	6.9 (0/1) (< 6.9)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
AIR PARTICULATE (E-3 PCI/CU.METER)	ZN-65		N/A	13.5 (0/8) (<10.3/<16.9)	15 (0/1) (<15)	16.9 (0/1) (<16.9)	Q-04 INDICATOR NITRIN 1.7 MILES NE OF SITE	0
	ZRNB-95		N/A	10.4 (0/8) (< 9.0/<12.1)	10 (0/1) (<10)	12.1 (0/1) (<12.1)	Q-01 INDICATOR ONSITE 1 0.5 MILES N OF SITE	0
	CS-134		50	5.8 (0/8) (< 5.3/< 6.9)	6.0 (0/1) (< 6.0)	6.9 (0/1) (< 6.9)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0
	CS-137		60	5.2 (0/8) (< 3.9/< 6.8)	6.0 (0/1) (< 6.0)	6.8 (0/1) (< 6.8)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	BALA140		N/A	391 (0/8) (<346/<474)	412 (0/1) (<412)	474 (0/1) (<474)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	117	70	41 (0/104) (<14/<65)	35 (0/13) (<25/<61)	42 (0/13) (<28/<65)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
MILK (PCI/LITER)	I-131 (LOW LVL)	3	1	0.7 (0/3) (< 0.4/< 1.0)	N/A	0.7 (0/3) (< 0.4/< 1.0)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
MILK (PCI/LITER)	GAMMA MN-54	3	N/A	5 (0/3) (<5/<7)	N/A	5 (0/3) (<5/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-58		N/A	6 (0/3) (<5/<7)	N/A	6 (0/3) (<5/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	FE-59		N/A	12 (0/3) (<9/<13)	N/A	12 (0/3) (<9/<13)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-60		N/A	6 (0/3) (<5/<7)	N/A	6 (0/3) (<5/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZN-65		N/A	13 (0/3) (<11/<16)	N/A	13 (0/3) (<11/<16)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZRNB-95		N/A	6 (0/3) (<5/<7)	N/A	6 (0/3) (<5/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-134		15	5 (0/3) (<4/<6)	N/A	5 (0/3) (<4/<6)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-137		18	6 (0/3) (<5/<6)	N/A	6 (0/3) (<5/<6)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 1ST QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
MILK (PCI/LITER)	BA-140		60	25 (0/3) (<20/<28)	N/A	25 (0/3) (<20/<28)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	LA-140		15	8 (0/3) (<7/<9)	N/A	8 (0/3) (<7/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	80	N/A	26 (78/78) (23/30)	27 (2/2) (27/27)	8 (1/1) (30)	Q-215-2 INDICATOR 4.2 MILES NW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	GR-B	6	4	6.4 (3/3) (4.6/ 8.0)	6.5 (3/3) (5.9/ 7.3)	6.5 (3/3) (5.9/ 7.3)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	H-3	2	2000	177 (0/1) (<177)	185 (0/1) (<185)	185 (0/1) (<185)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	GAMMA MN-54	6	15	2 (0/3) ($<1/3$)	2 (0/3) ($<1/3$)	2 (0/3) ($<1/3$)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-58		15	2 (0/3) ($<1/3$)	2 (0/3) ($<2/3$)	2 (0/3) ($<2/3$)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	FE-59		30	5 (0/3) ($<2/7$)	5 (0/3) ($<4/6$)	5 (0/3) ($<2/7$)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-60		15	2 (0/3) ($<1/3$)	2 (0/3) ($<1/2$)	2 (0/3) ($<1/3$)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	ZN-65		30	5 (0/3) ($<1/7$)	4 (0/3) ($<3/6$)	5 (0/3) ($<1/7$)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	NB-95		15	2 (0/3) ($<1/3$)	2 (0/3) ($<2/3$)	2 (0/3) ($<2/3$)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	4 (0/3) (<1/<6)	4 (0/3) (<3/<5)	4 (0/3) (<3/<5)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	I-131		15	13 (0/3) (<13/<14)	12 (0/2) (<9/<15)	13 (0/3) (<13/<14)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-134		15	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	CS-137		18	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	BA-140		60	22 (0/3) (<14/<26)	26 (0/3) (<18/<33)	26 (0/3) (<18/<33)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	LA-140		15	7 (0/3) (<4/<9)	9 (0/3) (<6/<11)	9 (0/3) (<6/<11)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
GROUND WATER (PCI/LITER)	H-3	2	2000	173 (0/2) (<173/<173)	N/A	173 (0/1) (<173)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	GAMMA MN-54	2	15	5 (0/2) (<5/<5)	N/A	5 (0/1) (<5)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 REPORTING PERIOD: 2ND QUARTER, 2006		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)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
GROUND WATER (PCI/LITER)	CO-58		15	5 (0/2) (<5/<6)	N/A	6 (0/1) (<6)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	FE-59		30	11 (0/2) (<11/<11)	N/A	11 (0/1) (<11)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CO-60		15	5 (0/2) (<4/<5)	N/A	5 (0/1) (<5)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZN-65		30	12 (0/2) (<11/<12)	N/A	12 (0/1) (<12)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	NB-95		15	5 (0/2) (<5/<6)	N/A	6 (0/1) (<6)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZR-95		30	10 (0/2) (<9/<11)	N/A	11 (0/1) (<11)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	I-131		15	12 (0/2) (<11/<13)	N/A	13 (0/1) (<13)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	CS-134		15	6 (0/2) (<5/<6)	N/A	6 (0/1) (<6)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CS-137		18	6 (0/2) (<5/<6)	N/A	6 (0/1) (<6)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	BA-140		60	31 (0/2) (<29/<33)	N/A	33 (0/1) (<33)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	LA-140		15	11 (0/2) (<10/<11)	N/A	11 (0/1) (<11)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
FISH (PCI/KG WET)	GAMMA MN-54	4	130	66 (0/2) (<54/<79)	65 (0/2) (<56/<73)	66 (0/2) (<54/<79)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CO-58		130	92 (0/2) (<75/<109)	81 (0/2) (<73/<88)	92 (0/2) (<75/<109)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	FE-59		260	237 (0/2) (<223/<251)	211 (0/2) (<187/<235)	237 (0/2) (<223/<251)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CO-60		130	86 (0/2) (<72/<100)	61 (0/2) (<47/<75)	86 (0/2) (<72/<100)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	ZN-65		260	184 (0/2) (<162/<206)	163 (0/2) (<143/<182)	184 (0/2) (<162/<206)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
FISH (PCI/KG WET)	ZRNB-95		N/A	105 (0/2) (<85/<124)	83 (0/2) (<74/<92)	105 (0/2) (<85/<124)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CS-134		130	81 (0/2) (<69/<92)	78 (0/2) (<66/<91)	81 (0/2) (<69/<92)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CS-137		150	77 (0/2) (<65/<90)	64 (0/2) (<54/<74)	77 (0/2) (<65/<90)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	BALA140		N/A	541 (0/2) (<395/<686)	511 (0/2) (<433/<588)	541 (0/2) (<395/<686)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
SEDIMENT (PCI/KG DRY)	GAMMA MN-54	1	N/A	104 (0/1) (<104)	N/A	104 (0/1) (<104)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-58		N/A	130 (0/1) (<130)	N/A	130 (0/1) (<130)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	FE-59		N/A	330 (0/1) (<330)	N/A	330 (0/1) (<330)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-60		N/A	100 (0/1) (<100)	N/A	100 (0/1) (<100)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SEDIMENT (PCI/KG DRY)	ZN-65		N/A	291 (0/1) (<291)	N/A	291 (0/1) (<291)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	ZRNB-95		N/A	144 (0/1) (<144)	N/A	144 (0/1) (<144)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-134		150	148 (0/1) (<148)	N/A	148 (0/1) (<148)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-137		180	106 (0/1) (<106)	N/A	106 (0/1) (<106)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	BALA140		N/A	547 (0/1) (<547)	N/A	547 (0/1) (<547)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	117	10	15 (102/104) (<5/24)	15 (13/13) (7/20)	16 (13/13) (7/23)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0
	GAMMA MN-54	9	N/A	3.2 (0/8) (< 2.3/< 4.4)	3.0 (0/1) (< 3.0)	4.4 (0/1) (< 4.4)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	CO-58		N/A	4.6 (0/8) (< 2.5/< 8.7)	5.0 (0/1) (< 5.0)	8.7 (0/1) (< 8.7)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN			
				LOCATIONS MEAN (F) RANGE	LOCATION 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	13.4 (0/8) (< 7.6/<20.3)	10.8 (0/1) (< 10.8)	20.3 (0/1) (< 20.3)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0	
	CO-60		N/A	3.3 (0/8) (< 1.0/< 5.5)	3.8 (0/1) (< 3.8)	5.5 (0/1) (< 5.5)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0	
	ZN-65		N/A	7.3 (0/8) (< 4.1/<10.9)	7.1 (0/1) (< 7.1)	10.9 (0/1) (< 10.9)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0	
	ZRNB-95		N/A	5.2 (0/8) (< 2.0/< 8.2)	3.6 (0/1) (< 3.6)	8.2 (0/1) (< 8.2)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0	
	CS-134		50	2.9 (0/8) (< 1.8/< 5.2)	2.6 (0/1) (< 2.6)	5.2 (0/1) (< 5.2)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0	
	CS-137		60	2.6 (0/8) (< 1.7/< 4.7)	2.4 (0/1) (< 2.4)	4.7 (0/1) (< 4.7)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0	
	BALA140		N/A	81.7 (0/8) (< 50.6/<128)	145 (0/1) (< 145)	145 (0/1) (< 145)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0	
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	117	70	53 (0/104) (< 15/< 69)	43 (0/13) (< 12/< 57)	56 (0/13) (< 20/< 68)	Q-01 INDICATOR ONSITE 1 0.5 MILES N OF SITE	0	

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FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
MILK (PCI/LITER)	I-131 (LOW LVL)	6	1	1.4 (0/6) (< 0.5/< 4.3)	N/A	1.4 (0/6) (< 0.5/< 4.3)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	GAMMA MN-54	6	N/A	6 (0/6) (<2/<9)	N/A	6 (0/6) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-58		N/A	6 (0/6) (<2/<9)	N/A	6 (0/6) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	FE-59		N/A	14 (0/6) (<5/<20)	N/A	14 (0/6) (<5/<20)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-60		N/A	6 (0/6) (<2/<9)	N/A	6 (0/6) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZN-65		N/A	14 (0/6) (<5/<20)	N/A	14 (0/6) (<5/<20)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZRNB-95		N/A	6 (0/6) (<2/<9)	N/A	6 (0/6) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-134		15	6 (0/6) (<2/<11)	N/A	6 (0/6) (<2/<11)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2ND QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN			NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION		
MILK (PCI/LITER)	CS-137		18	6 (0/6) (<2/<10)	N/A	6 (0/6) (<2/<10)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0	
	BA-140		60	35 (0/6) (<11/<43)	N/A	35 (0/6) (<11/<43)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0	
	LA-140		15	11 (0/6) (<3/<14)	N/A	11 (0/6) (<3/<14)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0	
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	79	N/A	21 (77/77) (18/27)	23 (2/2) (23/23)	11 (1/1) (27)	Q-205-1 INDICATOR 4.7 MILES E OF SITE	0	

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	GR-B	6	4	5.0 (3/3) (4.5/ 5.9)	4.7 (3/3) (4.2/ 5.5)	5.0 (3/3) (4.5/ 5.9)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	H-3	2	2000	145 (0/1) (<145)	145 (0/1) (<145)	145 (0/1) (<145)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	GAMMA MN-54	6	15	1 (0/3) (<1/<1)	2 (0/3) (<1/<2)	2 (0/3) (<1/<2)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	CO-58		15	1 (0/3) (<1/<1)	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	FE-59		30	3 (0/3) (<2/<3)	4 (0/3) (<2/<6)	4 (0/3) (<2/<6)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	CO-60		15	1 (0/3) (<1/<1)	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	ZN-65		30	2 (0/3) (<1/<3)	3 (0/3) (<1/<4)	3 (0/3) (<1/<4)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	NB-95		15	1 (0/3) (<1/<2)	2 (0/3) (<1/<3)	2 (0/3) (<1/<3)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 REPORTING PERIOD: 3RD QUARTER, 2006		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)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SURFACE WATER (PCI/LITER)	ZR-95		30	2 (0/3) (<1/<2)	3 (0/3) (<2/<5)	3 (0/3) (<2/<5)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	I-131		15	11 (0/3) (<6/<15)	11 (0/3) (<8/<13)	11 (0/3) (<8/<13)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	CS-134		15	1 (0/3) (<1/<1)	1 (0/3) (<1/<2)	1 (0/3) (<1/<2)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	CS-137		18	1 (0/3) (<1/<1)	2 (0/3) (<1/<2)	2 (0/3) (<1/<2)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	BA-140		60	15 (0/3) (<11/<20)	24 (0/3) (<15/<42)	24 (0/3) (<15/<42)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	LA-140		15	5 (0/3) (<4/<6)	8 (0/3) (<5/<14)	8 (0/3) (<5/<14)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
GROUND WATER (PCI/LITER)	H-3	2	2000	164 (0/2) (<161/<166)	N/A	166 (0/1) (<166)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	GAMMA MN-54	2	15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CO-58		15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	FE-59		30	3 (0/2) (<2/<3)	N/A	3 (0/1) (<3)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CO-60		15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	ZN-65		30	2 (0/2) (<2/<2)	N/A	2 (0/1) (<2)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	NB-95		15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	ZR-95		30	2 (0/2) (<2/<2)	N/A	2 (0/1) (<2)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	I-131		15	12 (0/2) (<11/<13)	N/A	13 (0/1) (<13)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CS-134		15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 3RD QUARTER, 2006						
				INDICATOR	CONTROL	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)	LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
GROUND WATER (PCI/LITER)	CS-137		18	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	BA-140		60	16 (0/2) (<14/<18)	N/A	18 (0/1) (<18)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	LA-140		15	5 (0/2) (<4/<6)	N/A	6 (0/1) (<6)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	117	10	21 (104/104) (7/36)	23 (13/13) (18/29)	23 (13/13) (18/29)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	GAMMA MN-54	9	N/A	1.9 (0/8) (< 1.3/< 2.5)	2.9 (0/1) (< 2.9)	2.9 (0/1) (< 2.9)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	CO-58		N/A	3.4 (0/8) (< 2.0/< 4.6)	4.9 (0/1) (< 4.9)	4.9 (0/1) (< 4.9)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	FE-59		N/A	11.1 (0/8) (< 6.2/<13.3)	13.6 (0/1) (<13.6)	13.6 (0/1) (<13.6)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	CO-60		N/A	1.3 (0/8) (< 0.8/< 2.1)	3.1 (0/1) (< 3.1)	3.1 (0/1) (< 3.1)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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
AIR PARTICULATE (E-3 PCI/CU.METER)	ZN-65		N/A	4.8 (0/8) (< 2.7/< 6.9)	6.1 (0/1) (< 6.1)	6.9 (0/1) (< 6.9)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	ZRNB-95		N/A	3.8 (0/8) (< 3.0/< 5.0)	4.9 (0/1) (< 4.9)	5.0 (0/1) (< 5.0)	Q-37 INDICATOR MEREDOSIA ROAD 4.4 MILES ENE OF SITE	0
	CS-134		50	1.6 (0/8) (< 0.9/< 2.1)	2.4 (0/1) (< 2.4)	2.4 (0/1) (< 2.4)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	CS-137		60	1.6 (0/8) (< 1.2/< 1.9)	1.9 (0/1) (< 1.9)	1.9 (0/1) (< 1.9)	Q-01 INDICATOR ONSITE 1 0.5 MILES N OF SITE	0
	BALA140		N/A	206.1 (0/8) (<110/<302)	279 (0/1) (<279)	302 (0/1) (<302)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	117	70	46 (0/104) (<18/<68)	42 (0/13) (<18/<64)	51 (0/13) (<28/<68)	Q-16 INDICATOR LOW MOOR 5.7 MILES NNW OF SITE	0
MILK (PCI/LITER)	I-131 (LOW LVL)	6	1	0.6 (0/6) (< 0.4/< 0.8)	N/A	0.6 (0/6) (< 0.4/< 0.8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:			50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
MILK (PCI/LITER)	GAMMA MN-54	6	N/A	6 (0/6) (<4/<8)	N/A	6 (0/6) (<4/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-58		N/A	6 (0/6) (<4/<9)	N/A	6 (0/6) (<4/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	FE-59		N/A	14 (0/6) (<8/<20)	N/A	14 (0/6) (<8/<20)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-60		N/A	6 (0/6) (<4/<8)	N/A	6 (0/6) (<4/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZN-65		N/A	14 (0/6) (<9/<19)	N/A	14 (0/6) (<9/<19)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZRNB-95		N/A	6 (0/6) (<4/<8)	N/A	6 (0/6) (<4/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-134		15	6 (0/6) (<4/<8)	N/A	6 (0/6) (<4/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-137		18	6 (0/6) (<4/<8)	N/A	6 (0/6) (<4/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
MILK (PCI/LITER)	BA-140		60	37 (0/6) (<20/<55)	N/A	37 (0/6) (<20/<55)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	LA-140		15	10 (0/6) (<6/<13)	N/A	10 (0/6) (<6/<13)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
VEGETATION (PCI/KG WET)	GAMMA MN-54	11	N/A	9 (0/9) (<6/<11)	10 (0/2) (<6/<13)	10 (0/3) (<9/<11)	Q-CONTROL INDICATOR	0
	CO-58		N/A	11 (0/9) (<6/<16)	9 (0/2) (<7/<11)	13 (0/3) (<10/<16)	Q-CONTROL INDICATOR	0
	FE-59		N/A	25 (0/9) (<16/<35)	28 (0/2) (<19/<37)	29 (0/2) (<28/<29)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
	CO-60		N/A	10 (0/9) (<6/<14)	9 (0/2) (<7/<11)	14 (0/2) (<13/<14)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
	ZN-65		N/A	23 (0/9) (<12/<32)	20 (0/2) (<16/<24)	27 (0/3) (<22/<32)	Q-CONTROL INDICATOR	0
	ZRNB-95		N/A	11 (0/9) (<7/<15)	10 (0/2) (<8/<13)	11 (0/3) (<11/<13)	Q-CONTROL INDICATOR	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 3RD QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
VEGETATION (PCI/KG WET)	I-131		60	51 (0/9) (<33/<59)	47 (0/2) (<37/<57)	57 (0/3) (<57/<58)	Q-CONTROL INDICATOR	0
	CS-134		60	9 (0/9) (<5/<11)	9 (0/2) (<6/<11)	10 (0/3) (<8/<11)	Q-CONTROL INDICATOR	0
	CS-137		80	10 (0/9) (<6/<13)	9 (0/2) (<7/<12)	11 (0/3) (<9/<13)	Q-CONTROL INDICATOR	0
	BALA140		N/A	25 (0/9) (<18/<33)	24 (0/2) (<19/<30)	30 (0/2) (<29/<31)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	80	N/A	19 (78/78) (16/27)	20 (2/2) (20/20)	30 (1/1) (27)	Q-108-1 INDICATOR 1.0 MILE SSE OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	GR-B	6	4	3.9 (3/3) (3.5/ 4.7)	3.9 (3/3) (2.7/ 4.8)	3.9 (3/3) (3.5/ 4.7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	H-3	2	2000	141 (0/1) (<141)	142 (0/1) (<142)	142 (0/1) (<142)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	GAMMA MN-54	6	15	4 (0/3) (<3/<7)	2 (0/3) (<1/<4)	4 (0/3) (<3/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-58		15	5 (0/3) (<2/<8)	2 (0/3) (<1/<4)	5 (0/3) (<2/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	FE-59		30	13 (0/3) (<7/<21)	6 (0/3) (<2/<10)	13 (0/3) (<7/<21)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-60		15	5 (0/3) (<2/<8)	2 (0/3) (<1/<4)	5 (0/3) (<2/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	ZN-65		30	8 (0/3) (<4/<13)	5 (0/3) (<2/<8)	8 (0/3) (<4/<13)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	NB-95		15	5 (0/3) (<3/<8)	3 (0/3) (<1/<5)	5 (0/3) (<3/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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
SURFACE WATER (PCI/LITER)	ZR-95		30	9 (0/3) (<5/<15)	5 (0/3) (<2/<8)	9 (0/3) (<5/<15)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	I-131		15	12 (0/3) (<8/<15)	11 (0/3) (<9/<13)	12 (0/3) (<8/<15)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-134		15	4 (0/3) (<2/<6)	2 (0/3) (<1/<4)	4 (0/3) (<2/<6)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-137		18	5 (0/3) (<3/<7)	2 (0/3) (<1/<4)	5 (0/3) (<3/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	BA-140		60	21 (0/3) (<11/<29)	22 (0/3) (<13/<31)	22 (0/3) (<13/<31)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	LA-140		15	7 (0/3) (<4/<10)	7 (0/3) (<4/<9)	7 (0/3) (<4/<10)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
GROUND WATER (PCI/LITER)	H-3	2	2000	179 (0/2) (<178/<179)	N/A	179 (0/1) (<179)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	GAMMA MN-54	2	15	1 (0/2) (<1/<2)	N/A	2 (0/1) (<2)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CO-58		15	2 (0/2) (<1/<2)	N/A	2 (0/1) (<2)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	FE-59		30	4 (0/2) (<4/<4)	N/A	4 (0/1) (<4)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	CO-60		15	4 (0/2) (<1/<6)	N/A	6 (0/1) (<6)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZN-65		30	3 (0/2) (<3/<3)	N/A	3 (0/1) (<3)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	NB-95		15	2 (0/2) (<2/<2)	N/A	2 (0/1) (<2)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZR-95		30	3 (0/2) (<3/<3)	N/A	3 (0/1) (<3)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	I-131		15	14 (0/2) (<14/<14)	N/A	14 (0/1) (<14)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	CS-134		15	1 (0/2) (<1/<1)	N/A	1 (0/1) (<1)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
GROUND WATER (PCI/LITER)	CS-137		18	1 (0/2) (<1/<2)	N/A	2 (0/1) (<2)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	BA-140		60	20 (0/2) (<19/<22)	N/A	22 (0/1) (<22)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	LA-140		15	7 (0/2) (<7/<7)	N/A	7 (0/1) (<7)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
FISH (PCI/KG WET)	GAMMA MN-54	4	130	31 (0/2) (<29/<33)	43 (0/2) (<38/<48)	43 (0/2) (<38/<48)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CO-58		130	47 (0/2) (<43/<52)	61 (0/2) (<58/<64)	61 (0/2) (<58/<64)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	FE-59		260	136 (0/2) (<119/<153)	159 (0/2) (<146/<171)	159 (0/2) (<146/<171)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CO-60		130	29 (0/2) (<27/<31)	39 (0/2) (<35/<42)	39 (0/2) (<35/<42)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	ZN-65		260	72 (0/2) (<66/<79)	81 (0/2) (<79/<84)	81 (0/2) (<79/<84)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
FISH (PCI/KG WET)	ZRNB-95		N/A	51 (0/2) (<46/<56)	71 (0/2) (<70/<72)	71 (0/2) (<70/<72)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CS-134		130	28 (0/2) (<24/<33)	37 (0/2) (<37/<38)	37 (0/2) (<37/<38)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CS-137		150	31 (0/2) (<27/<34)	38 (0/2) (<37/<40)	38 (0/2) (<37/<40)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	BALA140		N/A	805 (0/2) (<800/<809)	1145 (0/2) (<1060/<1230)	1145 (0/2) (<1060/<1230)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
SEDIMENT (PCI/KG DRY)	GAMMA MN-54	1	N/A	55 (0/1) (<55)	N/A	55 (0/1) (<55)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-58		N/A	68 (0/1) (<68)	N/A	68 (0/1) (<68)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	FE-59		N/A	158 (0/1) (<158)	N/A	158 (0/1) (<158)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-60		N/A	63 (0/1) (<63)	N/A	63 (0/1) (<63)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SEDIMENT (PCI/KG DRY)	ZN-65		N/A	124 (0/1) (<124)	N/A	124 (0/1) (<124)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	ZRNB-95		N/A	82 (0/1) (<82)	N/A	82 (0/1) (<82)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-134		150	49 (0/1) (<49)	N/A	49 (0/1) (<49)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-137		180	67 (0/1) (<67)	N/A	67 (0/1) (<67)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	BALA140		N/A	278 (0/1) (<278)	N/A	278 (0/1) (<278)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	117	10	24 (104/104) (10/36)	25 (13/13) (14/33)	25 (13/13) (12/32)	Q-16 INDICATOR LOW MOOR 5.7 MILES NNW OF SITE	0
	GAMMA MN-54	9	N/A	2.5 (0/8) (< 2.1/< 3.2)	1.5 (0/1) (< 1.5)	3.2 (0/1) (< 3.2)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0
	CO-58		N/A	2.9 (0/8) (< 2.1/< 3.4)	1.2 (0/1) (< 1.2)	3.4 (0/1) (< 3.4)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, IL		REPORTING PERIOD:		4TH QUARTER, 2006		
				INDICATOR	CONTROL	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)	LOCATIONS MEAN (F) RANGE	LOCATION 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	7.5 (0/8) (< 6.4/<10.1)	2.6 (0/1) (< 2.6)	10.1 (0/1) (<10.1)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	CO-60		N/A	2.4 (0/8) (< 1.9/< 3.3)	1.9 (0/1) (< 1.9)	3.3 (0/1) (< 3.3)	Q-16 INDICATOR LOW MOOR 5.7 MILES NNW OF SITE	0
	ZN-65		N/A	5.8 (0/8) (< 5.1/< 6.1)	3.0 (0/1) (< 3.0)	6.1 (0/1) (< 6.1)	Q-03 INDICATOR ONSITE 3 0.6 MILES S OF SITE	0
	ZRNB-95		N/A	3.2 (0/8) (< 2.4/< 4.0)	1.9 (0/1) (< 1.9)	4.0 (0/1) (< 4.0)	Q-04 INDICATOR NITRIN 1.7 MILES NE OF SITE	0
	CS-134		50	2.4 (0/8) (< 1.9/< 2.9)	1.2 (0/1) (< 1.2)	2.9 (0/1) (< 2.9)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	CS-137		60	2.2 (0/8) (< 1.3/< 3.4)	1.6 (0/1) (< 1.6)	3.4 (0/1) (< 3.4)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	BALA140		N/A	14.4 (0/8) (<10.1/<22.1)	8.1 (0/1) (< 8.1)	22.1 (0/1) (<22.1)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	117	70	47 (0/104) (<14/<69)	44 (0/13) (<18/<68)	51 (0/13) (<29/<68)	Q-16 INDICATOR LOW MOOR 5.7 MILES NNW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL				DOCKET NUMBER: 50-254 & 50-265 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
MILK (PCI/LITER)	I-131 (LOW LVL)	4	1	0.6 (0/4) (<0.5/<0.6)	N/A	0.6 (0/4) (<0.5/<0.6)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	GAMMA MN-54	4	N/A	5 (0/4) (<4/<7)	N/A	5 (0/4) (<4/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-58		N/A	6 (0/4) (<5/<6)	N/A	6 (0/4) (<5/<6)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	FE-59		N/A	14 (0/4) (<12/<17)	N/A	14 (0/4) (<12/<17)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-60		N/A	5 (0/4) (<4/<6)	N/A	5 (0/4) (<4/<6)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZN-65		N/A	13 (0/4) (<10/<15)	N/A	13 (0/4) (<10/<15)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZRNB-95		N/A	7 (0/4) (<5/<8)	N/A	7 (0/4) (<5/<8)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-134		15	5 (0/4) (<4/<5)	N/A	5 (0/4) (<4/<5)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 4TH QUARTER 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, 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	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
MILK (PCI/LITER)	CS-137		18	6 (0/4) (<5/<7)	N/A	6 (0/4) (<5/<7)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	BA-140		60	44 (0/4) (<39/<52)	N/A	44 (0/4) (<39/<52)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	LA-140		15	13 (0/4) (<11/<14)	N/A	13 (0/4) (<11/<14)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	80	N/A	24 (78/78) (17/33)	25 (2/2) (25/25)	13 (1/1) (33)	Q-205-1 INDICATOR 4.7 MILES E OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 2006						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	GR-B	24	4	5.0 (12/12) (3.5/ 8.0)	5.0 (12/12) (2.7/ 7.3)	5.0 (12/12) (3.5/ 8.0)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	H-3	8	2000	163 (0/4) (<141/<188)	165 (0/4) (<142/<187)	165 (0/4) (<142/<187)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	GAMMA MN-54	24	15	3 (0/12) (<1/<7)	2 (0/12) (<1/<4)	3 (0/12) (<1/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-58		15	3 (0/12) (<1/<8)	2 (0/12) (<1/<4)	3 (0/12) (<1/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	FE-59		30	7 (0/12) (<2/<21)	5 (0/12) (<2/<10)	7 (0/12) (<2/<21)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CO-60		15	3 (0/12) (<1/<8)	2 (0/12) (<1/<4)	3 (0/12) (<1/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	ZN-65		30	5 (0/12) (<1/<13)	4 (0/12) (<1/<8)	5 (0/12) (<1/<13)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	NB-95		15	3 (0/12) (<1/<8)	2 (0/12) (<1/<5)	3 (0/12) (<1/<8)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, IL		REPORTING PERIOD:		2006		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
SURFACE WATER (PCI/LITER)	ZR-95		30	5 (0/12) (<1/<15)	4 (0/12) (<2/<8)	5 (0/12) (<1/<15)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	I-131		15	12 (0/12) (<6/<15)	11 (0/11) (<8/<15)	12 (0/12) (<6/<15)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-134		15	2 (0/12) (<1/<6)	2 (0/12) (<1/<4)	2 (0/12) (<1/<6)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	CS-137		18	3 (0/12) (<1/<7)	2 (0/12) (<1/<4)	3 (0/12) (<1/<7)	Q-33 INDICATOR CORDOVA 3.1 MILES SSW OF SITE	0
	BA-140		60	20 (0/12) (<11/<29)	23 (0/12) (<13/<42)	23 (0/12) (<13/<42)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
	LA-140		15	7 (0/12) (<4/<10)	7 (0/12) (<4/<14)	7 (0/12) (<4/<14)	Q-34 CONTROL CAMANCHE - UPSTREAM 4.4 MILES NNE OF SITE	0
GROUND WATER (PCI/LITER)	H-3	8	2000	154 (0/8) (<100/<179)	N/A	155 (0/4) (<100/<179)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	GAMMA MN-54	8	15	4 (0/8) (<1/<8)	N/A	4 (0/4) (<1/<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 REPORTING PERIOD: 2006						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
GROUND WATER (PCI/LITER)	CO-58		15	4 (0/8) (<1/<8)	N/A	4 (0/4) (<1/<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	FE-59		30	8 (0/8) (<2/<14)	N/A	8 (0/4) (<3/<14)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CO-60		15	4 (0/8) (<1/<9)	N/A	5 (0/4) (<1/<7)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZN-65		30	9 (0/8) (<2/<21)	N/A	9 (0/4) (<2/<21)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	NB-95		15	4 (0/8) (<1/<8)	N/A	4 (0/4) (<1/<7)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	ZR-95		30	7 (0/8) (<2/<12)	N/A	7 (0/4) (<2/<12)	Q-36 INDICATOR CORDOVA WELL 3.3 MILES SSW OF SITE	0
	I-131		15	12 (0/8) (<10/<14)	N/A	13 (0/4) (<11/<14)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	CS-134		15	4 (0/8) (<1/<11)	N/A	5 (0/4) (<1/<11)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, IL			REPORTING PERIOD:		2006	
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
GROUND WATER (PCI/LITER)	CS-137		18	4 (0/8) (<1/<8)	N/A	4 (0/4) (<1/<8)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	BA-140		60	25 (0/8) (<14/<36)	N/A	25 (0/4) (<18/<36)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
	LA-140		15	8 (0/8) (<4/<12)	N/A	9 (0/4) (<6/<12)	Q-35 INDICATOR MCMILLAN WELL 1.5 MILES S OF SITE	0
FISH (PCI/KG WET)	GAMMA MN-54	8	130	49 (0/4) (<29/<79)	54 (0/4) (<38/<73)	54 (0/4) (<38/<73)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CO-58		130	70 (0/4) (<43/<109)	71 (0/4) (<58/<88)	71 (0/4) (<58/<88)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	FE-59		260	187 (0/4) (<119/<251)	185 (0/4) (<146/<235)	187 (0/4) (<119/<251)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CO-60		130	58 (0/4) (<27/<100)	50 (0/4) (<35/<75)	58 (0/4) (<27/<100)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	ZN-65		260	128 (0/4) (<66/<206)	122 (0/4) (<79/<182)	128 (0/4) (<66/<206)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 2006						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
FISH (PCI/KG WET)	ZRNB-95		N/A	78 (0/4) (<46/<124)	77 (0/4) (<70/<92)	78 (0/4) (<46/<124)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	CS-134		130	55 (0/4) (<24/<92)	58 (0/4) (<37/<91)	58 (0/4) (<37/<91)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
	CS-137		150	54 (0/4) (<27/<90)	51 (0/4) (<37/<74)	54 (0/4) (<27/<90)	Q-24 INDICATOR POOL #14 OF MISSISSIPPI RIVER - DOWNSTRM 0.5 MILES SW OF SITE	0
	BALA140		N/A	673 (0/4) (<395/<809)	828 (0/4) (<433/<1230)	828 (0/4) (<433/<1230)	Q-29 CONTROL MISSISSIPPI RIVER - UPSTREAM 1.0 MILES N OF SITE	0
SEDIMENT (PCI/KG DRY)	GAMMA MN-54	2	N/A	80 (0/2) (<55/<104)	N/A	80 (0/2) (<55/<104)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-58		N/A	99 (0/2) (<68/<130)	N/A	99 (0/2) (<68/<130)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	FE-59		N/A	244 (0/2) (<158/<330)	N/A	244 (0/2) (<158/<330)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CO-60		N/A	81 (0/2) (<63/<100)	N/A	81 (0/2) (<63/<100)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES LOCATION OF FACILITY: CORDOVA, IL		DOCKET NUMBER: 50-254 & 50-265 REPORTING PERIOD: 2006						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SEDIMENT (PCI/KG DRY)	ZN-65		N/A	208 (0/2) (<124/<291)	N/A	208 (0/2) (<124/<291)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	ZRNB-95		N/A	113 (0/2) (<82/<144)	N/A	113 (0/2) (<82/<144)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-134		150	98 (0/2) (<49/<148)	N/A	98 (0/2) (<49/<148)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	CS-137		180	87 (0/2) (<67/<106)	N/A	87 (0/2) (<67/<106)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
	BALA140		N/A	413 (0/2) (<278/<547)	N/A	413 (0/2) (<278/<547)	Q-39 INDICATOR CORDOVA - DOWNSTREAM MISSISSIPPI RIVER 0.8 MILES SSW OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	468	10	19 (413/416) (<5/36)	20 (52/52) (7/33)	20 (52/52) (7/33)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	GAMMA MN-54	36	N/A	3.4 (0/32) (< 1.3/< 7.6)	2.8 (0/4) (< 1.5/< 3.8)	3.9 (0/4) (< 2.1/< 7.1)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	CO-58		N/A	5.3 (0/32) (< 2.0/<12)	5.4 (0/4) (< 1.2/<10.7)	6.4 (0/4) (< 2.1/<11)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 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	15.3 (0/32) (< 6.2/<37.9)	12.1 (0/4) (< 2.6/<21.6)	19 (0/4) (< 10.1/<37.9)	Q-38 INDICATOR FULLER ROAD 4.7 MILES E OF SITE	0
	CO-60		N/A	3.1 (0/32) (< 0.8/< 6.5)	3.9 (0/4) (< 1.9/< 6.9)	3.9 (0/4) (< 1.9/< 6.9)	Q-07 CONTROL CLINTON 8.9 MILES NE OF SITE	0
	ZN-65		N/A	7.9 (0/32) (< 2.7/<16.9)	7.8 (0/4) (< 3.0/<15)	9.3 (0/4) (< 5.1/<14.2)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	ZRNB-95		N/A	5.6 (0/32) (< 2.0/<12.1)	5.1 (0/4) (< 1.9/<10)	6.3 (0/4) (< 3.9/<10.3)	Q-37 INDICATOR MEREDOSIA ROAD 4.4 MILES ENE OF SITE	0
	CS-134		50	3.2 (0/32) (< 0.9/< 6.9)	3.0 (0/4) (< 1.2/< 6.0)	4.0 (0/4) (< 1.7/< 6.5)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	CS-137		60	2.9 (0/32) (< 1.2/< 6.8)	3.0 (0/4) (< 1.6/< 6.0)	3.6 (0/4) (< 1.4/< 6.8)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
	BALA140		N/A	173.3 (0/32) (< 10.1/<474)	211 (0/4) (< 8.1/<412)	216.8 (0/4) (< 15.5/<474)	Q-02 INDICATOR ONSITE 2 0.4 MILES ENE OF SITE	0
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	468	70	47 (0/416) (< 14/<69)	41 (0/52) (< 12/<68)	49 (0/52) (< 14/<69)	Q-13 INDICATOR PRINCETON 4.7 MILES SW OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY:		QUAD CITIES			DOCKET NUMBER:		50-254 & 50-265	
LOCATION OF FACILITY:		CORDOVA, IL			REPORTING PERIOD:		2006	
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
MILK (PCI/LITER)	I-131 (LOW LVL)	19	1	0.9 (0/19) (< 0.4/< 4.3)	N/A	0.9 (0/19) (< 0.4/< 4.3)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	GAMMA MN-54	19	N/A	6 (0/19) (<2/<9)	N/A	6 (0/19) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-58		N/A	6 (0/19) (<2/<9)	N/A	6 (0/19) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	FE-59		N/A	14 (0/19) (<5/<20)	N/A	14 (0/19) (<5/<20)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CO-60		N/A	6 (0/19) (<2/<9)	N/A	6 (0/19) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZN-65		N/A	14 (0/19) (<5/<20)	N/A	14 (0/19) (<5/<20)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	ZRNB-95		N/A	6 (0/19) (<2/<9)	N/A	6 (0/19) (<2/<9)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	CS-134		15	6 (0/19) (<2/<11)	N/A	6 (0/19) (<2/<11)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 2006						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
MILK (PCI/LITER)	CS-137		18	6 (0/19) (<2/<10)	N/A	6 (0/19) (<2/<10)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	BA-140		60	36 (0/19) (<11/<55)	N/A	36 (0/19) (<11/<55)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
	LA-140		15	11 (0/19) (<3/<14)	N/A	11 (0/19) (<3/<14)	Q-26 INDICATOR BILL STANLEY DAIRY 3.5 MILES ESE OF SITE	0
VEGETATION (PCI/KG WET)	GAMMA MN-54	11	N/A	9 (0/9) (<6/<11)	10 (0/2) (<6/<13)	10 (0/3) (<9/<11)	Q-CONTROL INDICATOR	0
	CO-58		N/A	11 (0/9) (<6/<16)	9 (0/2) (<7/<11)	13 (0/3) (<10/<16)	Q-CONTROL INDICATOR	0
	FE-59		N/A	25 (0/9) (<16/<35)	28 (0/2) (<19/<37)	29 (0/2) (<28/<29)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
	CO-60		N/A	10 (0/9) (<6/<14)	9 (0/2) (<7/<11)	14 (0/2) (<13/<14)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
	ZN-65		N/A	23 (0/9) (<12/<32)	20 (0/2) (<16/<24)	27 (0/3) (<22/<32)	Q-CONTROL INDICATOR	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2006**

NAME OF FACILITY:		QUAD CITIES		DOCKET NUMBER:		50-254 & 50-265		
LOCATION OF FACILITY:		CORDOVA, IL		REPORTING PERIOD:		2006		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	
VEGETATION (PCI/KG WET)	ZRNB-95		N/A	11 (0/9) ($<7/<15$)	10 (0/2) ($<8/<13$)	11 (0/3) ($<11/<13$)	Q-CONTROL INDICATOR	0
	I-131		60	51 (0/9) ($<33/<59$)	47 (0/2) ($<37/<57$)	57 (0/3) ($<57/<58$)	Q-CONTROL INDICATOR	0
	CS-134		60	9 (0/9) ($<5/<11$)	9 (0/2) ($<6/<11$)	10 (0/3) ($<8/<11$)	Q-CONTROL INDICATOR	0
	CS-137		80	10 (0/9) ($<6/<13$)	9 (0/2) ($<7/<12$)	11 (0/3) ($<9/<13$)	Q-CONTROL INDICATOR	0
	BALA140		N/A	25 (0/9) ($<18/<33$)	24 (0/2) ($<19/<30$)	30 (0/2) ($<29/<31$)	Q-QUAD 3 INDICATOR AMY JOHNSTON 1.8 MILES S OF SITE	0
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	319	N/A	23 (311/311) (16/33)	24 (8/8) (20/27)	30 (4/4) (20/33)	Q-205-1 INDICATOR 4.7 MILES E OF SITE	0

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
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, Quad Cities Nuclear Power Station, 2006

Location	Location Description	Distance & Direction From Site
<u>A. Surface Water</u>		
Q-33	Cordova (indicator)	3.1 miles SSW
Q-34	Camanche, Upstream (control)	4.4 miles NNE
<u>B. Ground/Well Water</u>		
Q-35	McMillan Well (indicator)	1.5 miles S
Q-36	Cordova Well (indicator)	3.3 miles SSW
<u>C. Milk - bi-weekly / monthly</u>		
Q-26	Bill Stanley Dairy (indicator)	3.5 miles ESE
<u>D. Air Particulates / Air Iodine</u>		
Q-01	Onsite 1 (indicator)	0.5 miles N
Q-02	Onsite 2 (indicator)	0.4 miles ENE
Q-03	Onsite 3 (indicator)	0.6 miles S
Q-04	Nitrin (indicator)	1.7 miles NE
Q-07	Clinton (control)	8.9 miles NE
Q-13	Princeton (indicator)	4.7 miles SW
Q-16	Low Moor (indicator)	5.7 miles NNW
Q-37	Meredosia Road (indicator)	4.4 miles ENE
Q-38	Fuller Road (indicator)	4.7 miles E
<u>E. Fish</u>		
Q-24	Pool #14 of Mississippi River, Downstream (indicator)	0.5 miles SW
Q-29	Mississippi River, Upstream (control)	1.0 miles N
<u>F. Sediment</u>		
Q-39	Cordova, Downstream on Mississippi River (indicator)	0.8 miles SSW
<u>G. Food Products</u>		
Quadrant 1	Janet Price	6.0 miles NE
Quadrant 2	Dale Nimmic	3.0 miles ESE
Quadrant 3	Amy Johnston	1.8 miles S
Quadrant 4	Mike Fawcett	4.5 miles NW
Control	Charles Leavens	9.5 miles NE
<u>H. Environmental Dosimetry - TLD</u>		
<u>Inner Ring</u>		
Q-101-1		0.6 miles N
Q-101-2		0.9 miles N
Q-102-1		1.3 miles NNE
Q-102-3		1.4 miles NNE
Q-103-1 and -2		1.2 miles NE
Q-104-1		1.1 miles ENE
Q-104-2		0.9 miles ENE
Q-105-1 and -2		0.8 miles E
Q-106-2 and -3		0.7 miles ESE
Q-107-2		0.7 miles SE
Q-107-3		0.8 miles SE
Q-108-1		1.0 miles SSE
Q-108-2		0.9 miles SSE

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

Location	Location Description	Distance & Direction From Site
Q-109-1		0.9 miles S
Q-109-2		1.2 miles S
Q-111-1		2.6 miles SW
Q-111-2		2.5 miles SW
Q-112-1		2.5 miles WSW
Q-112-2		2.2 miles WSW
Q-113-1 and -2		2.5 miles W
Q-114-1		2.1 miles WNW
Q-114-2		2.5 miles WNW
Q-115-1		2.6 miles NW
Q-115-2		2.3 miles NW
Q-116-1		2.3 miles NNW
Q-116-3		2.4 miles NNW
<u>Outer Ring</u>		
Q-201-1 and -2		4.2 miles N
Q-202-1		4.4 miles NNE
Q-202-2		4.8 miles NNE
Q-203-1		4.7 miles NE
Q-203-2		5.0 miles NE
Q-204-1		4.7 miles ENE
Q-204-2		4.5 miles ENE
Q-205-1		4.7 miles E
Q-205-4		4.8 miles E
Q-206-1 and -2		4.8 miles ESE
Q-207-1 and -4		4.7 miles SE
Q-208-1		4.3 miles SSE
Q-208-2		4.9 miles SSE
Q-209-1 and -4		4.7 miles S
Q-210-1 and -4		4.1 miles SSW
Q-211-1 and -2		4.5 miles SW
Q-212-1		5.4 miles WSW
Q-212-2		4.4 miles WSW
Q-213-1		4.3 miles W
Q-213-2		4.8 miles W
Q-214-1		4.7 miles WNW
Q-214-2		4.4 miles WNW
Q-215-1		5.0 miles NW
Q-215-2		4.2 miles NW
Q-216-1		4.6 miles NNW
Q-216-2		4.3 miles NNW
<u>Other</u>		
Q-01	Onsite 1 (indicator)	0.5 miles N
Q-02	Onsite 2 (indicator)	0.4 miles ENE
Q-03	Onsite 3 (indicator)	0.6 miles S
Q-04	Nitrin (indicator)	1.7 miles NE
Q-13	Princeton (indicator)	4.7 miles SW
Q-16	Low Moor (indicator)	5.7 miles NNW
Q-37	Meredosia Road (indicator)	4.4 miles ENE
Q-38	Fuller Road (indicator)	4.7 miles E
<u>Control</u>		
Q-07		8.9 miles NE

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

Sample Medium	Analysis	Sampling Method	Analytical Procedure Number
Surface Water	Gamma Spectroscopy	Monthly composite from weekly grab samples.	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Surface Water	Gross Beta	Monthly composite from weekly grab samples.	TBE, TBE-2008 Gross Alpha and/or gross beta activity in various matrices Env. Inc., W(DS)-01 Determination of gross alpha and/or gross beta in water (dissolved solids or total residue)
Surface Water	Tritium	Quarterly composite from weekly grab samples.	TBE, TBE-2011 Tritium analysis in drinking water by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Ground Water	Gamma Spectroscopy	Quarterly grab samples.	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Ground Water	Tritium	Quarterly grab samples.	TBE, TBE-2011 Tritium analysis in drinking water by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Fish	Gamma Spectroscopy	Semi-annual samples collected via electroshocking or other techniques	TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Sediment	Gamma Spectroscopy	Semi-annual grab samples	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Air Particulates	Gross Beta	One-week composite of continuous air sampling through glass-fiber filter paper	TBE, TBE-2008 Gross Alpha and/or gross beta activity in various matrices Env. Inc., AP-02 Determination of gross alpha and/or gross beta in air particulate filters
Air Particulates	Gamma Spectroscopy	Quarterly composite of each station	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Air Iodine	Gamma Spectroscopy	Weekly composite of continuous air sampling through charcoal filter	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., I-131-02 Determination of I-131 in charcoal canisters by gamma spectroscopy (batch method)

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

Sample Medium	Analysis	Sampling Method	Analytical Procedure Number
Milk	I-131	Bi-weekly grab sample when cows are on pasture. Monthly all other times	TBE, TBE-2012 Radioiodine in various matrices Env. Inc., I-131-01 Determination of I-131 in milk by anion exchange
Milk	Gamma Spectroscopy	Bi-weekly grab sample when cows are on pasture. Monthly all other times	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Food Products	Gamma Spectroscopy	Annual grab samples.	TBE, TBE-2007 Gamma emitting radioisotope analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
TLD	Thermoluminescence Dosimetry	Quarterly TLDs	Global Dosimetry

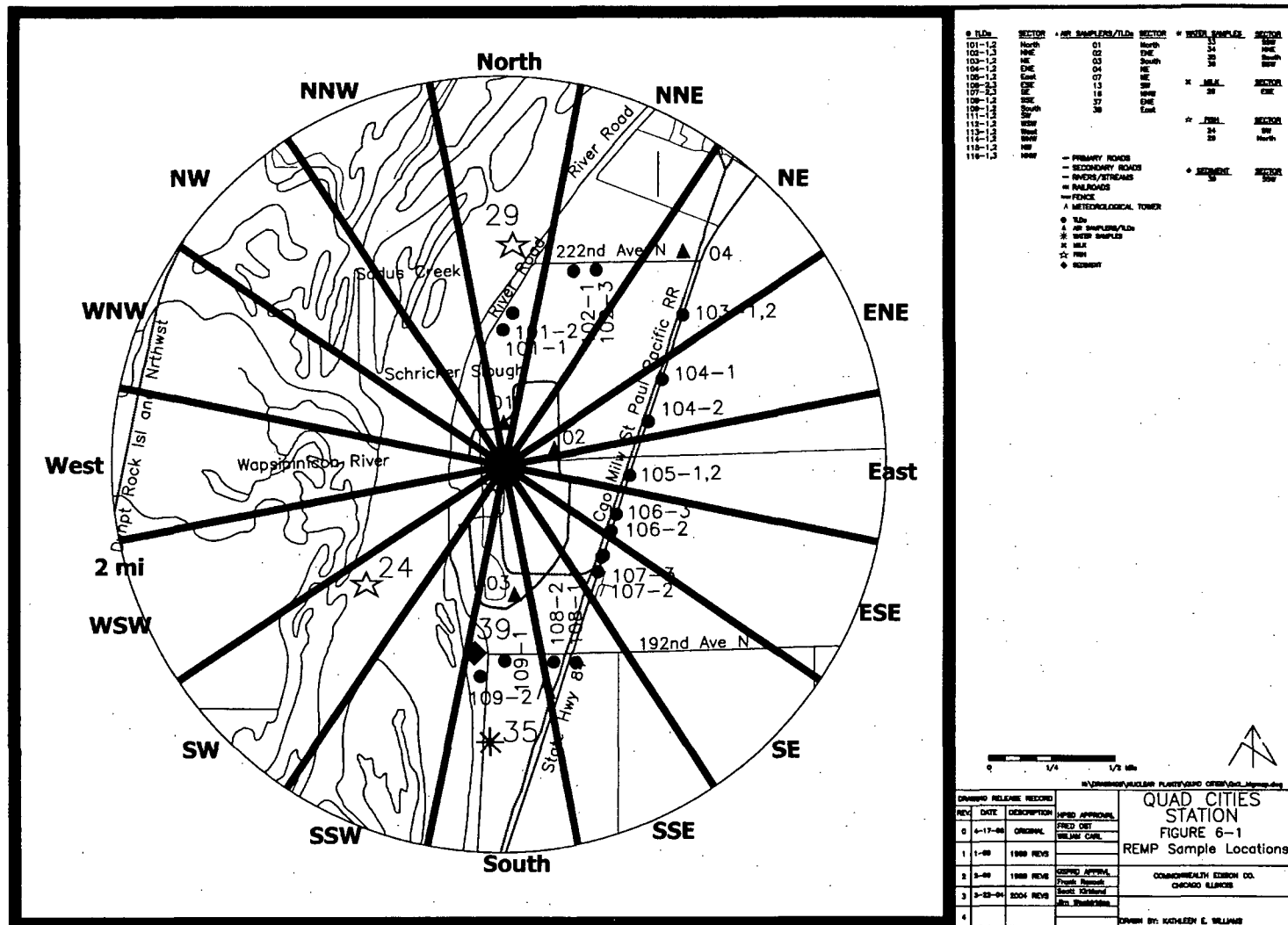
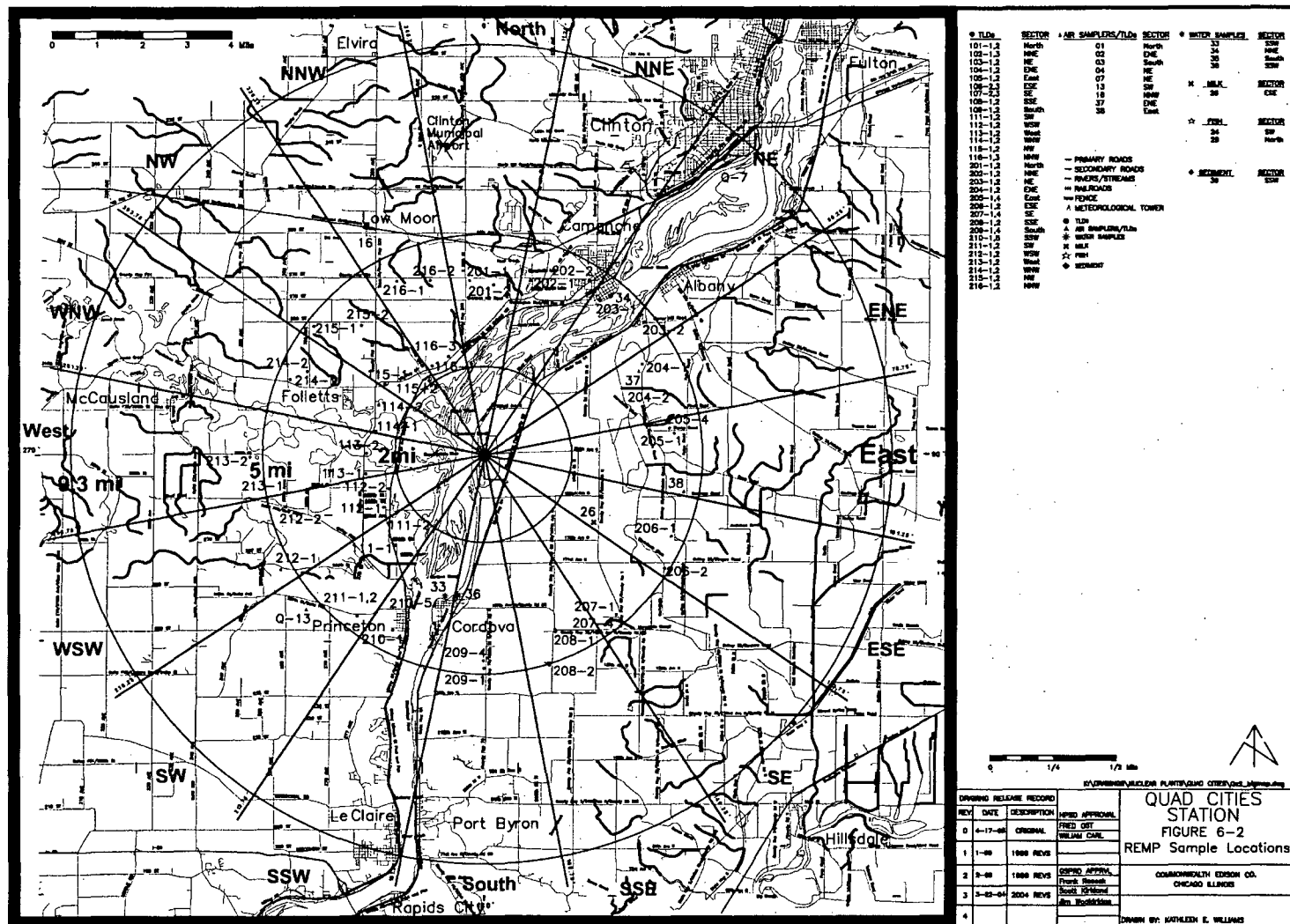


Figure B-1
Quad Cities REMP Sample Locations – 2 Mile Radius, 2006



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 QUAD CITIES NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	Q-33	Q-34
JAN	5.0 \pm 1.8	4.5 \pm 1.8
FEB	4.8 \pm 1.7	5.4 \pm 1.7
MAR	4.6 \pm 1.8	4.7 \pm 1.8
APR	8.0 \pm 2.1	7.3 \pm 2.1
MAY	6.6 \pm 2.3	5.9 \pm 2.2
JUN	4.6 \pm 1.9	6.4 \pm 2.0
JUL	5.9 \pm 2.0	4.5 \pm 2.0
AUG	4.6 \pm 1.8	5.5 \pm 1.8
SEP	4.5 \pm 1.9	4.2 \pm 1.9
OCT	4.7 \pm 1.7	4.8 \pm 1.7
NOV	3.6 \pm 1.7	4.2 \pm 1.7
DEC	3.5 \pm 1.8	2.7 \pm 1.8
MEAN	5.0 \pm 2.5	5.0 \pm 2.4

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

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	Q-33	Q-34
JAN-MAR	< 188	< 187
APR-JUN	< 177	< 185
JUL-SEP	< 145	< 145
OCT-DEC	< 141	< 142
MEAN	163 \pm 47	165 \pm 49

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

RESULTS IN UNITS OF PCI/LITER \pm 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
Q-33 JAN	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 11	< 3	< 3	< 21	< 7
FEB	< 3	< 3	< 7	< 3	< 7	< 3	< 6	< 10	< 4	< 3	< 22	< 7
MAR	< 3	< 3	< 7	< 2	< 6	< 3	< 5	< 15	< 3	< 3	< 27	< 8
APR	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 2	< 25	< 9
MAY	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 13	< 1	< 1	< 14	< 4
JUN	< 3	< 3	< 7	< 3	< 7	< 3	< 6	< 13	< 3	< 3	< 26	< 9
JUL	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 13	< 1	< 1	< 15	< 5
AUG	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 20	< 6
SEP	< 1	< 1	< 3	< 1	< 3	< 2	< 2	< 6	< 1	< 1	< 11	< 4
OCT	< 7	< 8	< 21	< 8	< 13	< 8	< 15	< 8	< 6	< 7	< 11	< 4
NOV	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 15	< 4	< 4	< 29	< 10
DEC	< 3	< 2	< 7	< 2	< 4	< 3	< 5	< 14	< 2	< 3	< 25	< 7
MEAN	3 \pm 3	3 \pm 4	7 \pm 10	3 \pm 4	5 \pm 7	3 \pm 4	5 \pm 7	12 \pm 6	2 \pm 3	3 \pm 3	20 \pm 13	7 \pm 4
Q-34 JAN	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 5
FEB	< 3	< 4	< 7	< 3	< 8	< 4	< 6	< 11	< 4	< 3	< 24	< 8
MAR	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 20	< 6
APR	< 3	< 3	< 6	< 2	< 6	< 3	< 5	< 15	< 3	< 3	< 26	< 9
MAY	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 17	< 1	< 1	< 33	< 11
JUN	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 9	< 2	< 2	< 18	< 6
JUL	< 1	< 1	< 2	< 1	< 1	< 1	< 2	< 13	< 1	< 1	< 15	< 5
AUG	< 2	< 3	< 6	< 3	< 4	< 3	< 5	< 13	< 2	< 2	< 42	< 14
SEP	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 8	< 2	< 2	< 16	< 5
OCT	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 13	< 4
NOV	< 4	< 4	< 10	< 4	< 8	< 5	< 8	< 13	< 4	< 4	< 31	< 9
DEC	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 7
MEAN	2 \pm 2	2 \pm 2	5 \pm 4	2 \pm 2	4 \pm 4	2 \pm 2	4 \pm 4	12 \pm 6	2 \pm 2	2 \pm 2	23 \pm 17	7 \pm 6

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

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION		
PERIOD	Q-35	Q-36
JAN-MAR	< 101	< 100
APR-JUN	< 173	< 173
JUL-SEP	< 161	< 166
OCT-DEC	< 178	< 179
MEAN	153 \pm 71	155 \pm 73

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

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC COLLECTION		MN-54	CO-58	FE-59	CO-60	ZN-65	NB-95	ZR-95	CS-134	CS-137	BA-140	LA-140
PERIOD												
Q-35	JAN	< 8	< 8	< 14	< 9	< 21	< 8	< 12	< 11	< 8	< 36	< 12
	APR	< 5	< 5	< 11	< 4	< 11	< 5	< 9	< 5	< 5	< 29	< 10
	JUL	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 1	< 1	< 18	< 6
	OCT	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 1	< 1	< 19	< 7
	MEAN	4 \pm 6	4 \pm 6	8 \pm 11	4 \pm 7	9 \pm 17	4 \pm 6	6 \pm 9	5 \pm 9	4 \pm 6	25 \pm 17	9 \pm 5
Q-36	JAN	< 7	< 6	< 13	< 7	< 16	< 7	< 12	< 9	< 6	< 29	< 11
	APR	< 5	< 6	< 11	< 5	< 12	< 6	< 11	< 6	< 6	< 33	< 11
	JUL	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 1	< 1	< 14	< 4
	OCT	< 2	< 2	< 4	< 6	< 3	< 2	< 3	< 1	< 2	< 22	< 7
	MEAN	4 \pm 6	4 \pm 5	8 \pm 10	5 \pm 5	8 \pm 14	4 \pm 6	7 \pm 10	4 \pm 7	4 \pm 6	24 \pm 17	8 \pm 7

TABLE C-III.1

**CONCENTRATIONS OF GAMMA EMITTERS IN FISH SAMPLES COLLECTED IN
THE VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006**

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	MN-54	CO-58	FE-59	CO-60	ZN-65	ZRNB-95	CS-134	CS-137	BALA-140
Q-24										
Channel Catfish	05/10/06	< 54	< 75	< 223	< 100	< 162	< 85	< 69	< 65	< 395
Carp	05/11/06	< 79	< 109	< 251	< 72	< 206	< 124	< 92	< 90	< 686
Carp	10/18/06	< 29	< 43	< 119	< 27	< 66	< 46	< 24	< 27	< 800
Largemouth Bass	10/18/06	< 33	< 52	< 153	< 31	< 79	< 56	< 33	< 34	< 809
	MEAN	49 \pm 45	70 \pm 59	187 \pm 122	58 \pm 70	128 \pm 134	78 \pm 70	55 \pm 63	54 \pm 58	673 \pm 387
Q-29										
Channel Catfish	05/10/06	< 130	< 130	< 260	< 130	< 260	< 200	< 100	< 100	< 300
Common Carp	05/10/06	< 130	< 130	< 260	< 130	< 260	< 200	< 100	< 100	< 300
Common Carp	10/18/06	< 62	< 38	< 131	< 48	< 100	< 48	< 44	< 55	< 91
Smallmouth Buffalo	10/18/06	< 52	< 67	< 128	< 67	< 140	< 70	< 58	< 57	< 150
	MEAN	93 \pm 85	91 \pm 93	195 \pm 151	94 \pm 85	190 \pm 165	130 \pm 164	75 \pm 58	78 \pm 51	210 \pm 213

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

RESULTS IN UNITS OF PCI/KG DRY \pm 2 SIGMA

STC	COLLECTION PERIOD	MN-54	CO-58	FE-59	CO-60	ZN-65	ZRNB-95	CS-134	CS-137	BALA-140
Q-39	05/19/06	< 104	< 130	< 330	< 100	< 291	< 144	< 148	< 106	< 547
	10/06/06	< 55	< 68	< 158	< 63	< 124	< 82	< 49	< 67	< 278
	MEAN	80 \pm 69	99 \pm 88	244 \pm 243	81 \pm 53	208 \pm 236	113 \pm 88	98 \pm 140	87 \pm 55	413 \pm 380

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

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

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

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

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

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 QUAD CITIES NUCLEAR POWER STATION, 2006

GROUP I - NEAR SITE LOCATIONS				GROUP II - FAR FIELD LOCATIONS				GROUP III - CONTROL LOCATIONS			
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	12	29	19 ± 9	12/30/05 - 02/03/06	16	28	20 ± 8	12/30/05 - 02/03/06	16	30	21 ± 12
02/03/06 - 03/03/06 < 5 (1)	28		18 ± 12	02/03/06 - 03/03/06	15	30	20 ± 8	02/03/06 - 03/03/06	18	24	21 ± 5
03/03/06 - 03/31/06	8	16	13 ± 5	03/03/06 - 03/31/06	7	18	12 ± 6	03/03/06 - 03/31/06	8	17	12 ± 7
03/31/06 - 04/28/06	13	24	17 ± 7	03/31/06 - 04/28/06	11	22	17 ± 7	03/31/06 - 04/28/06	10	20	14 ± 9
04/28/06 - 06/02/06 < 5	20		13 ± 9	04/28/06 - 06/02/06 < 5	20		13 ± 9	04/28/06 - 06/02/06	7	20	14 ± 11
06/02/06 - 06/30/06	11	21	16 ± 4	06/02/06 - 06/30/06	12	23	16 ± 5	06/02/06 - 06/30/06	15	20	17 ± 6
06/30/06 - 07/28/06	17	27	22 ± 6	06/30/06 - 07/28/06	19	32	24 ± 8	06/30/06 - 07/28/06	23	28	26 ± 5
07/28/06 - 09/01/06	7	36	23 ± 13	07/28/06 - 09/01/06	7	33	23 ± 12	07/28/06 - 09/01/06	18	29	23 ± 8
09/01/06 - 09/29/06	16	25	19 ± 5	09/01/06 - 09/29/06	14	25	19 ± 6	09/01/06 - 09/29/06	18	24	21 ± 6
09/29/06 - 11/04/06	11	28	18 ± 9	09/29/06 - 11/04/06	10	28	19 ± 9	09/29/06 - 11/04/06	14	26	21 ± 9
11/04/06 - 12/01/06	18	36	26 ± 9	11/04/06 - 12/01/06	16	34	27 ± 12	11/04/06 - 12/01/06	17	29	25 ± 14
12/01/06 - 12/29/06	20	33	28 ± 8	12/01/06 - 12/29/06	24	33	28 ± 6	12/01/06 - 12/29/06	24	33	29 ± 9
12/30/05 - 12/29/06 < 5	36		19 ± 9	12/30/05 - 12/29/06 < 5	34		20 ± 10	12/30/05 - 12/29/06	7	33	20 ± 11

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-V.3

**CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006**

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

STC	COLLECTION PERIOD		MN-54	CO-58	FE-59	CO-60	ZN-65	ZRNB-95	CS-134	CS-137	BALA140
Q-01	12/30/05	03/31/06	< 6	< 12	< 35	< 5	< 15	< 12	< 6	< 4	< 360
	03/31/06	06/30/06	< 2	< 3	< 11	< 3	< 4	< 2	< 2	< 2	< 51
	06/30/06	09/29/06	< 1	< 4	< 12	< 1	< 5	< 4	< 2	< 2	< 206
	09/29/06	12/29/06	< 2	< 3	< 7	< 2	< 6	< 3	< 2	< 1	< 14
	MEAN		3 \pm 4	5 \pm 9	16 \pm 26	3 \pm 3	7 \pm 10	5 \pm 9	3 \pm 4	3 \pm 3	158 \pm 317
Q-02	12/30/05	03/31/06	< 6	< 11	< 31	< 5	< 14	< 9	< 6	< 7	< 474
	03/31/06	06/30/06	< 4	< 9	< 17	< 5	< 11	< 8	< 5	< 5	< 76
	06/30/06	09/29/06	< 2	< 4	< 12	< 1	< 7	< 4	< 2	< 2	< 302
	09/29/06	12/29/06	< 2	< 2	< 6	< 3	< 5	< 3	< 2	< 1	< 16
	MEAN		4 \pm 4	6 \pm 8	17 \pm 21	3 \pm 4	9 \pm 8	6 \pm 6	4 \pm 5	4 \pm 5	217 \pm 422
Q-03	12/30/05	03/31/06	< 4	< 10	< 30	< 5	< 14	< 11	< 5	< 5	< 374
	03/31/06	06/30/06	< 3	< 2	< 14	< 4	< 6	< 5	< 2	< 2	< 64
	06/30/06	09/29/06	< 1	< 2	< 6	< 1	< 3	< 3	< 1	< 1	< 156
	09/29/06	12/29/06	< 2	< 3	< 7	< 3	< 6	< 4	< 3	< 3	< 10
	MEAN		2 \pm 2	4 \pm 8	14 \pm 22	3 \pm 3	7 \pm 9	5 \pm 7	3 \pm 4	3 \pm 4	151 \pm 321
Q-04	12/30/05	03/31/06	< 6	< 12	< 29	< 4	< 17	< 10	< 5	< 5	< 365
	03/31/06	06/30/06	< 3	< 4	< 8	< 3	< 5	< 4	< 2	< 2	< 51
	06/30/06	09/29/06	< 2	< 5	< 12	< 2	< 5	< 3	< 2	< 2	< 207
	09/29/06	12/29/06	< 3	< 3	< 7	< 2	< 5	< 4	< 2	< 2	< 10
	MEAN		3 \pm 3	6 \pm 8	14 \pm 21	3 \pm 3	8 \pm 12	5 \pm 6	3 \pm 3	3 \pm 4	158 \pm 324
Q-07	12/30/05	03/31/06	< 4	< 11	< 22	< 7	< 15	< 10	< 6	< 6	< 412
	03/31/06	06/30/06	< 3	< 5	< 11	< 4	< 7	< 4	< 3	< 2	< 145
	06/30/06	09/29/06	< 3	< 5	< 14	< 3	< 6	< 5	< 2	< 2	< 279
	09/29/06	12/29/06	< 2	< 1	< 3	< 2	< 3	< 2	< 1	< 2	< 8
	MEAN		3 \pm 2	5 \pm 8	12 \pm 16	4 \pm 4	8 \pm 10	5 \pm 7	3 \pm 4	3 \pm 4	211 \pm 347

TABLE C-V.3

**CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006**

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

STC	COLLECTION PERIOD		MN-54	CO-58	FE-59	CO-60	ZN-65	ZRNB-95	CS-134	CS-137	BALA140
Q-13	12/30/05	03/31/06	< 5	< 11	< 31	< 7	< 15	< 9	< 7	< 5	< 358
	03/31/06	06/30/06	< 4	< 6	< 20	< 6	< 8	< 8	< 4	< 3	< 128
	06/30/06	09/29/06	< 2	< 3	< 13	< 1	< 5	< 4	< 2	< 2	< 291
	09/29/06	12/29/06	< 3	< 3	< 7	< 2	< 6	< 3	< 2	< 2	< 12
	MEAN		4 \pm 3	6 \pm 7	18 \pm 20	4 \pm 5	9 \pm 9	6 \pm 6	4 \pm 4	3 \pm 3	197 \pm 314
Q-16	12/30/05	03/31/06	< 5	< 9	< 21	< 6	< 10	< 11	< 5	< 5	< 346
	03/31/06	06/30/06	< 3	< 5	< 11	< 1	< 8	< 4	< 3	< 3	< 101
	06/30/06	09/29/06	< 1	< 2	< 10	< 1	< 5	< 3	< 1	< 1	< 110
	09/29/06	12/29/06	< 3	< 3	< 7	< 3	< 6	< 2	< 2	< 2	< 10
	MEAN		3 \pm 3	5 \pm 6	12 \pm 12	3 \pm 5	7 \pm 5	5 \pm 8	3 \pm 4	3 \pm 3	142 \pm 287
Q-37	12/30/05	03/31/06	< 8	< 11	< 17	< 4	< 12	< 10	< 6	< 4	< 402
	03/31/06	06/30/06	< 3	< 3	< 11	< 3	< 7	< 6	< 2	< 2	< 93
	06/30/06	09/29/06	< 2	< 4	< 12	< 2	< 5	< 5	< 1	< 2	< 250
	09/29/06	12/29/06	< 2	< 3	< 9	< 2	< 6	< 4	< 3	< 2	< 21
	MEAN		4 \pm 5	5 \pm 7	12 \pm 7	3 \pm 2	7 \pm 6	6 \pm 6	3 \pm 4	2 \pm 2	192 \pm 340
Q-38	12/30/05	03/31/06	< 7	< 10	< 39	< 6	< 12	< 11	< 6	< 6	< 449
	03/31/06	06/30/06	< 4	< 4	< 16	< 3	< 9	< 5	< 2	< 3	< 91
	06/30/06	09/29/06	< 2	< 4	< 12	< 1	< 5	< 4	< 1	< 1	< 127
	09/29/06	12/29/06	< 3	< 3	< 10	< 2	< 6	< 3	< 3	< 3	< 22
	MEAN		4 \pm 5	5 \pm 6	19 \pm 26	3 \pm 4	8 \pm 6	6 \pm 8	3 \pm 4	3 \pm 4	172 \pm 379

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

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

WEEK	GROUP I				GROUP II				GROUP III
	Q-01	Q-02	Q-03	Q-04	Q-13	Q-16	Q-37	Q-38	Q-07
1	< 39	< 39	< 38	< 39	< 41	< 39	< 44	< 44	< 26
2	< 19	< 37	< 36	< 37	< 33	< 32	< 32	< 32	< 37
3	< 38	< 38	< 37	< 38	< 65	< 63	< 65	< 65	< 28
4	< 49	< 37	< 48	< 49	< 48	< 46	< 54	< 54	< 42
5	< 38	< 38	< 37	< 38	< 37	< 36	< 40	< 40	< 25
6	< 39	< 39	< 38	< 39	< 42	< 40	< 37	< 37	< 43
7	< 46	< 47	< 45	< 46	< 39	< 38	< 48	< 48	< 28
8	< 26	< 28	< 23	< 29	< 52	< 51	< 35	< 34	< 42
9	< 52	< 52	< 50	< 52	< 39	< 38	< 48	< 48	< 27
10	< 54	< 65	< 54	< 36	< 65	< 63	< 55	< 55	< 61
11	< 38	< 37	< 37	< 38	< 29	< 28	< 32	< 25	< 29
12	< 46	< 45	< 45	< 46	< 14	< 14	< 14	< 14	< 30
13	< 51	< 50	< 50	< 51	< 40	< 39	< 41	< 41	< 32
14	< 53	< 51	< 51	< 53	< 35	< 45	< 45	< 45	< 47
15	< 20	< 19	< 19	< 20	< 16	< 15	< 19	< 19	< 12
16	< 59	< 57	< 57	< 59	< 56	< 36	< 51	< 51	< 57
17	< 52	< 50	< 50	< 51	< 62	< 62	< 49	< 49	< 49
18	< 61	< 59	< 59	< 61	< 51	< 51	< 31	< 57	< 51
19	< 68	< 66	< 66	< 68	< 57	< 57	< 57	< 56	< 37
20	< 65	< 63	< 62	< 64	< 65	< 64	< 57	< 57	< 39
21	< 55	< 53	< 53	< 55	< 65	< 65	< 53	< 53	< 49
22	< 49	< 47	< 47	< 49	< 42	< 40	< 46	< 35	< 41
23	< 64	< 62	< 62	< 64	< 69	< 66	< 65	< 65	< 44
24	< 67	< 65	< 64	< 67	< 59	< 57	< 56	< 56	< 37
25	< 68	< 66	< 66	< 68	< 55	< 55	< 54	< 35	< 55
26	< 50	< 48	< 48	< 50	< 68	< 68	< 69	< 69	< 38
27	< 67	< 65	< 65	< 67	< 65	< 65	< 58	< 58	< 57
28	< 18	< 22	< 22	< 22	< 61	< 62	< 58	< 46	< 23
29	< 55	< 42	< 53	< 55	< 55	< 56	< 56	< 56	< 53
30	< 46	< 45	< 35	< 46	< 46	< 45	< 42	< 42	< 48
31	< 31	< 29	< 29	< 29	< 28	< 28	< 27	< 27	< 23
32	< 60	< 58	< 58	< 60	< 46	< 46	< 56	< 56	< 39
33	< 20	< 20	< 20	< 20	< 48	< 48	< 42	< 42	< 18
34	< 49	< 47	< 47	< 49	< 68	< 68	< 55	< 55	< 46
35	< 48	< 47	< 47	< 48	< 42	< 43	< 47	< 26	< 43
36	< 56	< 55	< 55	< 56	< 31	< 57	< 59	< 59	< 57
37	< 56	< 54	< 54	< 56	< 63	< 63	< 49	< 27	< 64
38	< 24	< 42	< 42	< 43	< 37	< 37	< 41	< 41	< 38
39	< 34	< 42	< 42	< 43	< 49	< 51	< 50	< 50	< 41
40	< 68	< 66	< 66	< 68	< 67	< 67	< 33	< 42	< 68
41	< 30	< 29	< 29	< 30	< 68	< 68	< 37	< 68	< 45
42	< 63	< 61	< 61	< 63	< 65	< 65	< 52	< 52	< 36
43	< 37	< 36	< 36	< 37	< 29	< 29	< 41	< 23	< 29
44	< 59	< 57	< 57	< 59	< 64	< 64	< 50	< 28	< 64
45	< 27	< 47	< 47	< 48	< 42	< 42	< 39	< 39	< 50
46	< 68	< 66	< 66	< 68	< 67	< 67	< 62	< 62	< 53
47	< 69	< 66	< 66	< 69	< 63	< 64	< 66	< 36	< 62
48	< 14	< 22	< 22	< 23	< 28	< 29	< 22	< 22	< 30
49	< 60	< 59	< 32	< 60	< 51	< 51	< 57	< 57	< 52
50	< 33	< 32	< 32	< 20	< 47	< 47	< 38	< 38	< 40
51	< 51	< 48	< 48	< 50	< 38	< 37	< 41	< 40	< 22
52	< 27	< 26	< 26	< 27	< 35	< 35	< 33	< 33	< 18
MEAN	47 ± 31	47 ± 27	46 ± 28	48 ± 29	49 ± 29	49 ± 29	46 ± 25	44 ± 27	41 ± 27

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

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION	INDICATOR FARM
PERIOD	Q-26
01/06/06	< 1.0
02/03/06	< 0.4
03/03/06	< 0.8
04/07/06	< 0.8
05/05/06	< 0.8
05/19/06	< 0.5
06/02/06	< 1.7 (1)
06/16/06	< 0.5
06/30/06	< 4.3 (1)
07/14/06	< 0.8
07/28/06	< 0.7
08/11/06	< 0.7
08/26/06	< 0.8
09/08/06	< 0.4
09/22/06	< 0.6
10/08/06	< 0.6
10/22/06	< 0.6
11/04/06	< 0.6
12/01/06	< 0.5
MEAN	0.9 \pm 1.7

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

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

RESULTS IN UNITS OF PCI/LITER \pm 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
Q-26	01/06/06	< 5	< 5	< 9	< 7	< 11	< 5	< 4	< 5	< 20	< 7
	02/03/06	< 7	< 7	< 13	< 7	< 16	< 7	< 6	< 6	< 27	< 9
	03/03/06	< 5	< 5	< 12	< 5	< 13	< 5	< 5	< 5	< 28	< 9
	04/07/06	< 6	< 7	< 16	< 7	< 17	< 7	< 6	< 7	< 38	< 12
	05/05/06	< 8	< 7	< 18	< 7	< 19	< 8	< 8	< 7	< 43	< 12
	05/19/06	< 9	< 9	< 20	< 9	< 20	< 9	< 11	< 10	< 39	< 11
	06/02/06	< 3	< 4	< 10	< 3	< 8	< 4	< 3	< 3	< 41	< 13
	06/16/06	< 7	< 7	< 18	< 7	< 17	< 8	< 7	< 7	< 40	< 14
	06/30/06	< 2	< 2	< 5	< 2	< 5	< 2	< 2	< 2	< 11	< 3
	07/14/06	< 4	< 4	< 8	< 4	< 9	< 4	< 4	< 4	< 20	< 6
	07/28/06	< 5	< 6	< 13	< 6	< 12	< 6	< 5	< 6	< 31	< 11
	08/11/06	< 5	< 6	< 15	< 7	< 14	< 7	< 5	< 7	< 37	< 8
	08/26/06	< 8	< 9	< 16	< 8	< 17	< 8	< 8	< 8	< 55	< 13
	09/08/06	< 5	< 5	< 13	< 6	< 14	< 5	< 5	< 6	< 38	< 9
	09/22/06	< 8	< 8	< 20	< 8	< 19	< 6	< 8	< 8	< 41	< 13
	10/08/06	< 5	< 5	< 13	< 4	< 10	< 5	< 4	< 5	< 42	< 14
	10/22/06	< 4	< 5	< 12	< 5	< 11	< 6	< 4	< 5	< 52	< 13
	11/04/06	< 6	< 6	< 15	< 6	< 15	< 8	< 5	< 7	< 39	< 14
	12/01/06	< 7	< 6	< 17	< 6	< 15	< 7	< 5	< 6	< 44	< 11
	MEAN	6 \pm 4	6 \pm 4	14 \pm 8	6 \pm 4	14 \pm 8	6 \pm 3	6 \pm 4	6 \pm 4	36 \pm 22	11 \pm 6

TABLE C-VIII.1 CONCENTRATIONS OF GAMMA EMITTERS IN FOOD PRODUCT SAMPLES COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	MN-54	CO-58	FE-59	CO-60	ZN-65	ZRNB-95	I-131	CS-134	CS-137	BALA140
Q-QUAD 1 Potatoes	07/31/06	< 6	< 7	< 19	< 7	< 16	< 8	< 37	< 6	< 7	< 19
Q-QUAD 1 Rhubarb Leaves	07/31/06	< 13	< 11	< 37	< 11	< 24	< 13	< 57	< 11	< 12	< 30
	MEAN	10 \pm 9	9 \pm 5	28 \pm 26	9 \pm 6	20 \pm 11	10 \pm 7	47 \pm 28	9 \pm 7	9 \pm 7	24 \pm 16
Q-QUAD 2 Beets	07/31/06	< 6	< 7	< 17	< 7	< 14	< 7	< 33	< 6	< 7	< 18
Q-QUAD 2 Cabbage	07/31/06	< 10	< 12	< 27	< 11	< 23	< 12	< 56	< 10	< 12	< 23
	MEAN	8 \pm 6	9 \pm 7	22 \pm 15	9 \pm 6	19 \pm 13	10 \pm 7	45 \pm 33	8 \pm 5	9 \pm 7	21 \pm 7
Q-QUAD 3 Broccoli	07/31/06	< 10	< 11	< 28	< 13	< 23	< 10	< 56	< 9	< 10	< 29
Q-QUAD 3 Horseradish	07/31/06	< 11	< 11	< 29	< 14	< 25	< 12	< 53	< 10	< 11	< 31
	MEAN	10 \pm 1	11 \pm 1	29 \pm 2	14 \pm 2	24 \pm 3	11 \pm 2	54 \pm 4	9 \pm 1	11 \pm 1	30 \pm 3
Q-QUAD 4 Kale	07/31/06	< 11	< 14	< 27	< 11	< 29	< 15	< 59	< 11	< 12	< 33
Q-QUAD 4 Onions	07/31/06	< 6	< 6	< 16	< 6	< 12	< 7	< 34	< 5	< 6	< 19
	MEAN	8 \pm 7	10 \pm 10	22 \pm 16	8 \pm 7	21 \pm 23	11 \pm 11	47 \pm 36	8 \pm 8	9 \pm 8	26 \pm 21
Q-QUAD 1 - CONTROL Asparagus	07/31/06	< 9	< 10	< 23	< 9	< 22	< 11	< 57	< 8	< 9	< 22
Q-QUAD 1 - CONTROL Onions	07/31/06	< 11	< 12	< 23	< 11	< 26	< 11	< 57	< 9	< 11	< 26
Q-QUAD 1 - CONTROL Rhubarb Leaves	07/31/06	< 11	< 16	< 35	< 11	< 32	< 13	< 58	< 11	< 13	< 27
	MEAN	10 \pm 2	13 \pm 6	27 \pm 14	10 \pm 2	27 \pm 10	11 \pm 2	57 \pm 1	10 \pm 3	11 \pm 4	25 \pm 6

TABLE C-IX.1 QUARTERLY TLD RESULTS FOR QUAD CITIES 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
Q-01-1	22.0 \pm 8.2	26	19	18	25
Q-01-2	20.3 \pm 5.0	23	20	17	21
Q-02-1	22.3 \pm 6.6	26	20	19	24
Q-02-2	21.0 \pm 7.1	26	19	18	21
Q-03-1	20.8 \pm 6.6	24	19	17	23
Q-03-2	21.3 \pm 6.6	25	19	18	23
Q-04-1	22.3 \pm 8.1	27	20	18	24
Q-04-2	21.8 \pm 6.6	26	21	18	22
Q-07-1	23.8 \pm 6.0	27	23	20	25
Q-07-2	23.8 \pm 6.0	27	23	20	25
Q-13-1	24.0 \pm 5.2	27	23	21	25
Q-13-2	22.8 \pm 8.5	28	21	18	24
Q-16-1	21.0 \pm 6.7	25	20	17	22
Q-16-2	20.5 \pm 6.0	23	19	17	23
Q-37-1	21.8 \pm 6.8	26	19	19	23
Q-37-2	21.5 \pm 6.0	25	19	19	23
Q-38-1	21.3 \pm 6.0	25	20	18	22
Q-38-2	21.8 \pm 7.7	26	19	18	24
Q-101-1	22.0 \pm 6.9	25	19	19	25
Q-101-2	22.8 \pm 6.0	26	22	19	24
Q-102-1	24.3 \pm 7.5	29	23	20	25
Q-102-3	21.3 \pm 7.7	25	19	17	24
Q-103-1	21.5 \pm 7.0	25	18	19	24
Q-103-2	20.0 \pm 5.2	23	19	17	21
Q-104-1	21.3 \pm 8.1	26	19	17	23
Q-104-2	21.5 \pm 6.6	24	21	17	24
Q-105-1	21.5 \pm 8.2	26	18	18	24
Q-105-2	21.3 \pm 6.4	26	19	20	20
Q-106-2	24.3 \pm 13	26	22	17	32
Q-106-3	21.5 \pm 6.8	25	21	17	23
Q-107-2	20.8 \pm 7.7	25	18	17	23
Q-107-3	21.0 \pm 7.3	23	19	17	25
Q-108-1	25.7 \pm 3.1	26	(1)	27	(2) 24
Q-108-2	20.8 \pm 7.7	25	18	17	23
Q-109-1	22.5 \pm 7.7	28	19	21	22
Q-109-2	21.8 \pm 5.5	25	19	20	23
Q-111-1	23.3 \pm 6.6	27	23	19	24
Q-111-2	21.3 \pm 7.0	23	20	17	25
Q-112-1	21.8 \pm 4.1	24	20	20	23
Q-112-2	22.0 \pm 7.5	27	21	18	22
Q-113-1	21.0 \pm 3.7	23	20	19	22
Q-113-2	21.0 \pm 6.5	25	21	17	21
Q-114-1	20.3 \pm 7.7	24	18	16	23
Q-114-2	23.0 \pm 7.7	28	20	20	24
Q-115-1	22.5 \pm 5.8	26	22	19	23
Q-115-2	21.0 \pm 7.3	25	19	17	23
Q-116-1	24.0 \pm 7.3	28	22	20	26
Q-116-3	22.0 \pm 6.3	26	20	19	23

(1) TLD NOT CHANGED

(2) TLD WAS IN SERVICE APRIL THROUGH SEPTEMBER AND READ 27 MREM WHICH EQUALS AN AVERAGE OF 13.5 MREM/QUARTER

TABLE C-IX.1 QUARTERLY TLD RESULTS FOR QUAD CITIES NUCLEAR POWER STATION, 2006

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

STATION CODE	MEAN \pm 2 S. D.	JAN - MAR	APR-JUN	JUL-SEP	OCT-DEC
Q-201-1	23.5 \pm 7.4	28	23	19	24
Q-201-2	23.5 \pm 6.0	25	21	21	27
Q-202-1	21.3 \pm 5.7	25	19	19	22
Q-202-2	21.0 \pm 6.7	25	20	17	22
Q-203-1	22.8 \pm 3.0	24	22	21	24
Q-203-2	25.0 \pm 5.2	28	24	22	26
Q-204-1	24.5 \pm 7.4	29	22	21	26
Q-204-2	26.3 \pm 4.1	28	25	24	28
Q-205-1	27.3 \pm 11	29	27	20	33
Q-205-4	25.3 \pm 6.0	29	24	22	26
Q-206-1	23.0 \pm 8.8	28	21	18	25
Q-206-2	22.3 \pm 9.4	29	21	18	21
Q-207-1	24.8 \pm 6.4	28	22	22	27
Q-207-4	23.0 \pm 5.9	26	21	20	25
Q-208-1	22.0 \pm 6.7	26	21	18	23
Q-208-2	25.0 \pm 5.9	28	23	22	27
Q-209-1	22.3 \pm 10	27	23	20	26
Q-209-4	23.5 \pm 6.8	28	20	22	24
Q-210-1	22.3 \pm 8.1	28	20	19	22
Q-210-4	23.8 \pm 7.5	28	23	19	25
Q-211-1	25.3 \pm 3.0	27	24	24	26
Q-211-2	25.0 \pm 2.3	26	24	24	26
Q-212-1	22.0 \pm 9.1	28	21	22	17
Q-212-2	22.0 \pm 5.2	25	21	19	23
Q-213-1	22.3 \pm 6.6	26	20	19	24
Q-213-2	21.5 \pm 6.8	25	21	17	23
Q-214-1	24.3 \pm 7.9	29	21	21	26
Q-214-2	25.0 \pm 5.9	28	22	23	27
Q-215-1	23.8 \pm 7.5	27	21	20	27
Q-215-2	26.0 \pm 7.1	30	23	23	28
Q-216-1	24.3 \pm 7.5	27	24	19	27
Q-216-2	24.8 \pm 8.1	29	23	20	27

TABLE C-IX.2 MEAN QUARTERLY TLD RESULTS FOR THE INNER RING, OUTER RING, OTHER AND CONTROL LOCATIONS FOR QUAD CITIES 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	25.5 \pm 3.1	27.3 \pm 3.1	25.5 \pm 2.7	27.0 \pm 0.0
APR-JUN	20.0 \pm 3.1	22.1 \pm 3.5	19.8 \pm 2.2	23.0 \pm 0.0
JUL-SEP	18.6 \pm 4.2	20.5 \pm 4.0	18.1 \pm 2.0	20.0 \pm 0.0
OCT-DEC	23.6 \pm 4.1	25.1 \pm 5.6	23.1 \pm 2.5	25.0 \pm 0.0

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

RESULTS IN UNITS OF MILLI-ROENTGEN/QUARTER

LOCATION	SAMPLES ANALYZED	PERIOD MINIMUM	PERIOD MAXIMUM	PERIOD MEAN
INNER RING	119	16	32	21.9 \pm 6.6
OUTER RING	128	17	33	23.7 \pm 6.7
OTHER	64	17	28	21.6 \pm 6.2
CONTROL	8	20	27	23.8 \pm 5.5

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

OUTER RING STATIONS - Q-201-1, Q-202-2, Q-202-1, Q-202-2, Q-203-1, Q-203-2, Q-204-1, Q-204-2, Q-205-1, Q-205-4, Q-206-1, Q-206-2, Q-207-1, Q-207-4, Q-208-1, Q-208-2, Q-209-1, Q-209-4, Q-210-1, Q-210-4, Q-210-5 (1), Q-211-1, Q-211-2, Q-212-1, Q-212-2, Q-213-1, Q-213-2, Q-214-1, Q-214-2, Q-215-1, Q-215-2, Q-216-1, Q-216-2

OTHER STATIONS - Q-01-1, Q-01-2, Q-02-1, Q-02-2, Q-03-1, Q-03-2, Q-04-1, Q-04-2, Q-13-1, Q-13-2, Q-16-1, Q-16-2, Q-37-1, Q-37-2, Q-38-1, Q-38-2

CONTROL STATIONS - Q-07-1, Q-07-2

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

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

SURFACE WATER (TRITIUM LIQUID SCINTILLATION)

COLLECTION PERIOD	Q-33	Q-34
JAN-MAR	01/06/06 - 03/31/06	01/06/06 - 03/31/06
APR-JUN	04/07/06 - 06/30/06	04/07/06 - 06/30/06
JUL-SEP	07/07/06 - 09/29/06	07/07/06 - 09/29/06
OCT-DEC	10/06/06 - 12/29/06	10/06/06 - 12/29/06

SURFACE WATER (GROSS BETA & GAMMA SPECTROSCOPY)

COLLECTION PERIOD	Q-33	Q-34
JAN	01/06/06 - 01/28/06	01/06/06 - 01/28/06
FEB	02/04/06 - 02/24/06	02/04/06 - 02/24/06
MAR	03/03/06 - 03/31/06	03/03/06 - 03/31/06
APR	04/07/06 - 04/27/06	04/07/06 - 04/27/06
MAY	05/05/06 - 05/25/06	05/05/06 - 05/25/06
JUN	06/02/06 - 06/30/06	06/02/06 - 06/30/06
JUL	07/07/06 - 07/28/06	07/07/06 - 07/28/06
AUG	08/04/06 - 08/25/06	08/04/06 - 08/25/06
SEP	09/01/06 - 09/29/06	09/01/06 - 09/29/06
OCT	10/06/06 - 10/27/06	10/06/06 - 10/27/06
NOV	11/03/06 - 11/30/06	11/03/06 - 11/30/06
DEC	12/15/06 - 12/29/06	12/15/06 - 12/29/06

GROUND WATER (TRITIUM & GAMMA SPECTROSCOPY)

COLLECTION PERIOD	Q-35	Q-36
JAN-MAR	01/13/06	01/13/06
APR-JUN	04/21/06	04/21/06
JUL-SEP	07/14/06	07/14/06
OCT-DEC	10/13/06	10/13/06

AIR PARTICULATE (GAMMA SPECTROSCOPY)

COLLECTION PERIOD	Q-01	Q-02	Q-03	Q-04	Q-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 - 12/29/06	09/29/06 - 12/29/06	09/29/06 - 12/29/06	09/29/06 - 12/29/06	09/29/06 - 12/29/06

AIR PARTICULATE (GAMMA SPECTROSCOPY)

COLLECTION PERIOD	Q-13	Q-16	Q-37	Q-38
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
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
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
OCT-DEC	09/29/06 - 12/29/06	09/29/06 - 12/29/06	09/29/06 - 12/29/06	09/29/06 - 12/29/06

**SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE
VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006**

AIR PARTICULATE (GROSS BETA & I-131)

COLLECTION PERIOD	Q-01	Q-02	Q-03	Q-04	Q-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 - 01/28/06
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	01/28/06 - 02/04/06
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	02/04/06 - 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 - 02/18/06
8	02/17/06 - 02/25/06	02/17/06 - 02/25/06	02/17/06 - 02/25/06	02/17/06 - 02/25/06	02/18/06 - 02/24/06
9	02/25/06 - 03/03/06	02/25/06 - 03/03/06	02/25/06 - 03/03/06	02/25/06 - 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	03/09/06 - 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 - 04/15/06
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	04/15/06 - 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 - 04/27/06
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	04/27/06 - 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 - 05/25/06
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	05/25/06 - 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 - 08/12/06
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	08/12/06 - 08/18/06
34	08/18/06 - 08/26/06	08/18/06 - 08/26/06	08/18/06 - 08/26/06	08/18/06 - 08/26/06	08/18/06 - 08/25/06
35	08/26/06 - 09/01/06	08/26/06 - 09/01/06	08/26/06 - 09/01/06	08/26/06 - 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 - 09/14/06
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	09/14/06 - 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 - 10/08/06	09/29/06 - 10/08/06	09/29/06 - 10/08/06	09/29/06 - 10/08/06	09/29/06 - 10/06/06
41	10/08/06 - 10/15/06	10/08/06 - 10/15/06	10/08/06 - 10/15/06	10/08/06 - 10/15/06	10/06/06 - 10/13/06
42	10/15/06 - 10/22/06	10/15/06 - 10/22/06	10/15/06 - 10/22/06	10/15/06 - 10/22/06	10/13/06 - 10/20/06
43	10/22/06 - 10/27/06	10/22/06 - 10/27/06	10/22/06 - 10/27/06	10/22/06 - 10/27/06	10/20/06 - 10/27/06
44	10/27/06 - 11/04/06	10/27/06 - 11/04/06	10/27/06 - 11/04/06	10/27/06 - 11/04/06	10/27/06 - 11/03/06
45	11/04/06 - 11/11/06	11/04/06 - 11/11/06	11/04/06 - 11/11/06	11/04/06 - 11/11/06	11/03/06 - 11/10/06
46	11/11/06 - 11/17/06	11/11/06 - 11/17/06	11/11/06 - 11/17/06	11/11/06 - 11/17/06	11/10/06 - 11/16/06
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	11/16/06 - 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 - 11/30/06
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	11/30/06 - 12/08/06
50	12/08/06 - 12/16/06	12/08/06 - 12/16/06	12/08/06 - 12/16/06	12/08/06 - 12/16/06	12/08/06 - 12/15/06
51	12/16/06 - 12/22/06	12/16/06 - 12/22/06	12/16/06 - 12/22/06	12/16/06 - 12/22/06	12/15/06 - 12/22/06
52	12/22/06 - 12/29/06	12/22/06 - 12/29/06	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 QUAD CITIES NUCLEAR POWER STATION, 2006AIR PARTICULATE (GROSS BETA & I-131)

COLLECTION PERIOD	Q-13	Q-16	Q-37	Q-38
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
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
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
4	01/20/06 - 01/28/06	01/20/06 - 01/28/06	01/20/06 - 01/27/06	01/20/06 - 01/27/06
5	01/28/06 - 02/04/06	01/28/06 - 02/04/06	01/27/06 - 02/03/06	01/27/06 - 02/03/06
6	02/04/06 - 02/10/06	02/04/06 - 02/10/06	02/03/06 - 02/10/06	02/03/06 - 02/10/06
7	02/10/06 - 02/18/06	02/10/06 - 02/18/06	02/10/06 - 02/17/06	02/10/06 - 02/17/06
8	02/18/06 - 02/24/06	02/18/06 - 02/24/06	02/17/06 - 02/25/06	02/17/06 - 02/25/06
9	02/24/06 - 03/03/06	02/24/06 - 03/03/06	02/25/06 - 03/03/06	02/25/06 - 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
11	03/09/06 - 03/17/06	03/09/06 - 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
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
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
15	04/07/06 - 04/15/06	04/07/06 - 04/15/06	04/07/06 - 04/14/06	04/07/06 - 04/14/06
16	04/15/06 - 04/21/06	04/15/06 - 04/21/06	04/14/06 - 04/21/06	04/14/06 - 04/21/06
17	04/21/06 - 04/27/06	04/21/06 - 04/27/06	04/21/06 - 04/28/06	04/21/06 - 04/28/06
18	04/27/06 - 05/05/06	04/27/06 - 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
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
21	05/19/06 - 05/25/06	05/19/06 - 05/25/06	05/19/06 - 05/26/06	05/19/06 - 05/26/06
22	05/25/06 - 06/02/06	05/25/06 - 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
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
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
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
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
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
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
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
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 - 08/12/06	08/04/06 - 08/12/06	08/04/06 - 08/11/06	08/04/06 - 08/11/06
33	08/12/06 - 08/18/06	08/12/06 - 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 - 08/26/06	08/18/06 - 08/26/06
35	08/25/06 - 09/01/06	08/25/06 - 09/01/06	08/26/06 - 09/01/06	08/26/06 - 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 - 09/14/06	09/08/06 - 09/14/06	09/08/06 - 09/15/06	09/08/06 - 09/15/06
38	09/14/06 - 09/22/06	09/14/06 - 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 - 10/08/06	09/29/06 - 10/08/06
41	10/06/06 - 10/13/06	10/06/06 - 10/13/06	10/08/06 - 10/15/06	10/08/06 - 10/15/06
42	10/13/06 - 10/20/06	10/13/06 - 10/20/06	10/15/06 - 10/22/06	10/15/06 - 10/22/06
43	10/20/06 - 10/27/06	10/20/06 - 10/27/06	10/22/06 - 10/27/06	10/22/06 - 10/27/06
44	10/27/06 - 11/03/06	10/27/06 - 11/03/06	10/27/06 - 11/04/06	10/27/06 - 11/04/06
45	11/03/06 - 11/10/06	11/03/06 - 11/10/06	11/04/06 - 11/11/06	11/04/06 - 11/11/06
46	11/10/06 - 11/16/06	11/10/06 - 11/16/06	11/11/06 - 11/17/06	11/11/06 - 11/17/06
47	11/16/06 - 11/24/06	11/16/06 - 11/24/06	11/17/06 - 11/24/06	11/17/06 - 11/24/06
48	11/24/06 - 11/30/06	11/24/06 - 11/30/06	11/24/06 - 12/01/06	11/24/06 - 12/01/06
49	11/30/06 - 12/08/06	11/30/06 - 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 - 12/16/06	12/08/06 - 12/16/06
51	12/15/06 - 12/22/06	12/15/06 - 12/22/06	12/16/06 - 12/22/06	12/16/06 - 12/22/06
52	12/22/06 - 12/29/06	12/22/06 - 12/29/06	12/22/06 - 12/29/06	12/22/06 - 12/29/06

TLD

93 of 227

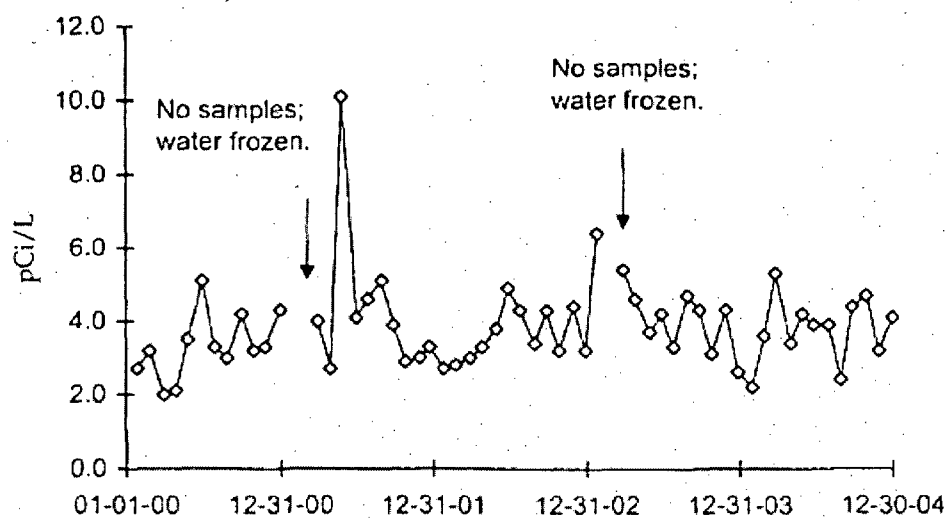
TABLE C-X.1 SUMMARY OF COLLECTION DATES FOR SAMPLES COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER STATION, 2006

TLD

STATION CODE	JAN - MAR	APR - JUN	JUL - SEP	OCT - DEC
Q-201-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-201-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-202-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-202-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-203-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-203-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-204-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-204-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-205-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-205-4	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-206-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-206-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-207-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-207-4	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-208-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-208-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-209-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-209-4	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-210-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-210-4	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-211-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-211-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-212-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-212-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-213-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-213-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-214-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-214-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-215-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-215-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-216-1	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07
Q-216-2	01/01/06 - 04/01/06	04/01/06 - 07/01/06	07/01/06 - 10/01/06	10/01/06 - 01/01/07

FIGURE C-1
Surface Water - Gross Beta - Stations Q-33 and Q-34 (C)
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-33 Cordova



Q-34 (C) Camanche

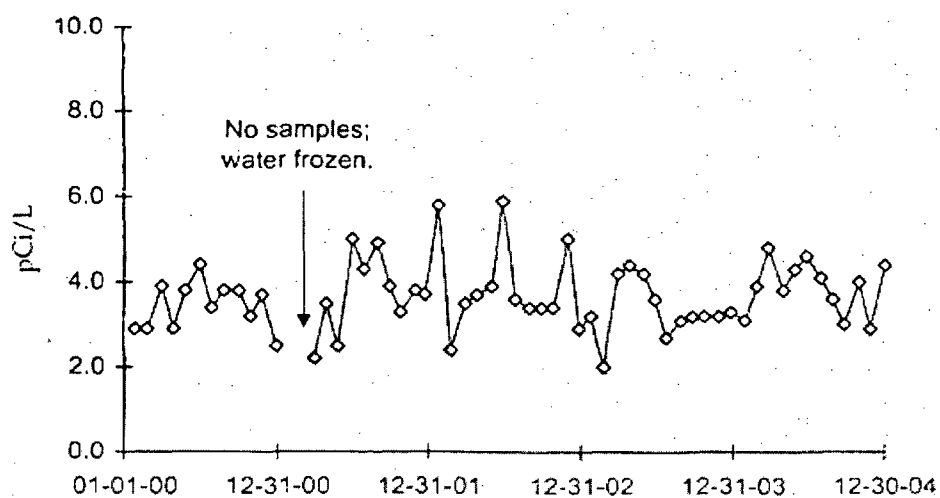
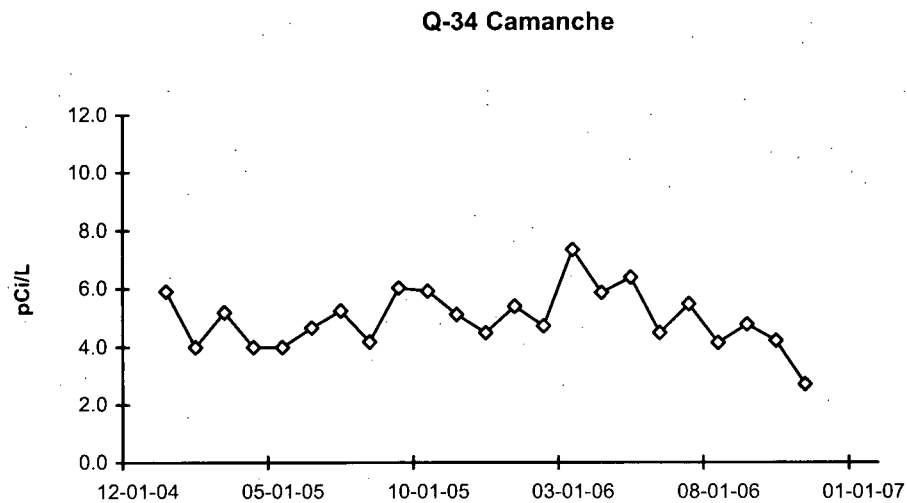
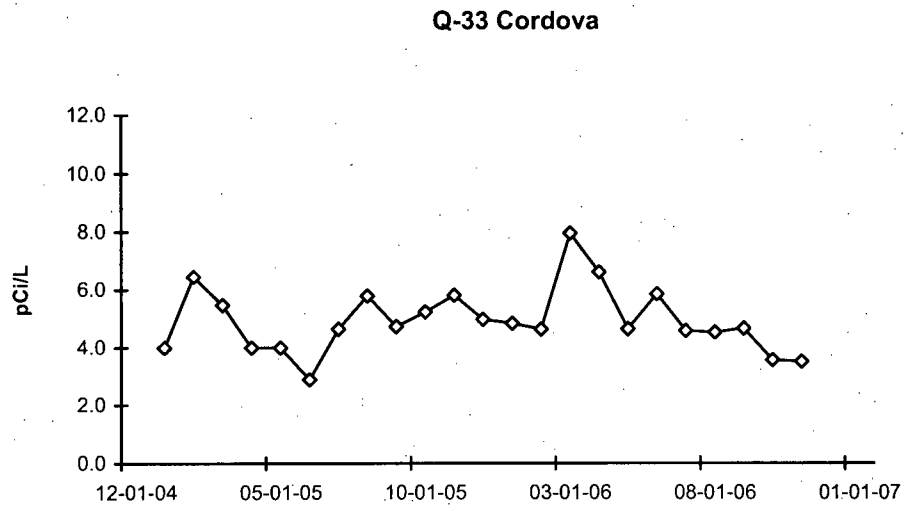


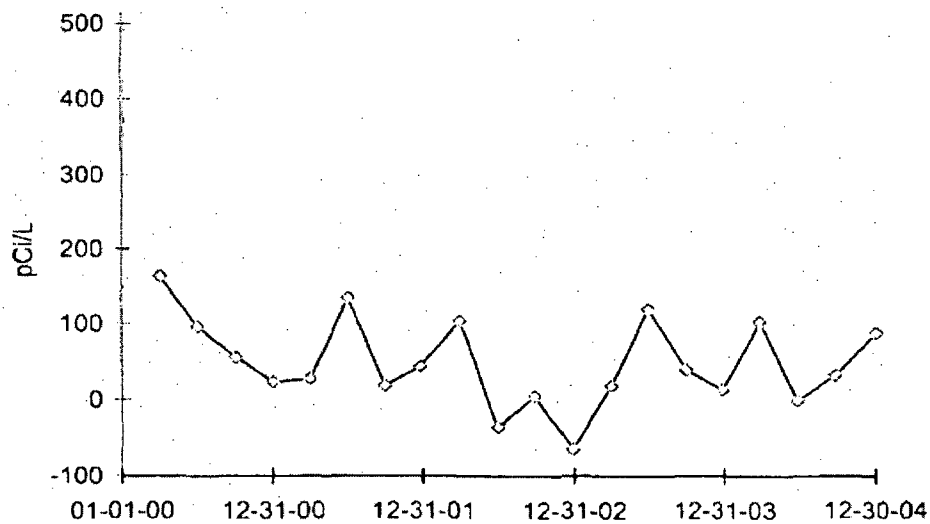
FIGURE C-1 (cont.)
Surface Water - Gross Beta - Stations Q-33 and Q-34 (C)
Collected in the Vicinity of QCNPS, 2005 - 2006



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

FIGURE C-2
Surface Water - Tritium - Stations Q-33 and Q-34 (C)
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-33 Cordova



Q-34 (C) Camanche

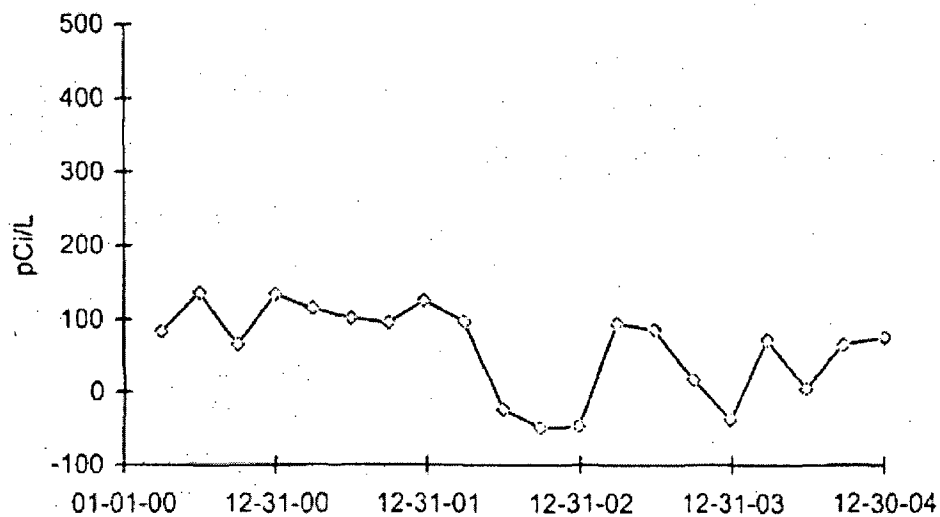
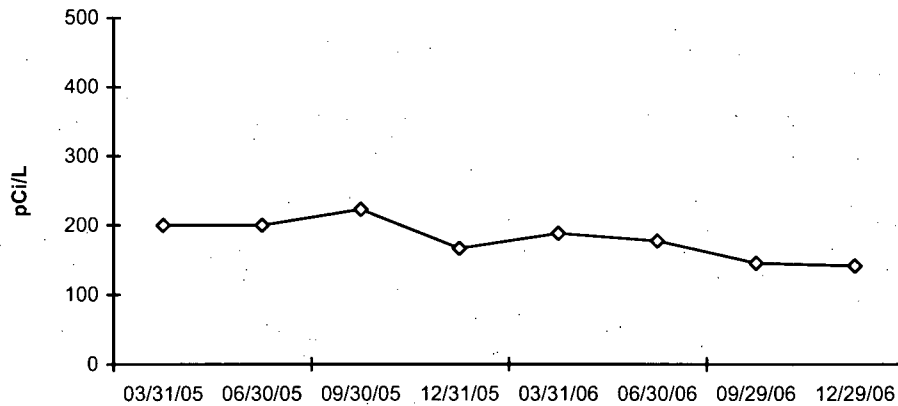
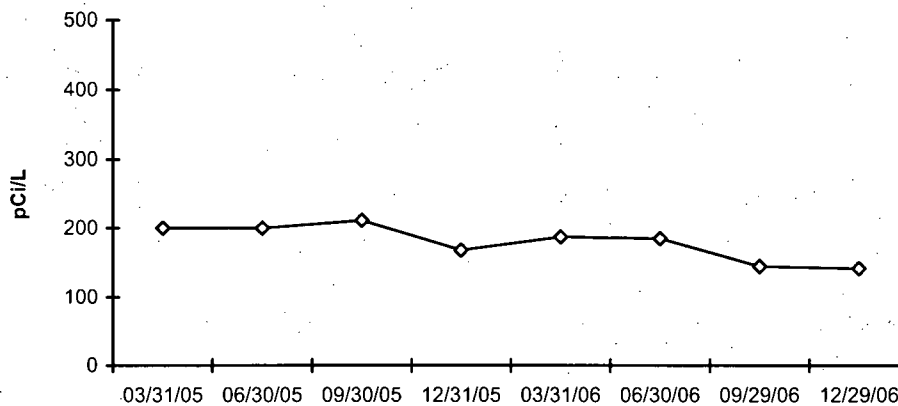


FIGURE C-2 (cont.)
Surface Water - Tritium - Stations Q-33 and Q-34 (C)
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-33 Cordova



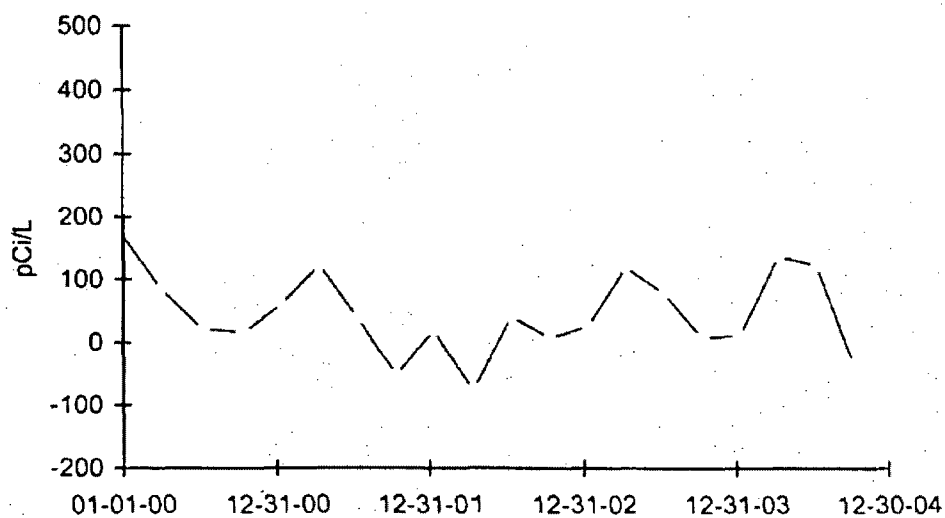
Q-34 (C) Camanche



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

FIGURE C-3
Ground Water - Tritium - Stations Q-35 and Q-36
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-35 McMillan Well



Q-36 Cordova Well

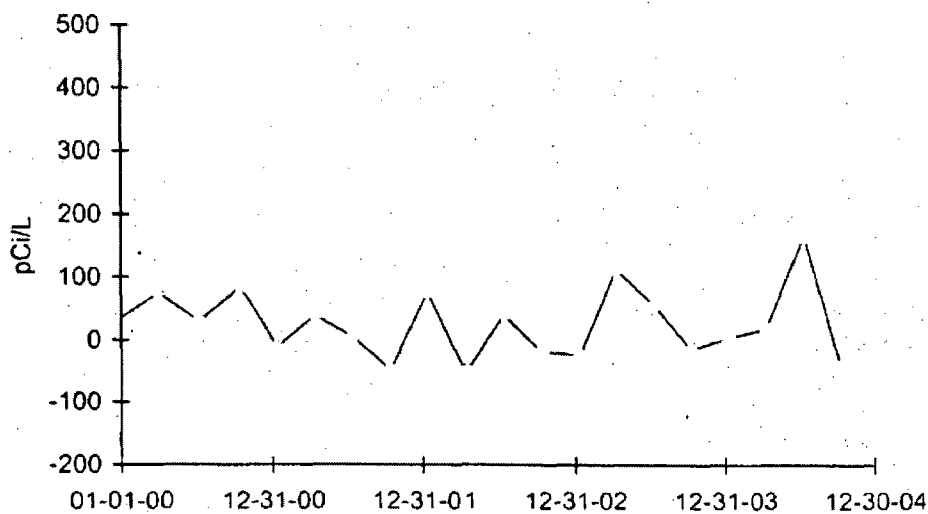
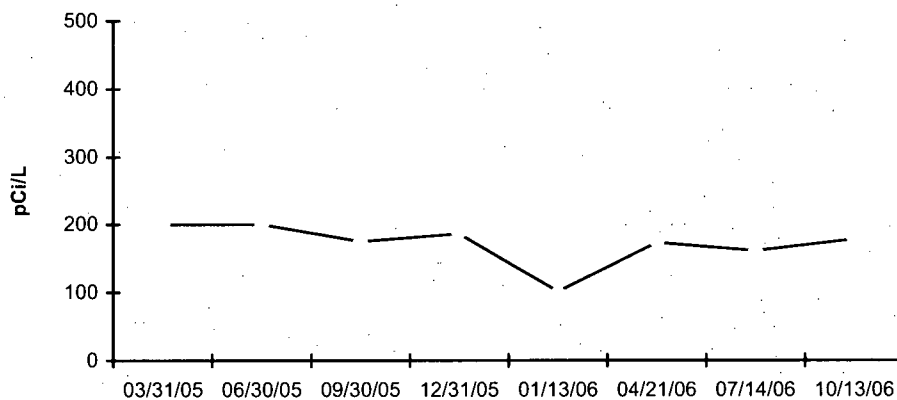
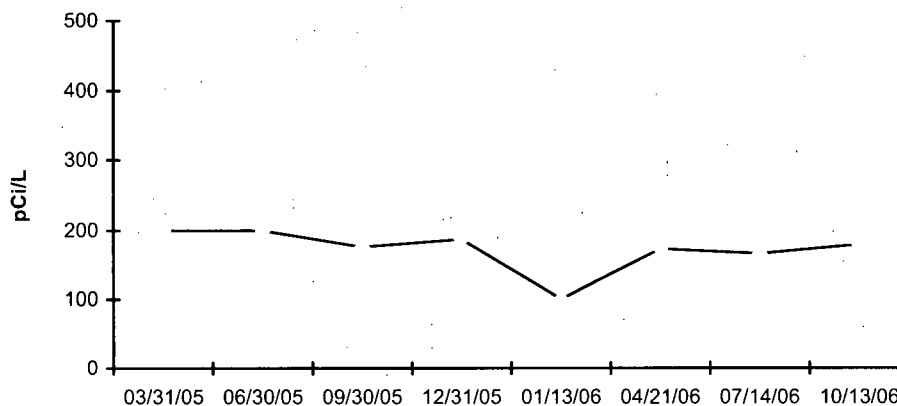


FIGURE C-3 (cont.)
Ground Water - Tritium - Stations Q-35 and Q-36
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-35 McMillan Well



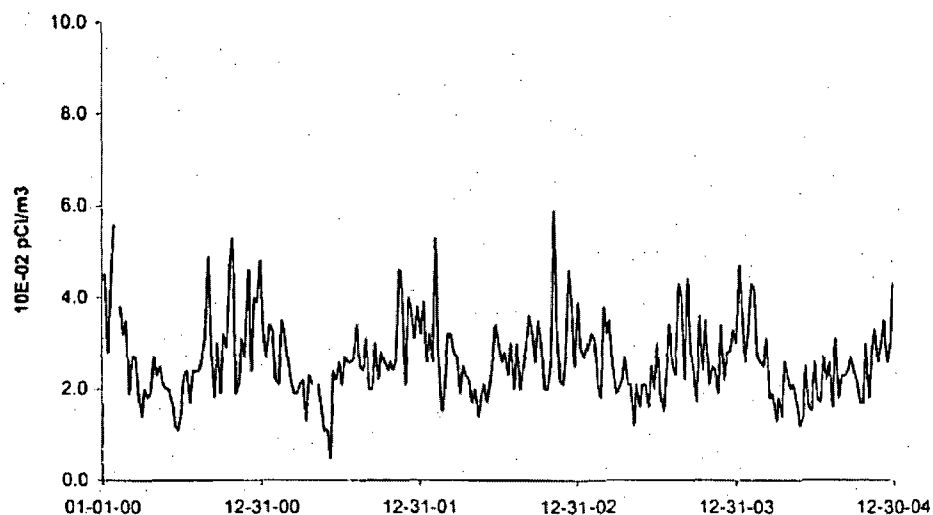
Q-36 Cordova Well



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

FIGURE C-4
Air Particulates - Gross Beta- Stations Q-01 and Q-02
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-01 Onsite No. 1



Q-02 Onsite No. 2

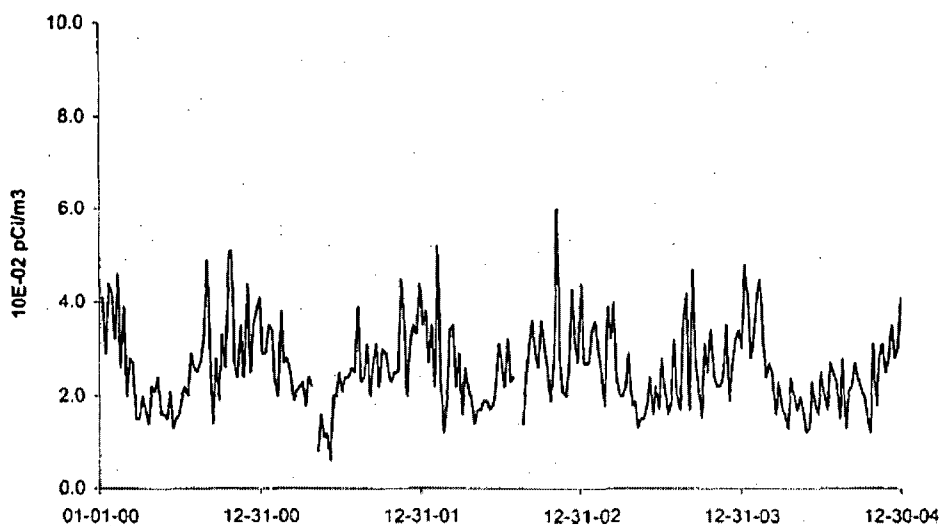
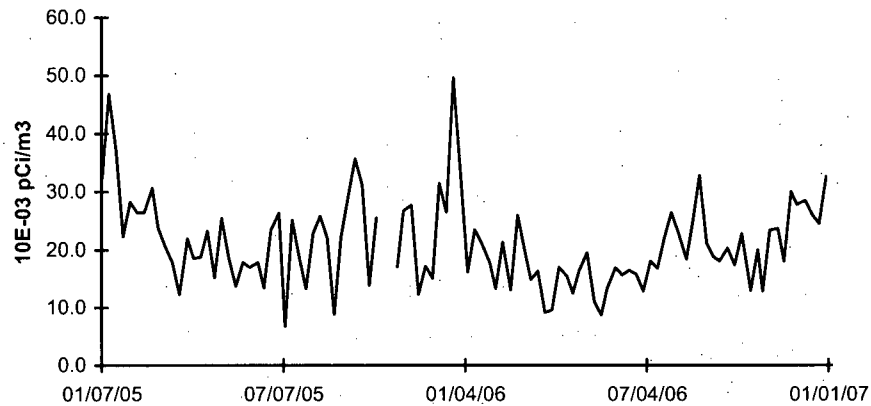


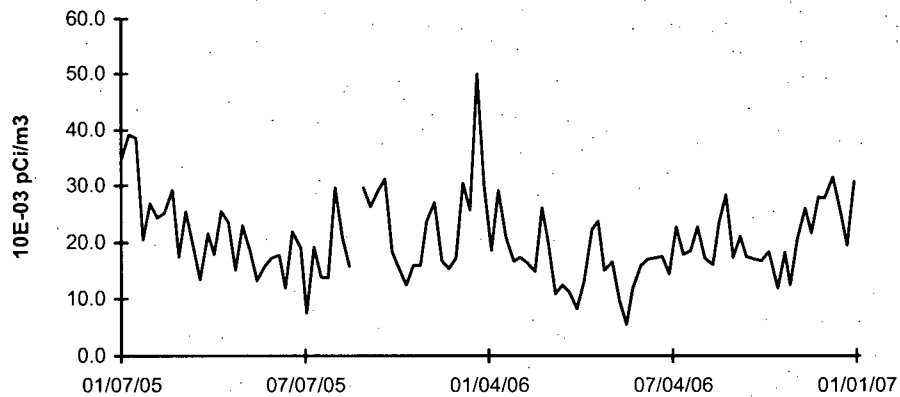
FIGURE C-4 (cont.)
Air Particulates - Gross Beta- Stations Q-01 and Q-02
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-01 Onsite No. 1



Station Q-01 lost power 10-07-05 - 10-21-05.

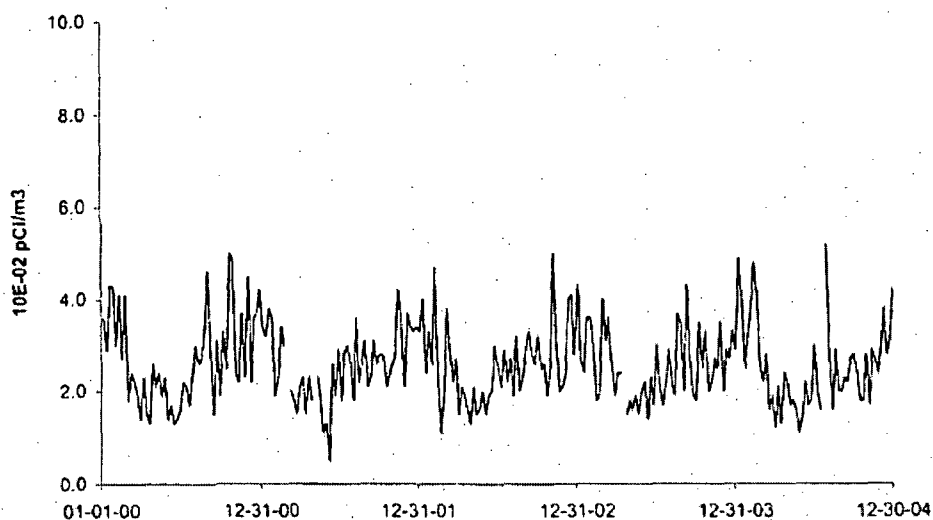
Q-02 Onsite No. 2



Station Q-02 lost power 08-19-05 - 08-26-05.

FIGURE C-5
Air Particulates - Gross Beta- Stations Q-03 and Q-04
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-03 Onsite No. 3



Q-04 Nitrin

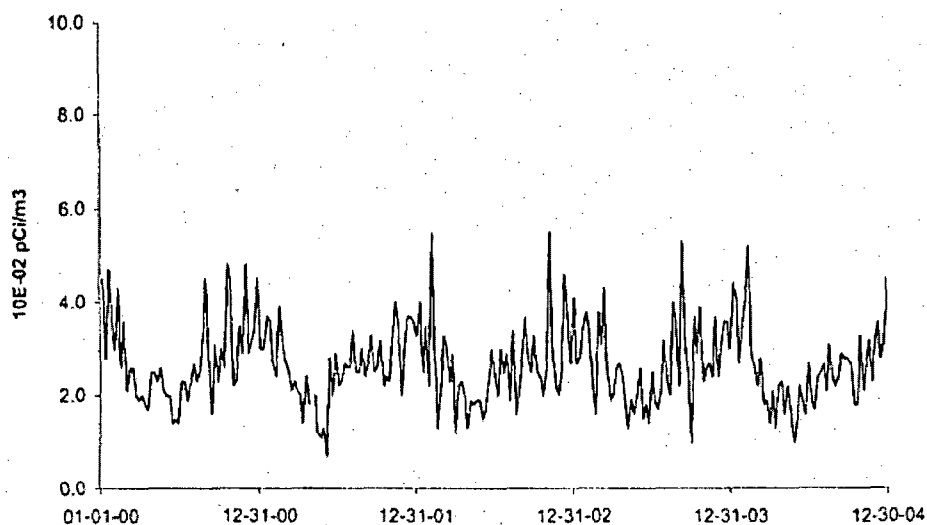
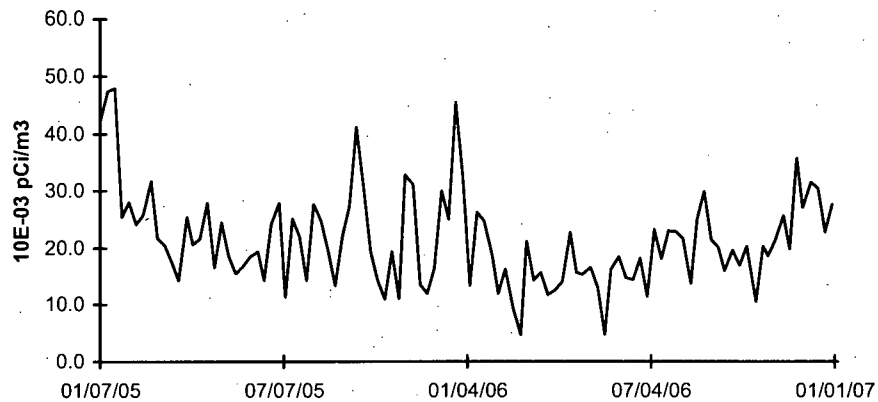


FIGURE C-5 (cont.)
Air Particulates - Gross Beta- Stations Q-03 and Q-04
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-03 Onsite No. 3



Q-04 Nitrin

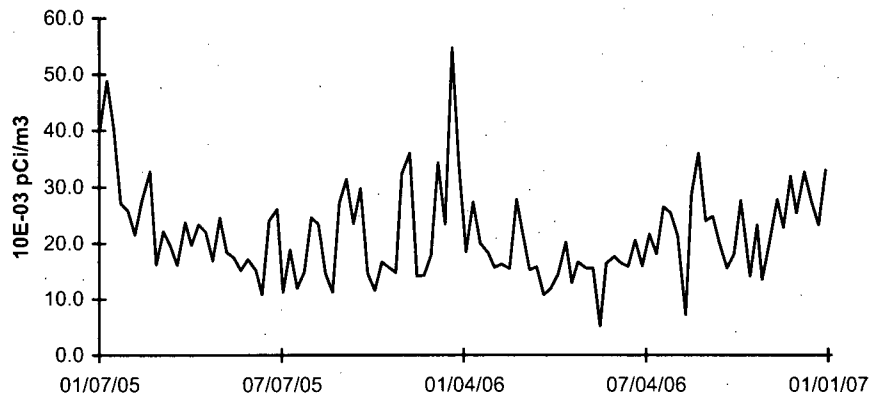


FIGURE C-6
Air Particulates - Gross Beta- Stations Q-07 (C)
Collected in the Vicinity of QCNPS, 2000 - 2004

Q-07 (C) Clinton

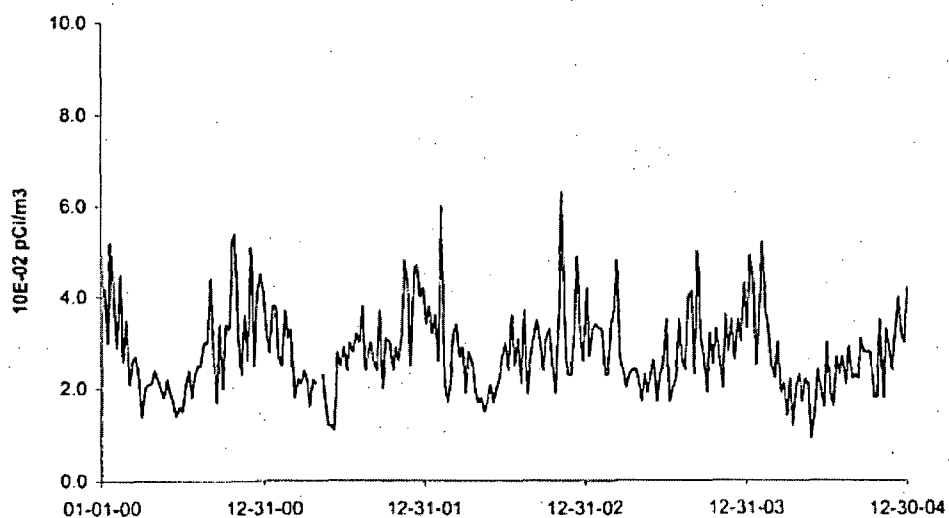


FIGURE C-6 (cont.)
Air Particulates - Gross Beta- Stations Q-07 (C)
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-07 (C) Clinton

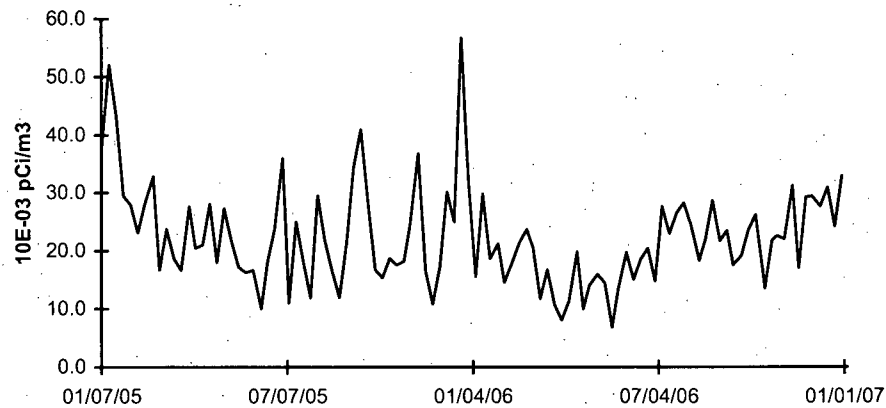
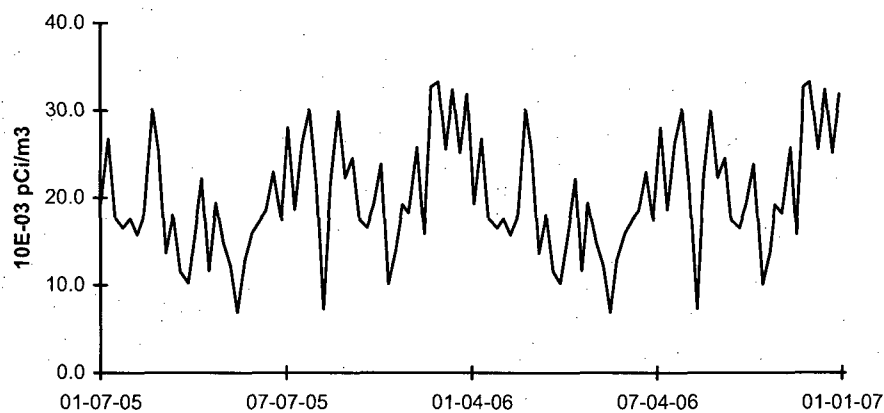
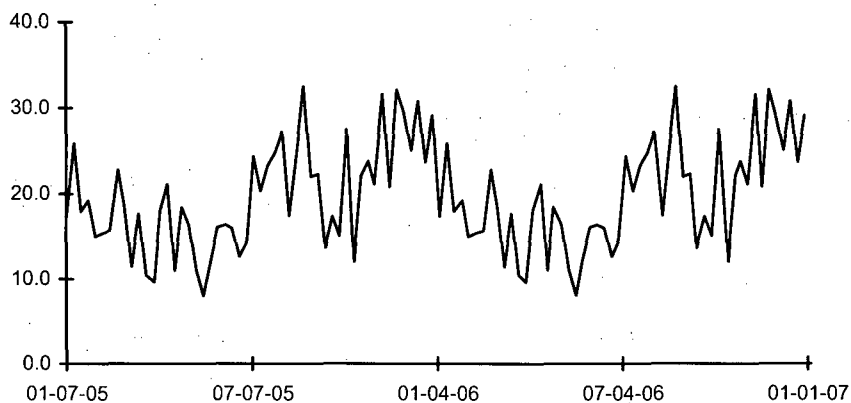


FIGURE C-7
Air Particulates - Gross Beta- Stations Q-13 and Q-16
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-13 Princeton



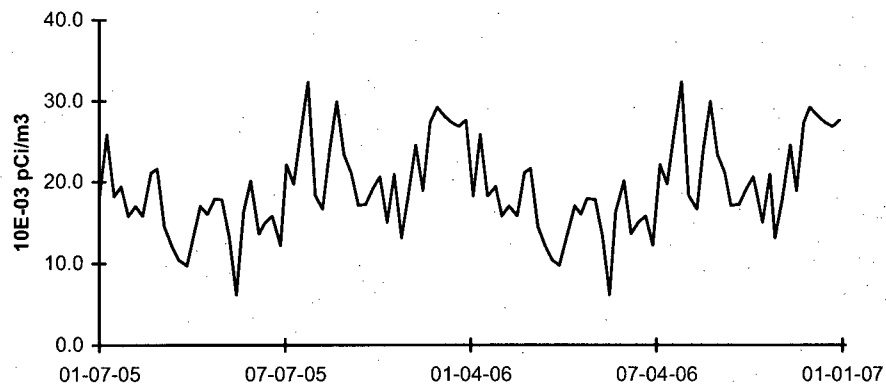
Q-16 Princeton



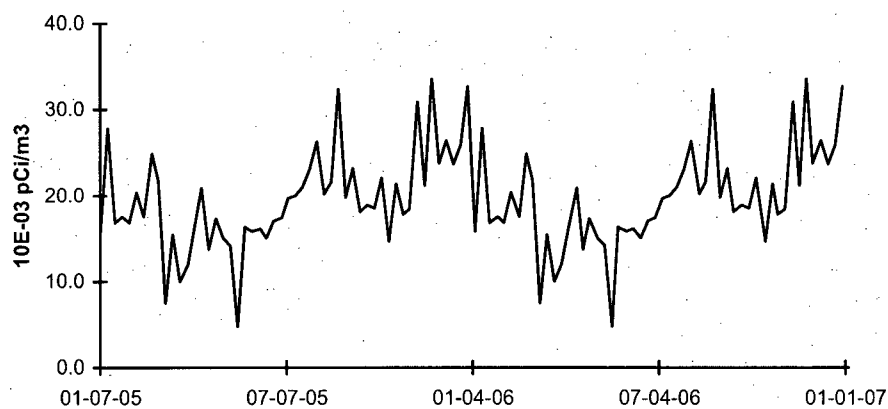
DUE TO VENDOR CHANGE IN 2005, THE REPORTED UNITS CHANGED FROM E-02 PCII/M3 TO E-03 PCII/M3

FIGURE C-8
Air Particulates - Gross Beta- Stations Q-37 and Q-38
Collected in the Vicinity of QCNPS, 2005 - 2006

Q-37 Meredosia Road



Q-38 Fuller Road



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

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.

ERA ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING, 2006
 (PAGE 1 OF 1)

(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-239/240	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 isotopic 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**

(Page 1 of 2)

Lab Code	Date	Analysis	Concentration (pCi/L)			
			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**

(Page 2 of 2)

Lab Code	Date	Analysis	Concentration (pCi/L)				Acceptance
			Laboratory Result ^b	ERA Result ^c	Control Limits		
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

(Page 1 of 3)

Lab Code ^c	Date	Analysis	Concentration ^b		Control Limits ^d	Acceptance
			Laboratory result	Known Activity		
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)³
ENVIRONMENTAL, INC., 2006

(Page 2 of 3)

Lab Code ^c	Date	Analysis	Concentration ^b		Control Limits ^d	Acceptance
			Laboratory result	Known Activity		
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

(Page 3 of 3)

Lab Code ^c	Date	Analysis	Concentration ^b		Control Limits ^d	Acceptance
			Laboratory result	Known Activity		
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

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
QUAD CITIES NUCLEAR POWER STATION, 2005**

NAME OF FACILITY: QUAD CITIES		DOCKET NUMBER: 50-254 & 50-265						
LOCATION OF FACILITY: CORDOVA, IL		REPORTING PERIOD: 2005						
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
				LOCATIONS MEAN (F) RANGE	LOCATION MEAN (F) RANGE	MEAN (F) RANGE	STATIONS # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
	I-131		60	<LLD	<LLD	-	-	0
	CS-134		60	<LLD	<LLD	-	-	0
	CS-137		80	<LLD	<LLD	-	-	0
	BALA140		N/A	<LLD	<LLD	-	-	0
A-43 DIRECT RADIATION (MILLI-ROENTGEN/QTR)	TLD-QUARTERLY	317	N/A	24.8 (311/311) (16/43*)	19.8 (6/6) (17/25)	26.0 (4/4) (20/31)	Q-211-1 INDICATOR 4.5 MILES SW OF SITE	0

* TLD 209-1 was in service July through December and read 43 mrem which equals an average of 21.5 mrem/quarter.

MEAN AND RANGE BASED ON DETECTABLE MEASUREMENTS ONLY (M)
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

APPENDIX F

EFFLUENT DATA

TABLE OF CONTENTS

INTRODUCTION.....	1
SUMMARY.....	2
1.0. EFFLUENTS	3
1.1. Gaseous Effluents to the Atmosphere	3
1.2. Liquids Released to Mississippi River	3
2.0. SOLID RADIOACTIVE WASTE	3
3.0. DOSE TO MAN.....	4
3.1. Gaseous Effluent Pathways	4
3.1.1. Noble Gases.....	4
3.1.1.1. Gamma Dose Rates	4
3.1.1.2. Beta Air and Skin Dose Rate	4
3.1.2. Radioactive Iodine.....	5
3.1.2.1. Dose to Thyroid.....	5
3.2. Liquid Effluent Pathways	6
3.3. Assessment of Dose to Member of Public	6
4.0. SITE METEOROLOGY	7

Table of Contents (cont.)

APPENDIX F-1 EFFLUENT TABLES..... F-1.1

Station Releases

Table 1.1-1 Gaseous Effluents - Summation of all Releases..... F-1.2

Table 1.2-1 Liquid Effluents - Summation of all Releases..... F-1.3

Table 2.0-1 Solid Radwaste Annual Report F-1.4

Table 3.1-1 Maximum Doses Resulting from Airborne Releases..... F-1.5

Table 3.2-1 Maximum Doses Resulting from Liquid Effluents..... F-1.6

Table 3.3-1 10CRF20 Compliance Assessment F-1.7

Table 3.4-1 Maximum Doses Resulting from Airborne Releases Based
On Concurrent Meteorological Data F-1.8

INTRODUCTION

Units 1 and 2 of the Quad Cities Nuclear Power Station, located near Cordova, Illinois next to the Mississippi River, are 2957 MW boiling water reactors. The station has been designed to keep releases to the environment at levels below those specified in the regulations.

Liquid effluents from Quad Cities Nuclear Power Station are released to the Mississippi River in controlled batches after radioassay of each batch. Gaseous effluents are released to the atmosphere after delay to permit decay of short-lived (noble) gases. Releases to the atmosphere are calculated on the basis of analyses of grab samples of noble gases as well as continuously collected composite samples of iodine and particulate activity sampled during the course of the year. The results of effluent analyses are summarized on a monthly basis and reported to the Nuclear Regulatory Commission as required per Technical Specifications. Airborne concentrations of noble gases, I-131, 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 Quad Cities Nuclear Power Station to measure changes in radiation or radioactivity levels that may be attributable to station operations. If significant changes attributable to Quad Cities Nuclear Power Station are measured, these changes are correlated with effluent releases. External gamma radiation exposure from noble gases and internal dose from I-131 in milk are the critical pathways at this site; however, an environmental monitoring program is conducted which also includes other pathways.

SUMMARY

Calculations based on gaseous and liquid effluents and hydrogen addition activities indicate that public dose due to radioactive material attributable to Quad Cities Nuclear Power Station during the period does not exceed regulatory or Offsite Dose Calculation Manual (ODCM) limits.

The Total Effective Dose Equivalent (TEDE) due to licensed activities at Quad Cities Nuclear Power Station calculated for the maximally-exposed individual for the period is 6.81 mrem. The annual limit on TEDE is 100 mrem. Most of the dose (6.62 mrem) is due to direct radiation from Unit 1 and Unit 2 turbines. The remaining 0.19 mrem is due to the maximum calculated dose from radionuclides released from the station in gaseous and liquid 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 and isotopic composition of noble gases, radioiodine, and particulate radioactivity released to the atmosphere during the year, are listed in Table 1.1-1. A total of $1.41\text{E}+02$ curies of fission and activation gases were released with a maximum quarterly release rate of $5.53\text{E}+00$ $\mu\text{Ci}/\text{sec}$, for both units.

A total of $1.37\text{E}-03$ curies of 1-131 were released during the year with a maximum average quarterly release rate of $5.72\text{E}-05$ $\mu\text{Ci}/\text{sec}$.

A total of $2.86\text{E}-03$ curies of beta-gamma emitters were released as airborne particulate matter with a maximum average release rate of $1.15\text{E}-04$ $\mu\text{Ci}/\text{sec}$. Alpha-emitting radionuclides were below the lower limit of detection (LLD) for the year.

A total of $1.35\text{E}+02$ curies of tritium were released with a maximum average quarterly release rate of $5.63\text{E}+00$ uCi/sec .

1.2 Liquids Released to the Mississippi River

A total of $5.56\text{E}+05$ liters of radioactive liquid wastes (prior to dilution) containing $3.49\text{E}-04$ curies (excluding tritium, noble gases and alpha) were discharged from the station. These wastes were released at a maximum quarterly diluted average concentration of $2.10\text{E}-10$ $\mu\text{Ci}/\text{ml}$. No alpha radioactivity was released in liquid waste. A total of $1.04\text{E}+00$ curies of tritium were released at a maximum quarterly average diluted concentration of $7.94\text{E}-07$ $\mu\text{Ci}/\text{ml}$. Quarterly release totals of principal radionuclides in liquid effluents are given in Table 1.2-1.

2.0 SOLID RADIOACTIVE WASTE

Forty shipments of solid radioactive waste were shipped to waste processors via truck during 2006; seventeen shipments were sent, via truck, to disposal sites (Table 2.0-1). For detail, refer to the Quad Cities Nuclear Power Station 2006 Annual Radiological Effluent Report.

3.0 DOSE TO MAN

3.1 Gaseous Effluent Pathways

Table 3.1-1 summarizes the doses resulting from releases of airborne radioactivity via the different exposure pathways.

3.1.1 Noble Gases

3.1.1.1 Gamma Dose Rates

Offsite Gamma air and whole body dose rates are shown in Table 3.1-1 and were calculated based on measured release rates, isotopic composition of the noble gases, and average meteorological data for the period. Dose rates based on concurrent meteorological data are shown in Table 3.4-1. Based on measured effluents and average meteorological data, the maximum total body dose to an individual would be $9.24\text{E-}03$ mrem for the year (Table 3.1-1), with an occupancy or shielding factor of 0.7 included. The maximum total body dose based on measured effluents and concurrent meteorological data would be $1.61\text{E-}02$ mrem (Table 3.4-1). The maximum gamma air dose was $6.36\text{E-}04$ mrad (Table 3.1-1) based on measured effluents and average meteorological data, and $4.08\text{E-}03$ mrad based on concurrent meteorological data (Table 3.4-1).

3.1.1.2 Beta Air and Skin Dose Rates

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 taken 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 for the year was $9.49\text{E-}04$ mrem (Table 3.4-1)

The maximum offsite beta air dose for the year was $3.13\text{E-}04$ mrad based on average meteorological data (Table 3.1-1) and $5.62\text{E-}04$ mrad based on concurrent meteorological data (Table 3.4-1).

Doses calculated using average meteorology and those calculated using concurrent meteorology differ for two reasons:

1. Concurrent meteorology results in different plume dispersion and deposition characteristics.
2. Concurrent wind direction will cause variations in the sector of dispersion and deposition. This variation results in varying distances used in calculating dispersion and deposition parameters.

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 a person resulting in a dose to the thyroid. The principal pathway of interest for this radionuclide is ingestion of radioiodine in milk.

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 annual thyroid dose was $1.71\text{E-}01$ mrem (Table 3.1-1[infant]).

3.2 Liquid Effluent Pathways

The three principal pathways through the aquatic environment for potential doses to man from liquid waste are ingestion of potable water, eating aquatic foods, and exposure while on the shoreline. Not all of these pathways are significant or 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 Offsite Dose Calculation Manual. The maximum whole body dose for the year was $2.09\text{E-}03$ mrem (adult). The maximum organ dose was $3.43\text{E-}03$ mrem (Table 3.2-1 [teen liver]).

3.3 Assessment of Dose to Member of Public

During the period January to December 2006, Quad Cities Nuclear Power Station did not exceed the following limits as shown in Table 3.1-1 and Table 3.2-1 (based on yearly average meteorological data), and as shown in Table 3.4-1 (based on concurrent meteorological data):

- 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 (3 mrem to the whole body or 10 mrem to any organ during any calendar quarter; 6 mrem to the whole body or 20 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 eight 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 RETS 40CFR190 limits for dose due to radioactive liquid and gaseous effluents to the whole body or any organ (25 mrem during the calendar year) and to the thyroid (75 mrem during the calendar year).
- The 10CFR20 limit on Total Effective Dose Equivalent to individual members of the public (100 mrem) during any calendar year.

4.0 SITE METEOROLOGY

A summary of the site meteorological measurements taken during each calendar quarter of the year is given in Appendix E. The data are presented as cumulative joint frequency distributions of the wind direction for the 296' level and wind speed class by atmospheric stability class determined from the temperature difference between the 296' and 33' levels. Average data recovery for all measurements on the tower as 99.1% during 2006 (Table 3.4-1).

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

APPENDIX F-1

EFFLUENT TABLES

Table 1.1-1

Gaseous Effluents – Summation of All Releases

Effluent & Waste Disposable Summary

Period: January – December 2006

Unit: 1 & 2

A. Fission & Activation Gases		Unit	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release		Ci	3.29E+01	2.82E+01	4.39E+01	3.58E+01	12.5
2. Average release rate for the period		μCi/sec	4.23E+00	3.58E+00	5.53E+00	4.50E+00	
3. Percent of ODCM limit ⁽¹⁾		%γ	3.28E-03	2.25E-03	3.68E-03	3.51E-03	
		%β	9.18E-04	5.40E-04	8.69E-04	8.01E-04	

B. Iodine							
1. Total Iodine – 131.		Ci	1.78E-04	3.93E-04	3.46E-04	4.54E-04	41.6
2. Average release rate for the period		μCi/sec	2.28E-05	4.99E-05	4.35E-05	5.72E-05	
3. Percent of ODCM limit		%	N/A	N/A	N/A	N/A	

C. Particulates							
1. Total particulates		Ci	8.61E-04	9.03E-04	3.62E-04	7.32E-04	32.3
2. Average release rate for the period		μCi/sec	1.11E-04	1.15E-04	4.55E-05	9.22E-05	
3. Percent of ODCM limit		%	N/A	N/A	N/A	N/A	
4. Gross alpha radioactivity		Ci	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	

D. Tritium							
1. Total Release		Ci	4.38E+01	2.76E+01	3.58E+01	2.75E+01	6.3
2. Average release rate for the period		μCi/sec	5.63E+00	3.51E+00	4.50E+00	3.45E+00	
3. Percent of ODCM limit		%	N/A	N/A	N/A	N/A	

E. Iodine 131 & 133, Tritium & Particulate							
1. Percent of ODCM limit		%	3.32E-01	6.47E-01	5.59E-01	7.38E-01	

(1) % Noble gas gamma/noble gas beta dose limits

(2) Gross alpha LLD reported on page 6 of 70

Table 1.2-1

Liquid Effluents – Summation of All Releases

Effluent & Waste Disposal Summary

Period: January – December 2006

Unit: 1 & 2

A. Fission & Activation Products	Unit	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release (not including tritium, gases & alpha)	Ci	5.27E-05	2.76E-04	2.01E-05	<LLD ⁽²⁾	4.1
2. Average diluted concentration during period	μCi/mL	2.03E-13	2.10E-10	4.08E-14	N/A ⁽⁴⁾	
3. Percent of applicable limit ⁽¹⁾	WB	1.72E-04	6.93E-02	4.45E-05	<LLD ⁽²⁾	
	O	8.19E-05	3.42E-02	2.12E-05	<LLD ⁽²⁾	
4. Maximum diluted concentration during batch discharges	μCi/mL	N/A ⁽³⁾	1.86E-10	N/A ⁽³⁾	N/A ⁽³⁾	

B. Tritium						
1. Total Release	Ci	<LLD ⁽²⁾	1.04E+00	<LLD ⁽²⁾	<LLD ⁽²⁾	4.1
2. Average diluted concentration during period	μCi/mL	N/A	7.94E-07	N/A	N/A	
3. Percent of applicable limit	%	N/A	2.65E-02	N/A	N/A	

C. Dissolved & Entrained Gases						
1. Total Release	Ci	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	4.1
2. Average diluted concentration during period	μCi/mL	N/A	N/A	N/A	N/A	
3. Percent of applicable limit	%	N/A	N/A	N/A	N/A	

D. Gross Alpha Activity						
1. Total Release	Ci	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	<LLD ⁽²⁾	14.8

E. Volume Of Waste Released (prior to dilution)	Liters	1.42E+05	3.03E+05	1.11E+05	0.00E+00
--------------------------------------------------------	--------	----------	----------	----------	----------

F. Volume Of Dilution Water Used During Period	Liters	2.60E+11	3.82E+11	4.93E+11	3.23E+11
-------------------------------------------------------	--------	----------	----------	----------	----------

- (1) Whole body/organ (ODCM)
 (2) Liquid LLDs reported on page 7 of 70
 (3) No liquid batch discharges
 (4) No liquid radioactivity released

Table 2.0-1

Solid Radwaste Annual Report

Solid Waste and Irradiated Fuel Shipments

A. Solid Waste shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc	9.42E+01	1.24E+03	2006	2.50E+01
b. Dry compressed waste, contaminated equip, etc	2.26E+03	5.27E+00	2006	2.50E+01
c. Irradiated components, control rods, etc	0.00E+00	0.00E+00	2006	2.50E+01
d. Other (describe)	0.00E+00	0.00E+00	2006	2.50E+01

2. Estimate of major nuclides composition (by waste type)

Major Nuclide Composition	%
a. Co-60	2.60E+01
Fe-55	5.64E+01
Zn-65	1.26E+01
b. Fe-55	5.46E+01
Co-60	2.65E+01
Ba-140	3.57E+00
Zn-65	3.36E+00
Fe-59	3.26E+00
La-140	2.37E+00
Mn-54	2.08E+00
c. N/A	N/A
d. N/a	N/A

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
40	Highway	Processor
17	Highway	Disposal

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
0	N/A	N/A

C. Changes to the Process Control Program

None.

Table 3.1-1

GASEOUS ANNUAL DOSE SUMMARY REPORT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Releases
Year.....: 2006
Coefficient Type.....: Historical
Receptor.....: 5 Composite Crit. Receptor - IP
Distance (meters).....: 0.0
Compass Point.....: 0.0

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Quarter 1	INFANT	THYROID	2.50E-02	Quarter	5.63E+00	4.44E-01	7.50E+00	3.33E-01
Quarter 2	INFANT	THYROID	4.85E-02	Quarter	5.63E+00	8.62E-01	7.50E+00	6.47E-01
Quarter 3	INFANT	THYROID	4.19E-02	Quarter	5.63E+00	7.45E-01	7.50E+00	5.59E-01
Quarter 4	INFANT	THYROID	5.53E-02	Quarter	5.63E+00	9.84E-01	7.50E+00	7.38E-01
Annual	INFANT	THYROID	1.71E-01	Annual	1.13E+01	1.52E+00	1.50E+01	1.14E+00

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Quarter 1	CHILD	TBODY	2.54E-03	Quarter	5.25E+00	4.84E-02	7.50E+00	3.39E-02
Quarter 2	CHILD	TBODY	2.85E-03	Quarter	5.25E+00	5.42E-02	7.50E+00	3.80E-02
Quarter 3	CHILD	TBODY	1.39E-03	Quarter	5.25E+00	2.65E-02	7.50E+00	1.85E-02
Quarter 4	CHILD	TBODY	2.46E-03	Quarter	5.25E+00	4.69E-02	7.50E+00	3.29E-02
Annual	CHILD	TBODY	9.24E-03	Annual	1.05E+01	8.80E-02	1.50E+01	6.16E-02

GASEOUS ANNUAL DOSE SUMMARY REPORT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Releases
Year.....: 2006
Coefficient Type.....: Historical
Receptor.....: 4 Composite Crit. Receptor - NG
Distance (meters).....: 0.0
Compass Point.....: 0.0

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Gamma) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Quarter 1	Gamma	1.64E-04	Quarter	3.75E+00	4.37E-03	5.00E+00	3.28E-03
Quarter 2	Gamma	1.13E-04	Quarter	3.75E+00	3.01E-03	5.00E+00	2.25E-03
Quarter 3	Gamma	1.84E-04	Quarter	3.75E+00	4.91E-03	5.00E+00	3.68E-03
Quarter 4	Gamma	1.75E-04	Quarter	3.75E+00	4.68E-03	5.00E+00	3.51E-03
Annual	Gamma	6.36E-04	Annual	7.50E+00	8.48E-03	1.00E+01	6.36E-03

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Beta) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Quarter 1	Beta	9.18E-05	Quarter	7.50E+00	1.22E-03	1.00E+01	9.18E-04
Quarter 2	Beta	5.40E-05	Quarter	7.50E+00	7.20E-04	1.00E+01	5.40E-04
Quarter 3	Beta	8.69E-05	Quarter	7.50E+00	1.16E-03	1.00E+01	8.69E-04
Quarter 4	Beta	8.01E-05	Quarter	7.50E+00	1.07E-03	1.00E+01	8.01E-04
Annual	Beta	3.13E-04	Annual	1.50E+01	2.09E-03	2.00E+01	1.56E-03

Table 3.2-1

Maximum Doses Resulting from Liquid Effluents

LIQUID ANNUAL DOSE SUMMARY REPORT

Release ID.....: 1 All Liquid Releases
 Year.....: 2006
 Liquid Receptor.....: 0 Liquid Receptor

```

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) =====
Dose      Age      Dose      Limit      Admin      Admin      T.Spec      T.Spec
Period    Group   Organ    (mrem)    Period    Limit      of Limit    Limit      of Limit
-----
Quarter 1 TEEN    LIVER    4.09E-06  Quarter  3.75E+00  1.09E-04    5.00E+00    8.19E-05
Quarter 2 TEEN    LIVER    1.30E-05  Quarter  3.75E+00  3.45E-04    5.00E+00    2.59E-04
Quarter 3 TEEN    LIVER    1.63E-06  Quarter  3.75E+00  4.34E-05    5.00E+00    3.26E-05
Quarter 4 ADULT   BONE     0.00E+00  Quarter  3.75E+00  0.00E+00    5.00E+00    0.00E+00
Annual    TEEN    LIVER    2.38E-05  Annual    7.50E+00  3.17E-04    1.00E+01    2.38E-04
  
```

```

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) =====
Dose      Age      Dose      Limit      Admin      Admin      T.Spec      T.Spec
Period    Group   Organ    (mrem)    Period    Limit      of Limit    Limit      of Limit
-----
Quarter 1 ADULT   TBODY    2.58E-06  Quarter  1.13E+00  2.29E-04    1.50E+00    1.72E-04
Quarter 2 ADULT   TBODY    7.94E-06  Quarter  1.13E+00  7.05E-04    1.50E+00    5.29E-04
Quarter 3 ADULT   TBODY    1.02E-06  Quarter  1.13E+00  9.10E-05    1.50E+00    6.83E-05
Quarter 4 ADULT   TBODY    0.00E+00  Quarter  1.13E+00  0.00E+00    1.50E+00    0.00E+00
Annual    ADULT   TBODY    1.47E-05  Annual    2.25E+00  6.53E-04    3.00E+00    4.90E-04
  
```

Table 3.3-1

10CFR20.1301(a)(1) Compliance Assessment

Quad Cities Station Unit One and Unit Two

Assessment Period 01/01/06 THROUGH 12/31/06

10CFR20.1301(a)(1) Limit 100.0 mrem/year

Quad Cities Unit 1

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Year Total	% of Limit
TEDE (mrem)	7.64E-01	7.25E-01	9.91E-01	9.91E-01	1.01E+00	3.49

Quad Cities Unit 2

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Year Total	% of Limit
TEDE (mrem)	7.85E-01	7.79E-01	9.72E-01	9.88E-01	3.52E-00	3.52

Table 3.4-1

**Maximum Doses Resulting From Airborne Releases
Based on Concurrent Meteorological Data**

Quad Cities Station - Unit 1

2006

TYPE OF DOSE	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	ANNUAL
GAMMA AIR (mrad)	6.500E-04 (SE)	4.135E-04 (N)	8.200E-04 (WSW)	7.350E-04 (NNE)	2.042E-03 (NNE)
BETA AIR (mrad)	1.040E-04 (SE)	6.050E-05 (SE)	9.250E-05 (WSW)	7.000E-05 (NNE)	2.810E-04 (SE)
WHOLE BODY (mrem)	1.241E-03 (NNE)	2.596E-03 (NNE)	1.278E-03 (NNE)	2.941E-03 (NNE)	8.056E-03 (NNE)
SKIN (mrem)	1.486E-03 (NNE)	3.089E-03 (NNE)	1.540E-03 (NNE)	3.510E-03 (NNE)	9.624E-03 (NNE)
ORGAN (mrem)	1.587E-04 (WNW)	2.081E-04 (WNW)	1.253E-04 (WNW)	2.183E-04 (WNW)	7.104E-04 (WNW)

CRITICAL PERSON	Teenager	Teenager	Teenager	Teenager	Teenager
CRITICAL ORGAN	Lung	Lung	Lung	Lung	Lung

COMPLIANCE STATUS

TYPE OF DOSE	10 CFR 50 APP. I		10 CFR 50 APP. I	
	QUARTERLY OBJECTIVE	% OF APP. I	YEARLY OBJECTIVE	% OF APP. I
GAMMA AIR (mrad)	5.0	0.02	10.0	0.02
BETA AIR (mrad)	10.0	0.00	20.0	0.00
WHOLE BODY (mrem)	2.5	0.12	5.0	0.16
SKIN (mrem)	7.5	0.05	15.0	0.06
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 0 - Vent

Unit 0 - Chimney

Date of calculation: 3/29/2007

Table 3.4-1 (continued)

**Maximum Doses Resulting From Airborne Releases
Based on Concurrent Meteorological Data**

Quad Cities Station - Unit 2

2006

TYPE OF DOSE	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	ANNUAL
GAMMA AIR (mrad)	6.500E-04 (SE)	4.135E-04 (N)	8.200E-04 (WSW)	7.350E-04 (NNE)	2.042E-03 (NNE)
BETA AIR (mrad)	1.040E-04 (SE)	6.050E-05 (SE)	9.250E-05 (WSW)	7.000E-05 (NNE)	2.810E-04 (SE)
WHOLE BODY (mrem)	1.241E-03 (NNE)	2.596E-03 (NNE)	1.278E-03 (NNE)	2.941E-03 (NNE)	8.056E-03 (NNE)
SKIN (mrem)	1.486E-03 (NNE)	3.089E-03 (NNE)	1.540E-03 (NNE)	3.510E-03 (NNE)	9.624E-03 (NNE)
ORGAN (mrem)	1.587E-04 (WNW)	2.081E-04 (WNW)	1.253E-04 (WNW)	2.183E-04 (WNW)	7.104E-04 (WNW)
CRITICAL PERSON	Teenager	Teenager	Teenager	Teenager	Teenager
CRITICAL ORGAN	Lung	Lung	Lung	Lung	Lung

COMPLIANCE STATUS

TYPE OF DOSE	10 CFR 50 APP. I		10 CFR 50 APP. I	
	QUARTERLY OBJECTIVE	% OF APP. I	YEARLY OBJECTIVE	% OF APP. I
GAMMA AIR (mrad)	5.0	0.02	10.0	0.02
BETA AIR (mrad)	10.0	0.00	20.0	0.00
WHOLE BODY (mrem)	2.5	0.12	5.0	0.16
SKIN (mrem)	7.5	0.05	15.0	0.06
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 0 - Vent
Unit 0 - Chimney

Data Recovery 99.1%
(priority parameters)

Date of calculation: 3/29/2007

APPENDIX G

METEOROLOGICAL DATA

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Extremely Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	8	0	0	0	8
NNE	0	0	5	2	0	0	7
NE	0	0	0	0	0	0	0
ENE	0	3	0	0	0	0	3
E	0	0	2	0	0	0	2
ESE	0	0	4	2	0	0	6
SE	0	3	7	0	0	0	10
SSE	0	10	16	0	0	0	26
S	0	4	0	0	0	0	4
SSW	0	16	5	0	0	0	21
SW	0	6	5	0	0	0	11
WSW	0	0	8	0	0	0	8
W	0	2	3	1	0	0	6
WNW	0	0	9	4	0	0	13
NW	0	2	21	0	0	0	23
NNW	0	1	4	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	0	47	97	9	0	0	153

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Moderately Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	6	0	0	0	6
NNE	0	3	4	1	0	0	8
NE	0	2	0	0	0	0	2
ENE	0	2	1	0	0	0	3
E	0	1	1	0	0	0	2
ESE	0	0	2	0	0	0	2
SE	0	0	1	0	0	0	1
SSE	0	3	2	0	0	0	5
S	0	3	0	0	0	0	3
SSW	0	2	0	0	0	0	2
SW	0	2	0	1	0	0	3
WSW	0	1	0	0	0	0	1
W	0	2	0	0	0	0	2
WNW	1	3	2	0	0	0	6
NW	0	3	1	0	0	0	4
NNW	0	0	3	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	1	27	23	2	0	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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Slightly Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	5	1	0	0	7
NNE	0	3	3	0	0	0	6
NE	0	1	4	1	0	0	6
ENE	0	3	3	1	0	0	7
E	0	2	2	3	0	0	7
ESE	0	3	2	1	0	0	6
SE	0	5	2	0	0	0	7
SSE	0	6	2	0	0	0	8
S	1	2	0	0	0	0	3
SSW	2	2	0	0	0	0	4
SW	0	8	2	0	0	0	10
WSW	1	1	1	3	0	0	6
W	0	10	2	0	0	0	12
WNW	0	3	6	0	0	0	9
NW	0	3	7	1	0	0	11
NNW	0	3	3	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	4	56	44	11	0	0	115

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Neutral - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	21	28	1	0	0	52
NNE	5	20	32	2	0	0	59
NE	2	13	24	8	0	0	47
ENE	1	19	29	11	0	0	60
E	3	20	30	3	0	0	56
ESE	1	22	13	6	0	0	42
SE	3	23	16	0	0	0	42
SSE	0	17	3	0	0	0	20
S	4	17	2	0	0	0	23
SSW	5	10	1	0	0	0	16
SW	8	30	23	1	0	0	62
WSW	1	30	12	12	1	0	56
W	4	41	34	18	0	0	97
WNW	7	87	102	15	0	0	211
NW	2	88	68	2	0	0	160
NNW	2	33	28	0	0	0	63
Variable	0	0	0	0	0	0	0
Total	50	491	445	79	1	0	1066

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Slightly Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	10	4	0	0	0	18
NNE	2	7	3	0	0	0	12
NE	4	6	1	0	0	0	11
ENE	1	22	2	0	0	0	25
E	1	18	4	1	0	0	24
ESE	3	22	16	0	0	0	41
SE	6	19	15	0	0	0	40
SSE	7	15	3	0	0	0	25
S	3	7	9	0	0	0	19
SSW	5	5	6	0	0	0	16
SW	4	16	5	0	0	0	25
WSW	10	19	1	1	0	0	31
W	8	39	0	0	0	0	47
WNW	14	32	2	0	0	0	48
NW	12	29	3	0	0	0	44
NNW	2	8	2	0	0	0	12
Variable	0	0	0	0	0	0	0
Total	86	274	76	2	0	0	438

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Moderately Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	2	0	0	0	0	5
NNE	1	3	0	0	0	0	4
NE	5	0	0	0	0	0	5
ENE	5	1	0	0	0	0	6
E	4	4	0	0	0	0	8
ESE	8	46	0	0	0	0	54
SE	10	10	0	0	0	0	20
SSE	10	4	0	0	0	0	14
S	10	0	0	0	0	0	10
SSW	7	6	0	0	0	0	13
SW	2	0	0	0	0	0	2
WSW	5	1	0	0	0	0	6
W	17	2	0	0	0	0	19
WNW	6	0	1	0	0	0	7
NW	2	0	0	0	0	0	2
NNW	2	1	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	97	80	1	0	0	0	178

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Extremely Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	3	0	0	0	0	0	3
E	2	1	0	0	0	0	3
ESE	7	15	0	0	0	0	22
SE	7	1	0	0	0	0	8
SSE	8	0	0	0	0	0	8
S	2	0	0	0	0	0	2
SSW	0	0	0	0	0	0	0
SW	2	0	0	0	0	0	2
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	1	0	0	0	0	0	1
NW	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	33	17	0	0	0	0	50

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

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Extremely Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	1	3	3	7
S	0	0	0	1	0	1	2
SSW	0	0	1	1	0	0	2
SW	0	1	1	1	0	0	3
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	2	2
NW	0	0	1	3	0	0	4
NNW	0	0	1	3	0	0	4
Variable	0	0	0	0	0	0	0
Total	0	1	4	10	3	6	24

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: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Moderately Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	3	0	0	3
NNE	0	0	0	3	2	0	5
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	1	0	0	1
ESE	0	0	0	2	2	0	4
SE	0	0	0	0	0	0	0
SSE	0	0	3	4	4	0	11
S	0	0	1	3	2	1	7
SSW	0	0	3	4	2	0	9
SW	0	0	1	2	0	0	3
WSW	0	0	1	4	0	0	5
W	0	0	2	0	0	0	2
WNW	0	0	2	1	3	2	8
NW	0	0	1	15	3	0	19
NNW	0	0	2	1	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	0	16	43	18	3	80

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: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Slightly Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	7	6	0	0	13
NNE	0	0	6	3	1	0	10
NE	0	0	5	1	2	0	8
ENE	0	4	5	0	2	0	11
E	0	0	1	1	2	0	4
ESE	0	1	2	2	1	0	6
SE	0	0	0	0	2	0	2
SSE	0	2	3	4	6	0	15
S	0	2	3	2	0	0	7
SSW	0	1	3	5	2	0	11
SW	0	2	3	2	2	0	9
WSW	0	0	1	1	1	0	3
W	0	0	4	1	0	0	5
WNW	0	1	1	2	2	0	6
NW	0	0	4	3	1	0	8
NNW	0	0	4	7	1	0	12
Variable	0	0	0	0	0	0	0
Total	0	13	52	40	25	0	130

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: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Neutral - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	5	22	29	5	0	62
NNE	3	4	19	31	3	1	61
NE	0	6	11	14	19	4	54
ENE	0	7	6	16	20	7	56
E	1	2	16	16	17	2	54
ESE	2	5	8	14	14	7	50
SE	0	4	10	12	12	1	39
SSE	0	3	11	19	9	1	43
S	1	3	11	11	2	1	29
SSW	2	10	6	8	3	1	30
SW	0	9	15	30	6	1	61
WSW	1	4	7	16	8	10	46
W	0	6	27	19	16	20	88
WNW	0	8	40	68	56	21	193
NW	0	14	51	101	33	7	206
NNW	1	8	21	37	16	1	84
Variable	0	0	0	0	0	0	0
Total	12	98	281	441	239	85	1156

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 21
 Hours of missing stability measurements in all stability classes: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Slightly Stable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	6	11	1	0	19
NNE	0	3	8	10	2	0	23
NE	0	3	8	7	0	0	18
ENE	0	0	7	12	1	0	20
E	0	0	13	4	2	0	19
ESE	0	0	4	14	11	0	29
SE	0	1	6	20	17	1	45
SSE	1	0	7	19	13	7	47
S	0	5	6	19	9	5	44
SSW	0	1	5	4	8	6	24
SW	0	2	5	11	6	2	26
WSW	0	3	5	11	2	1	22
W	0	1	11	8	1	0	21
WNW	1	4	13	19	1	0	38
NW	2	9	16	29	0	1	57
NNW	0	1	9	20	0	0	30
Variable	0	0	0	0	0	0	0
Total	4	34	129	218	74	23	482

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: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006
 Stability Class - Moderately Stable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	6	3	1	0	0	11
NNE	2	2	6	1	0	0	11
NE	2	5	3	2	0	0	12
ENE	0	0	1	0	0	0	1
E	0	1	1	2	0	0	4
ESE	2	2	2	3	1	0	10
SE	0	3	3	23	11	0	40
SSE	0	4	10	12	2	0	28
S	0	0	6	6	1	0	13
SSW	0	0	3	19	2	0	24
SW	0	1	3	3	3	0	10
WSW	0	1	1	1	0	0	3
W	0	2	5	5	0	0	12
WNW	0	1	0	1	1	0	3
NW	0	3	2	1	0	0	6
NNW	0	4	0	3	0	0	7
Variable	0	0	0	0	0	0	0
Total	7	35	49	83	21	0	195

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: 41

Quad Cities Nuclear Station

Period of Record: January - March 2006

Stability Class - Extremely Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	1	0	0	1
SE	0	1	1	1	1	0	4
SSE	0	0	0	4	0	0	4
S	0	0	1	6	0	0	7
SSW	0	2	0	7	0	0	9
SW	0	0	0	0	0	0	0
WSW	1	0	0	0	0	0	1
W	0	2	0	0	0	0	2
WNW	0	1	0	0	0	0	1
NW	0	1	0	0	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	1	7	2	19	1	0	30

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: 41

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Extremely Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	7	0	0	0	9
NNE	0	13	7	0	0	0	20
NE	0	3	4	1	0	0	8
ENE	0	5	6	0	0	0	11
E	0	6	0	0	0	0	6
ESE	0	5	9	3	0	0	17
SE	0	6	5	0	0	0	11
SSE	0	9	4	0	0	0	13
S	0	23	10	0	0	0	33
SSW	0	22	13	0	0	0	35
SW	0	15	5	0	0	0	20
WSW	0	8	13	1	0	0	22
W	0	17	6	0	0	0	23
WNW	0	12	32	0	0	0	44
NW	0	13	12	5	0	0	30
NNW	0	0	9	2	0	0	11
Variable	0	0	0	0	0	0	0
Total	0	159	142	12	0	0	313

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

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Moderately Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	2	0	0	0	5
NNE	0	3	1	0	0	0	4
NE	0	1	0	0	0	0	1
ENE	0	2	2	0	0	0	4
E	0	1	0	0	0	0	1
ESE	0	2	0	1	0	0	3
SE	0	1	1	0	0	0	2
SSE	0	1	0	0	0	0	1
S	0	1	0	0	0	0	1
SSW	0	8	0	0	0	0	8
SW	0	2	0	0	0	0	2
WSW	0	4	1	0	0	0	5
W	0	9	1	0	0	0	10
WNW	0	5	2	0	0	0	7
NW	0	5	3	0	0	0	8
NNW	0	1	2	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	49	15	1	0	0	65

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

Quad Cities Nuclear Station

Period of Record: April - June 2006
 Stability Class - Slightly Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	5	1	0	0	10
NNE	0	4	4	0	0	0	8
NE	0	5	0	2	0	0	7
ENE	0	6	1	0	0	0	7
E	0	4	1	0	0	0	5
ESE	0	8	3	0	0	0	11
SE	0	5	3	0	0	0	8
SSE	0	4	0	0	0	0	4
S	0	3	4	0	0	0	7
SSW	0	7	1	0	0	0	8
SW	1	4	0	0	0	0	5
WSW	0	10	1	0	0	0	11
W	2	11	2	0	0	0	15
WNW	1	4	3	0	0	0	8
NW	0	7	5	0	0	0	12
NNW	0	8	5	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	4	94	38	3	0	0	139

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

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Neutral - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	15	11	0	0	0	26
NNE	1	12	5	3	0	0	21
NE	2	28	25	11	0	0	66
ENE	3	25	19	2	0	0	49
E	4	14	12	1	0	0	31
ESE	5	17	28	12	0	0	62
SE	5	15	11	4	0	0	35
SSE	1	13	1	0	0	0	15
S	2	14	2	0	0	0	18
SSW	3	16	7	0	0	0	26
SW	3	19	3	0	0	0	25
WSW	5	17	12	0	0	0	34
W	6	22	13	0	0	0	41
WNW	6	44	28	2	0	0	80
NW	3	48	26	11	0	0	88
NNW	0	21	8	0	0	0	29
Variable	0	0	0	0	0	0	0
Total	49	340	211	46	0	0	646

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

Quad Cities Nuclear Station

Period of Record: April - June 2006
 Stability Class - Slightly Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	10	0	0	0	0	14
NNE	4	3	3	0	0	0	10
NE	6	11	7	0	0	0	24
ENE	7	15	2	0	0	0	24
E	8	22	1	1	0	0	32
ESE	6	14	11	11	0	0	42
SE	8	20	1	0	0	0	29
SSE	11	29	2	0	0	0	42
S	13	20	2	0	0	0	35
SSW	9	11	4	0	0	0	24
SW	7	21	4	0	0	0	32
WSW	9	17	3	0	0	0	29
W	13	30	3	0	0	0	46
WNW	10	34	3	0	0	0	47
NW	9	33	3	0	0	0	45
NNW	3	19	1	0	0	0	23
Variable	0	0	0	0	0	0	0
Total	127	309	50	12	0	0	498

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

Quad Cities Nuclear Station

Period of Record: April - June 2006
 Stability Class - Moderately Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	2	0	0	0	0	6
NNE	6	1	0	0	0	0	7
NE	5	0	0	0	0	0	5
ENE	11	3	0	0	0	0	14
E	9	1	0	0	0	0	10
ESE	27	14	0	0	0	0	41
SE	31	9	0	0	0	0	40
SSE	15	15	0	0	0	0	30
S	9	4	0	0	0	0	13
SSW	17	1	0	0	0	0	18
SW	9	3	0	0	0	0	12
WSW	6	1	0	0	0	0	7
W	17	2	0	0	0	0	19
WNW	18	5	0	0	0	0	23
NW	13	8	0	0	0	0	21
NNW	7	2	0	0	0	0	9
Variable	0	0	0	0	0	0	0
Total	204	71	0	0	0	0	275

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

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Extremely Stable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	0	0	0	0	0	2
NNE	2	0	0	0	0	0	2
NE	1	0	0	0	0	0	1
ENE	2	0	0	0	0	0	2
E	6	0	0	0	0	0	6
ESE	23	8	0	0	0	0	31
SE	8	0	0	0	0	0	8
SSE	11	0	0	0	0	0	11
S	3	0	0	0	0	0	3
SSW	10	0	0	0	0	0	10
SW	1	0	0	0	0	0	1
WSW	1	0	0	0	0	0	1
W	9	1	0	0	0	0	10
WNW	4	0	0	0	0	0	4
NW	2	2	0	0	0	0	4
NNW	1	0	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	86	11	0	0	0	0	97

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

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Extremely Unstable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	2	0	0	2
NE	0	0	1	1	0	0	2
ENE	0	0	0	4	0	0	4
E	0	0	0	0	0	0	0
ESE	0	0	2	2	1	1	6
SE	0	0	0	2	1	0	3
SSE	0	0	1	3	0	0	4
S	0	0	4	12	5	3	24
SSW	0	0	4	5	7	0	16
SW	0	0	2	1	0	0	3
WSW	0	0	1	5	1	0	7
W	0	0	1	0	0	0	1
WNW	0	0	2	12	6	0	20
NW	0	0	1	6	2	1	10
NNW	0	0	0	0	3	2	5
Variable	0	0	0	0	0	0	0
Total	0	0	19	55	26	7	107

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Moderately Unstable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	5	0	0	6
NNE	0	1	11	0	0	0	12
NE	0	0	2	3	2	0	7
ENE	0	0	2	2	0	0	4
E	0	0	3	1	0	0	4
ESE	0	0	3	0	0	0	3
SE	0	0	5	3	1	0	9
SSE	0	0	6	0	1	0	7
S	0	0	0	3	4	1	8
SSW	0	0	5	10	1	0	16
SW	0	0	4	1	1	0	6
WSW	0	1	2	5	0	0	8
W	0	1	4	1	0	0	6
WNW	0	2	10	6	4	0	22
NW	0	2	10	4	1	1	18
NNW	0	0	2	3	2	1	8
Variable	0	0	0	0	0	0	0
Total	0	7	70	47	17	3	144

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Slightly Unstable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	6	5	1	0	14
NNE	0	3	7	3	0	0	13
NE	0	3	1	1	0	2	7
ENE	0	3	5	2	0	0	10
E	0	0	4	0	0	0	4
ESE	0	0	1	1	0	1	3
SE	0	4	3	0	0	0	7
SSE	0	1	3	3	0	1	8
S	0	1	2	2	2	1	8
SSW	0	5	4	8	2	0	19
SW	0	1	5	0	0	0	6
WSW	0	0	11	1	2	0	14
W	0	6	8	2	0	0	16
WNW	0	3	9	1	5	0	18
NW	0	5	6	9	2	0	22
NNW	0	0	3	6	0	0	9
Variable	0	0	0	0	0	0	0
Total	0	37	78	44	14	5	178

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006
 Stability Class - Neutral - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	5	15	10	6	0	36
NNE	0	4	11	3	0	2	20
NE	0	9	14	28	15	12	78
ENE	1	2	18	21	5	4	51
E	0	3	16	15	4	0	38
ESE	2	10	5	8	20	12	57
SE	0	3	6	11	12	15	47
SSE	1	3	4	5	5	1	19
S	1	5	12	12	15	3	48
SSW	2	6	8	17	6	2	41
SW	0	5	11	5	1	0	22
WSW	1	6	10	12	4	0	33
W	1	11	13	11	14	0	50
WNW	1	9	26	17	18	3	74
NW	1	8	30	25	22	20	106
NNW	0	7	18	11	5	3	44
Variable	0	0	0	0	0	0	0
Total	11	96	217	211	152	77	764

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Slightly Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	12	6	1	0	24
NNE	1	1	4	8	0	0	14
NE	0	2	6	8	1	0	17
ENE	1	2	7	7	1	0	18
E	1	6	9	11	3	0	30
ESE	0	2	7	14	8	8	39
SE	0	2	4	12	7	1	26
SSE	0	3	8	20	12	0	43
S	0	2	10	39	18	4	73
SSW	0	2	8	18	7	3	38
SW	1	2	7	11	4	1	26
WSW	1	0	7	16	3	0	27
W	0	1	12	12	5	0	30
WNW	0	1	16	36	3	0	56
NW	0	2	10	25	4	0	41
NNW	0	2	13	15	7	0	37
Variable	0	0	0	0	0	0	0
Total	6	34	140	258	84	17	539

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006
 Stability Class - Moderately Stable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	6	4	2	0	15
NNE	0	1	10	3	0	0	14
NE	0	1	2	2	0	0	5
ENE	0	0	3	1	0	0	4
E	1	4	6	2	0	0	13
ESE	1	5	9	9	1	0	25
SE	0	3	6	21	4	0	34
SSE	0	4	7	18	3	0	32
S	0	0	13	23	3	0	39
SSW	0	2	7	17	0	0	26
SW	0	0	10	4	0	0	14
WSW	1	1	8	3	0	0	13
W	1	2	6	8	0	0	17
WNW	0	1	6	4	0	0	11
NW	2	1	12	5	0	0	20
NNW	0	0	9	8	2	0	19
Variable	0	0	0	0	0	0	0
Total	6	28	120	132	15	0	301

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: 29

Quad Cities Nuclear Station

Period of Record: April - June 2006

Stability Class - Extremely Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	2	1	0	6
NNE	0	3	6	3	0	0	12
NE	0	4	2	1	0	0	7
ENE	1	0	0	0	0	0	1
E	3	3	1	0	0	0	7
ESE	0	1	2	1	0	0	4
SE	1	4	3	2	0	0	10
SSE	0	1	8	2	0	0	11
S	0	5	2	1	0	0	8
SSW	0	1	0	7	4	0	12
SW	0	1	3	7	0	0	11
WSW	0	3	1	2	0	0	6
W	0	0	4	0	0	0	4
WNW	0	1	1	0	0	0	2
NW	0	0	1	1	0	0	2
NNW	1	3	3	0	0	0	7
Variable	0	0	0	0	0	0	0
Total	6	30	40	29	5	0	110

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: 29

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Extremely Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	5	0	0	0	8
NNE	0	1	2	0	0	0	3
NE	0	5	2	0	0	0	7
ENE	0	9	11	0	0	0	20
E	0	2	0	0	0	0	2
ESE	0	8	2	0	0	0	10
SE	0	6	7	0	0	0	13
SSE	0	18	7	0	0	0	25
S	0	2	0	0	0	0	2
SSW	0	13	0	0	0	0	13
SW	0	26	3	0	0	0	29
WSW	0	8	2	0	0	0	10
W	0	18	2	0	0	0	20
WNW	0	7	1	0	0	0	8
NW	0	5	3	0	0	0	8
NNW	0	4	8	0	0	0	12
Variable	0	0	0	0	0	0	0
Total	0	135	55	0	0	0	190

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

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Moderately Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	1	0	0	0	5
NNE	0	2	0	0	0	0	2
NE	0	5	2	0	0	0	7
ENE	0	8	1	0	0	0	9
E	0	5	0	0	0	0	5
ESE	0	3	0	0	0	0	3
SE	0	3	0	0	0	0	3
SSE	0	4	0	0	0	0	4
S	0	1	0	0	0	0	1
SSW	0	6	1	0	0	0	7
SW	0	12	1	0	0	0	13
WSW	0	3	0	0	0	0	3
W	0	9	0	0	0	0	9
WNW	0	1	1	0	0	0	2
NW	0	3	1	0	0	0	4
NNW	0	0	1	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	0	69	9	0	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

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Slightly Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	5	0	0	0	9
NNE	0	1	0	0	0	0	1
NE	0	7	0	0	0	0	7
ENE	1	15	3	0	0	0	19
E	0	5	0	0	0	0	5
ESE	0	7	0	0	0	0	7
SE	1	11	3	0	0	0	15
SSE	0	9	0	0	0	0	9
S	1	9	0	0	0	0	10
SSW	0	14	1	0	0	0	15
SW	0	10	3	0	0	0	13
WSW	2	6	1	0	0	0	9
W	2	9	0	0	0	0	11
WNW	0	6	5	0	0	0	11
NW	1	12	2	0	0	0	15
NNW	0	12	2	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	8	137	25	0	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

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Neutral - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	26	8	0	0	0	38
NNE	1	11	2	0	0	0	14
NE	8	40	6	0	0	0	54
ENE	5	61	15	0	0	0	81
E	9	27	7	0	0	0	43
ESE	8	38	0	0	0	0	46
SE	6	22	4	0	0	0	32
SSE	8	16	0	0	0	0	24
S	7	11	0	0	0	0	18
SSW	4	22	0	0	0	0	26
SW	10	38	12	0	0	0	60
WSW	7	22	6	0	0	0	35
W	7	31	2	1	0	0	41
WNW	4	32	5	0	0	0	41
NW	10	44	2	0	0	0	56
NNW	4	27	8	0	0	0	39
Variable	0	0	0	0	0	0	0
Total	102	468	77	1	0	0	648

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

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Slightly Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	20	16	0	0	0	0	36
NNE	12	6	2	0	0	0	20
NE	10	21	2	0	0	0	33
ENE	25	24	1	0	0	0	50
E	28	9	1	0	0	0	38
ESE	21	13	6	0	0	0	40
SE	15	22	4	0	0	0	41
SSE	19	14	0	0	0	0	33
S	6	16	0	0	0	0	22
SSW	10	19	0	0	0	0	29
SW	17	38	10	0	0	0	65
WSW	24	13	3	0	0	0	40
W	15	19	0	0	0	0	34
WNW	15	11	0	0	0	0	26
NW	26	26	0	0	0	0	52
NNW	14	16	3	0	0	0	33
Variable	0	0	0	0	0	0	0
Total	277	283	32	0	0	0	592

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

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Moderately Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	0	0	0	0	0	3
NNE	10	3	0	0	0	0	13
NE	12	0	0	0	0	0	12
ENE	7	5	0	0	0	0	12
E	18	0	0	0	0	0	18
ESE	23	7	0	0	0	0	30
SE	18	4	0	0	0	0	22
SSE	26	2	0	0	0	0	28
S	8	6	0	0	0	0	14
SSW	5	3	0	0	0	0	8
SW	10	1	0	0	0	0	11
WSW	8	1	0	0	0	0	9
W	10	2	0	0	0	0	12
WNW	8	5	0	0	0	0	13
NW	5	3	0	0	0	0	8
NNW	6	0	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	177	42	0	0	0	0	219

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

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Extremely Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	2	0	0	0	0	0	2
NE	1	0	0	0	0	0	1
ENE	4	0	0	0	0	0	4
E	14	0	0	0	0	0	14
ESE	20	5	0	0	0	0	25
SE	19	0	0	0	0	0	19
SSE	11	0	0	0	0	0	11
S	14	0	0	0	0	0	14
SSW	10	1	0	0	0	0	11
SW	4	0	0	0	0	0	4
WSW	4	0	0	0	0	0	4
W	10	0	0	0	0	0	10
WNW	13	1	0	0	0	0	14
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	128	7	0	0	0	0	135

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

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Extremely Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
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	9	0	0	9
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	2	0	0	0	2
SSE	0	0	0	4	2	2	8
S	0	0	0	0	0	0	0
SSW	0	0	1	1	0	0	2
SW	0	0	1	1	0	0	2
WSW	0	0	0	0	0	0	0
W	0	0	1	0	0	0	1
WNW	0	0	0	0	0	0	0
NW	1	0	0	0	0	0	1
NNW	0	0	0	1	0	0	1
Variable	0	0	0	0	0	0	0
Total	1	0	5	17	2	2	27

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Moderately Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	1	0	0	2
NNE	0	1	1	0	0	0	2
NE	0	1	3	1	0	0	5
ENE	0	0	11	1	0	0	12
E	0	0	1	0	0	0	1
ESE	0	0	4	1	0	0	5
SE	0	0	5	0	0	0	5
SSE	0	1	6	3	3	2	15
S	0	0	0	3	1	0	4
SSW	0	0	4	5	0	0	9
SW	0	1	5	4	0	0	10
WSW	0	0	3	0	0	0	3
W	0	3	5	4	0	0	12
WNW	0	0	1	3	0	0	4
NW	0	2	2	2	0	0	6
NNW	0	1	3	6	0	0	10
Variable	0	0	0	0	0	0	0
Total	0	10	55	34	4	2	105

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Slightly Unstable - 296Ft-33Ft Delta-T (F)
Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	5	1	0	0	9
NNE	0	1	0	2	0	0	3
NE	0	4	7	0	0	0	11
ENE	0	7	10	3	0	0	20
E	0	6	3	0	0	0	9
ESE	0	2	6	0	0	0	8
SE	0	2	7	0	1	0	10
SSE	0	4	1	8	0	0	13
S	0	2	3	2	0	1	8
SSW	0	3	5	8	2	0	18
SW	0	4	5	12	1	0	22
WSW	0	1	6	4	0	0	11
W	0	5	12	4	0	0	21
WNW	0	6	2	1	2	0	11
NW	0	2	3	2	1	0	8
NNW	0	7	2	4	0	0	13
Variable	0	0	0	0	0	0	0
Total	0	59	77	51	7	1	195

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Neutral - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	12	31	9	1	0	54
NNE	1	1	2	7	1	0	12
NE	0	5	30	17	1	0	53
ENE	1	12	45	28	2	0	88
E	0	12	21	4	2	0	39
ESE	0	7	19	15	2	0	43
SE	3	18	17	7	3	0	48
SSE	0	12	6	12	3	1	34
S	1	13	5	8	1	0	28
SSW	2	16	20	15	1	0	54
SW	0	12	17	20	13	1	63
WSW	1	10	12	8	2	0	33
W	0	16	22	19	2	1	60
WNW	0	9	15	21	3	1	49
NW	2	14	11	17	3	0	47
NNW	0	18	17	27	1	0	63
Variable	0	0	0	0	0	0	0
Total	12	187	290	234	41	4	768

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Slightly Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	10	18	8	0	0	36
NNE	0	4	14	7	1	0	26
NE	2	6	18	13	0	0	39
ENE	1	3	20	20	0	0	44
E	0	6	26	7	1	0	40
ESE	1	2	21	7	2	5	38
SE	1	5	21	15	6	1	49
SSE	1	3	9	20	12	0	45
S	0	3	8	23	2	0	36
SSW	0	2	5	31	16	0	54
SW	2	3	18	26	7	1	57
WSW	0	5	18	8	3	0	34
W	1	8	21	20	1	1	52
WNW	2	8	9	8	0	0	27
NW	2	5	15	8	0	0	30
NNW	0	8	20	15	0	0	43
Variable	0	0	0	0	0	0	0
Total	13	81	261	236	51	8	650

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006

Stability Class - Moderately Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	2	1	0	0	6
NNE	0	4	4	1	0	0	9
NE	0	4	3	2	0	0	9
ENE	0	3	2	2	0	0	7
E	0	6	6	4	0	0	16
ESE	1	5	6	7	0	0	19
SE	0	1	9	20	3	0	33
SSE	0	1	14	9	3	0	27
S	0	1	4	14	1	0	20
SSW	1	3	10	27	3	0	44
SW	0	2	6	5	0	0	13
WSW	2	4	6	8	0	0	20
W	1	1	5	3	0	0	10
WNW	0	3	5	9	0	0	17
NW	0	4	2	0	1	0	7
NNW	0	2	5	2	0	0	9
Variable	0	0	0	0	0	0	0
Total	5	47	89	114	11	0	266

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: 11

Quad Cities Nuclear Station

Period of Record: July - September 2006
 Stability Class - Extremely Stable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	2	2	1	0	0	8
NNE	0	1	2	0	0	0	3
NE	0	2	0	0	0	0	2
ENE	1	0	2	0	0	0	3
E	2	3	1	0	0	0	6
ESE	3	1	3	0	0	0	7
SE	1	4	5	3	2	0	15
SSE	1	2	4	10	0	0	17
S	0	3	5	2	0	0	10
SSW	3	8	6	7	1	0	25
SW	0	3	2	4	0	0	9
WSW	2	3	4	6	0	0	15
W	1	6	5	3	0	0	15
WNW	1	4	5	5	0	0	15
NW	2	2	3	5	0	0	12
NNW	0	4	7	4	0	0	15
Variable	0	0	0	0	0	0	0
Total	20	48	56	50	3	0	177

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 7
 Hours of missing stability measurements in all stability classes: 11

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Extremely Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	1	0	0	2
NNE	0	0	9	0	0	0	9
NE	0	1	1	0	0	0	2
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	1
SE	0	3	6	0	0	0	9
SSE	0	19	4	0	0	0	23
S	0	4	8	0	0	0	12
SSW	0	16	2	0	0	0	18
SW	0	12	3	0	0	0	15
WSW	0	0	0	0	0	0	0
W	0	1	3	5	0	0	9
WNW	0	1	9	1	0	0	11
NW	0	0	6	0	0	0	6
NNW	0	0	3	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	57	56	7	0	0	120

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

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Moderately Unstable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	0	0	0	3
NNE	0	0	3	1	0	0	4
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	1	1	0	0	0	2
SE	0	2	0	0	0	0	2
SSE	0	6	0	0	0	0	6
S	0	2	0	0	0	0	2
SSW	0	5	0	0	0	0	5
SW	0	9	1	0	0	0	10
WSW	0	2	0	0	0	0	2
W	0	1	1	5	0	0	7
WNW	0	0	1	2	0	0	3
NW	0	1	4	0	0	0	5
NNW	0	3	2	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	0	32	16	8	0	0	56

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

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Slightly Unstable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	10	2	0	0	14
NNE	0	0	0	0	0	0	0
NE	0	0	4	2	0	0	6
ENE	0	0	0	0	0	0	0
E	0	0	1	0	0	0	1
ESE	0	3	2	0	0	0	5
SE	0	2	1	0	0	0	3
SSE	0	10	1	0	0	0	11
S	0	5	1	0	0	0	6
SSW	0	8	0	0	0	0	8
SW	0	11	1	0	0	0	12
WSW	0	3	0	0	0	0	3
W	0	6	6	2	0	0	14
WNW	0	5	9	1	0	0	15
NW	0	5	7	0	0	0	12
NNW	0	4	2	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	0	64	45	7	0	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: 0

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Neutral - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	9	57	13	0	0	80
NNE	0	3	13	9	0	0	25
NE	2	35	23	2	0	0	62
ENE	4	16	7	1	0	0	28
E	3	22	30	2	0	0	57
ESE	3	22	17	5	0	0	47
SE	5	25	10	0	0	0	40
SSE	5	21	2	0	0	0	28
S	2	22	5	0	0	0	29
SSW	7	24	4	0	0	0	35
SW	6	17	10	0	0	0	33
WSW	6	21	26	0	0	0	53
W	7	43	73	18	0	0	141
WNW	2	53	67	13	0	0	135
NW	4	65	34	2	0	0	105
NNW	1	23	26	0	0	0	50
Variable	0	0	0	0	0	0	0
Total	58	421	404	65	0	0	948

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

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Slightly Stable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	3	0	0	0	0	7
NNE	4	4	0	0	0	0	8
NE	7	8	5	0	0	0	20
ENE	1	12	0	0	0	0	13
E	5	7	0	1	0	0	13
ESE	10	26	1	1	0	0	38
SE	10	42	4	0	0	0	56
SSE	13	30	0	0	0	0	43
S	6	38	1	0	0	0	45
SSW	15	32	3	0	0	0	50
SW	11	32	13	0	0	0	56
WSW	5	26	6	1	0	0	38
W	9	26	12	0	0	0	47
WNW	14	49	7	0	0	0	70
NW	10	15	0	0	0	0	25
NNW	4	8	2	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	128	358	54	3	0	0	543

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

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Moderately Stable - 196Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	3	0	0	0	0	5
NNE	0	2	0	0	0	0	2
NE	3	3	0	0	0	0	6
ENE	5	0	0	0	0	0	5
E	4	2	0	0	0	0	6
ESE	18	25	0	0	0	0	43
SE	28	14	0	0	0	0	42
SSE	19	8	0	0	0	0	27
S	7	6	0	0	0	0	13
SSW	2	4	0	0	0	0	6
SW	6	0	0	0	0	0	6
WSW	7	0	0	0	0	0	7
W	7	3	0	0	0	0	10
WNW	1	0	0	0	0	0	1
NW	2	0	0	0	0	0	2
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	111	71	0	0	0	0	182

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

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Extremely Stable - 196Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	0	0	0	0	1
NNE	0	1	0	0	0	0	1
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	6	1	0	0	0	0	7
ESE	41	57	1	1	0	0	100
SE	22	3	0	0	0	0	25
SSE	13	0	0	0	0	0	13
S	4	0	0	0	0	0	4
SSW	4	0	0	0	0	0	4
SW	1	0	0	0	0	0	1
WSW	1	0	0	0	0	0	1
W	0	0	0	0	0	0	0
WNW	1	0	0	0	0	0	1
NW	4	1	0	0	0	0	5
NNW	2	0	0	0	0	0	2
Variable	0	0	0	0	0	0	0
Total	101	63	1	1	0	0	166

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

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Extremely Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	1	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	0	0	0	0	0	0
SE	0	0	1	2	2	0	5
SSE	0	0	1	5	1	0	7
S	0	0	1	6	1	0	8
SSW	0	0	2	3	0	0	5
SW	0	0	1	0	0	0	1
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	1	1	2
NW	0	0	0	0	2	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	6	17	7	1	31

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

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Moderately Unstable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	2	0	0	2
NNE	0	0	6	2	0	0	8
NE	0	0	1	0	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	2	1	1	0	4
SSE	0	0	4	0	1	0	5
S	0	0	1	3	3	0	7
SSW	0	0	10	5	0	0	15
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	1	0	2	3
WNW	0	0	0	4	1	0	5
NW	0	0	0	1	2	0	3
NNW	0	0	0	0	2	0	2
Variable	0	0	0	0	0	0	0
Total	0	0	24	19	10	2	55

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

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Slightly Unstable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	5	0	0	5
NNE	0	0	1	1	0	1	3
NE	0	0	1	1	3	0	5
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	1	1	0	0	0	2
SE	0	0	3	0	1	0	4
SSE	0	0	3	4	0	0	7
S	0	0	5	2	2	1	10
SSW	0	3	8	6	4	0	21
SW	0	0	4	2	0	0	6
WSW	0	0	0	0	0	0	0
W	0	1	3	1	0	4	9
WNW	0	0	5	1	5	4	15
NW	0	0	4	5	3	0	12
NNW	0	0	10	2	0	0	12
Variable	0	0	0	0	0	0	0
Total	0	5	48	30	18	10	111

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

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Neutral - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	9	37	36	2	86
NNE	0	2	1	4	12	3	22
NE	0	4	5	43	12	1	65
ENE	1	0	8	10	4	3	26
E	0	6	14	24	6	1	51
ESE	2	8	11	16	13	6	56
SE	1	4	5	15	7	0	32
SSE	2	8	10	12	7	0	39
S	1	7	15	20	6	2	51
SSW	1	11	11	20	13	0	56
SW	2	11	12	7	9	0	41
WSW	3	7	8	8	19	1	46
W	0	9	15	46	51	14	135
WNW	0	2	29	51	40	12	134
NW	0	6	36	45	24	1	112
NNW	0	4	13	37	14	0	68
Variable	0	0	0	0	0	0	0
Total	13	91	202	395	273	46	1020

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 7
 Hours of missing stability measurements in all stability classes: 1

Quad Cities Nuclear Station

Period of Record: October - December 2006
 Stability Class - Slightly Stable - 296Ft-33Ft Delta-T (F)
 Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	6	4	1	0	11
NNE	0	3	4	4	0	0	11
NE	0	1	1	5	5	0	12
ENE	1	4	4	6	6	0	21
E	0	1	7	3	0	0	11
ESE	1	5	4	8	2	2	22
SE	0	2	7	19	2	1	31
SSE	0	4	21	40	8	0	73
S	0	1	10	42	20	1	74
SSW	0	9	13	45	30	2	99
SW	0	3	7	14	19	1	44
WSW	0	4	9	19	4	3	39
W	0	0	13	13	17	1	44
WNW	1	1	14	22	9	0	47
NW	2	3	21	21	2	0	49
NNW	0	2	5	15	1	0	23
Variable	0	0	0	0	0	0	0
Total	5	43	146	280	126	11	611

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

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Moderately Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	1	1	0	0	3
NNE	1	1	1	1	0	0	4
NE	0	2	0	5	0	0	7
ENE	0	4	0	1	0	0	5
E	0	2	1	0	0	0	3
ESE	1	1	0	5	2	0	9
SE	0	2	2	15	6	0	25
SSE	0	3	4	31	2	0	40
S	0	3	16	27	5	0	51
SSW	1	0	17	19	2	0	39
SW	0	3	8	2	1	0	14
WSW	1	1	4	0	0	0	6
W	0	2	3	2	0	0	7
WNW	0	2	8	1	0	0	11
NW	0	0	4	7	0	0	11
NNW	0	2	1	3	0	0	6
Variable	0	0	0	0	0	0	0
Total	5	28	70	120	18	0	241

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: 1

Quad Cities Nuclear Station

Period of Record: October - December 2006

Stability Class - Extremely Stable - 296Ft-33Ft Delta-T (F)

Winds Measured at 296 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	0	0	0	0	1
NNE	1	0	1	0	0	0	2
NE	0	1	0	0	0	0	1
ENE	0	1	0	0	0	0	1
E	1	0	3	1	0	0	5
ESE	1	4	2	1	0	0	8
SE	0	0	4	2	7	0	13
SSE	0	0	8	14	2	0	24
S	1	0	7	15	1	0	24
SSW	1	0	13	14	0	0	28
SW	0	0	5	3	0	0	8
WSW	0	3	0	0	0	0	3
W	0	1	1	0	0	0	2
WNW	1	4	3	0	0	0	8
NW	0	0	1	0	0	0	1
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	7	15	48	50	10	0	130

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

APPENDIX H

ANNUAL RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM REPORT (ARGPPR)

QUAD CITIES NUCLEAR POWER STATION UNITS 1 and 2

Annual Radiological
Groundwater Protection Program Report

1 January Through 31 December 2006

Prepared By

Teledyne Brown Engineering
Environmental Services



Nuclear

Quad Cities Nuclear Power Station
Cordova, IL 61242

May 2007

Table Of Contents

I. Summary and Conclusion	1
II. Introduction.....	4
A. Objectives of the RGPP	4
B. Implementation of the Objectives	4
C. Program Description.....	5
D. Characteristics of Tritium (H-3)	6
III. Program Description.....	6
A. Sample Analysis	6
B. Data Interpretation	7
C. Background Analysis.....	8
1. Background Concentrations of Tritium	8
IV. Results and Discussion	10
A. Groundwater Results.....	10

Appendices

Appendix A Location Designation

Tables

Table A-1: Radiological Groundwater Protection Program - Sampling Locations, Quad Cities Nuclear Power Station, 2006

Figures

Figure A-1: Sampling Locations Near the Site Boundary of the Quad Cities Nuclear Power Station, 2006

Appendix B Data Tables

Tables

Table B-I.1 Concentrations of Tritium in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table B-I.2 Highest to Lowest Concentrations of Tritium in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table B-I.3 Concentrations of Strontium in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table B-I.4 Highest to Lowest Concentrations of Strontium in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table B-I.5 Concentrations of Gamma Emitters in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

Table B-I.6 Highest to Lowest Concentrations of Gamma Emitters in Groundwater Samples Collected in the Vicinity of Quad Cities Nuclear Power Station, 2006.

I. Summary and Conclusions

In 2006, Exelon instituted a comprehensive program to evaluate the impact of station operations on groundwater and surface water in the vicinity of Quad Cities Nuclear Power Station. This evaluation involved numerous station personnel and contractor support personnel. At Quad Cities, 25 permanent groundwater monitoring wells were installed in 2006. The results of these groundwater monitoring wells are included in this report. This report covers groundwater and surface water samples, collected outside of the Licensee required Off-Site Dose Calculation Manual (ODCM) requirements. During that time period, 262 analyses were performed on 116 samples from 37 locations. The monitoring was conducted in two phases. Phase 1 of the monitoring was part of a comprehensive study initiated by Exelon to establish baseline data of groundwater and surface water radionuclides at and in the vicinity of Quad Cities Nuclear Power Station. Phase 1 was conducted by Conestoga Rovers and Associates (CRA) and the conclusions were made available to state and federal regulators as well as the public on an Exelon web site <http://www.exeloncorp.com/ourcompanies/powergen/nuclear/Tritium.htm>. Phase 2 of the RGPP was conducted by Exelon corporate, contractors and station personnel to initiate follow up of Phase 1 and begin long-term monitoring at groundwater and surface water locations selected during Phase 1. All analytical results from both the Phase 1 and Phase 2 monitoring are reported herein.

In assessing all the data gathered for this report, it was concluded that the operation of Quad Cities Nuclear Power Station had no adverse radiological impact on the environment, and there are no known active releases into the groundwater at Quad Cities Nuclear Power Station.

Gamma-emitting radionuclides associated with licensed plant operations were not detected at concentrations greater than their respective Lower Limits of Detection (LLDs) as specified in NUREG-1302 in any of the groundwater or surface water samples. In the case of tritium, Exelon specified that the independent laboratory achieve a lower limit of detection 10 times lower than that required by the United States Environmental Protection Agency (USEPA) regulation.

Strontium-89/90 was not detected at a concentration greater than the LLD of 2.0 pCi/L in any of the groundwater or surface water samples tested.

Tritium was detected in two groundwater samples at concentrations of 31,800 and 32,600 pCi/L, exceeding the United States Environmental Protection Agency (USEPA) drinking water standard (and the Nuclear Regulatory Commission

Reporting Limit) of 20,000 pCi/L. Low levels of tritium were detected at concentrations greater than the LLD of 200 pCi/L in 15 of 37 groundwater monitoring locations. The tritium concentrations ranged from 245 ± 129 pCi/L to $9,640 \pm 660$ pCi/L. Most of the tritium that was detected in groundwater at the Station is on the south and east side of the Reactor / Turbine buildings and is believed to be the result of isolated historical releases and/or background from external sources greater than 200 pCi/L.

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II. Introduction

The Quad Cities Nuclear Power Station (QCNPS), consisting of two 2957 MWth boiling water reactor owned and operated by Exelon Corporation, is located in Cordova, Illinois along the Mississippi River. Unit No. 1 went critical on 16 March 1972. Unit No. 2 went critical on 02 December 1973. The site is located in northern Illinois, approximately 182 miles west of Chicago, Illinois.

This report covers those analyses performed by Teledyne Brown Engineering (TBE) and Environmental Inc. (Midwest Labs) on samples collected in 2006.

A. Objective of the RGPP

The long-term objectives of the RGPP are as follows:

1. Identify suitable locations to monitor and evaluate potential impacts from station operations before significant radiological impact to the environment and potential drinking water sources.
2. Understand the local hydrogeologic regime in the vicinity of the station and maintain up-to-date knowledge of flow patterns on the surface and shallow subsurface.
3. Perform routine water sampling and radiological analysis of water from selected locations.
4. Report new leaks, spills, or other detections with potential radiological significance to stakeholders in a timely manner.
5. Regularly assess analytical results to identify adverse trends.
6. Take necessary corrective actions to protect groundwater resources.

B. Implementation of the Objectives

The objectives identified have been implemented at Quad Cities Nuclear Power Station as discussed below:

1. Exelon and its consultant identified locations as described in the Phase 1 study. Phase 1 studies were conducted by Conestoga Rovers and Associates (CRA) and the results and conclusions were made available to state and federal regulators as well as the public on an Exelon web site in station specific reports.
<http://www.exelonCorp.com/ourcompanies/powergen/nuclear/Tritium.htm>

2. The Quad Cities Nuclear Power Station reports describe the local hydrogeologic regime. Periodically, the flow patterns on the surface and shallow subsurface are updated based on ongoing measurements.
3. Quad Cities Nuclear Power Station will continue to perform routine sampling and radiological analysis of water from selected locations.
4. Quad Cities Nuclear Power Station has implemented new procedures to identify and report new leaks, spills, or other detections with potential radiological significance in a timely manner.
5. Quad Cities Nuclear Power Station staff and consulting hydrogeologist assess analytical results on an ongoing basis to identify adverse trends.

C. Program Description

1. Sample Collection

Sample locations can be found in Table A-1 and Figures A-1, Appendix A.

Groundwater and Surface Water

Samples of water are collected, managed, transported and analyzed in accordance with approved procedures following regulatory methods. Both groundwater and surface water are collected. Sample locations, sample collection frequencies and analytical frequencies are controlled in accordance with approved station procedures. Contractor and/or station personnel are trained in the collection, preservation management, and shipment of samples, as well as in documentation of sampling events. Analytical laboratories are subject to internal quality assurance programs, inter-laboratory cross-check programs, as well as nuclear industry audits. Station personnel review and evaluate all analytical data deliverables after initial review by the contractor.

Analytical data results are reviewed by both station personnel and an independent hydrogeologist for adverse trends or changes to hydrogeologic conditions.

D. Characteristics of Tritium (H-3)

Tritium (chemical symbol H-3) is a radioactive isotope of hydrogen. The most common form of tritium is tritium oxide, which is also called "tritiated water." The chemical properties of tritium are essentially those of ordinary hydrogen.

Tritiated water behaves the same as ordinary water in both the environment and the body. Tritium can be taken into the body by drinking water, breathing air, eating food, or absorption through skin. Once tritium enters the body, it disperses quickly and is uniformly distributed throughout the body. Tritium is excreted primarily through urine with a clearance rate characterized by an effective biological half-life of about 14 days. Within one month or so after ingestion, essentially all tritium is cleared. Organically bound tritium (tritium that is incorporated in organic compounds) can remain in the body for a longer period.

Tritium is produced naturally in the upper atmosphere when cosmic rays strike air molecules. Tritium is also produced during nuclear weapons explosions, as a by-product in reactors producing electricity, and in special production reactors, where the isotopes lithium-7 and/or boron-10 are activated to produce tritium. Like normal water, tritiated water is colorless and odorless. Tritiated water behaves chemically and physically like non-tritiated water in the subsurface, and therefore tritiated water will travel at the same velocity as the average groundwater velocity.

Tritium has a half-life of approximately 12.3 years. It decays spontaneously to helium-3 (^3He). This radioactive decay releases a beta particle (low-energy electron). The radioactive decay of tritium is the source of the health risk from exposure to tritium. Tritium is one of the least dangerous radionuclides because it emits very weak beta radiation and leaves the body relatively quickly. Since tritium is almost always found as water, it goes directly into soft tissues and organs. The associated dose to these tissues is generally uniform and is dependent on the water content of the specific tissue.

III. Program Description

A. Sample Analysis

This section describes the general analytical methodologies used by TBE and EIML to analyze the environmental samples for radioactivity for the Quad Cities Nuclear Power Station RGPP in 2006.

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

1. Concentrations of gamma emitters in groundwater and surface water.
2. Concentrations of strontium in groundwater and surface water.
3. Concentrations of tritium in groundwater and surface water.

B. Data Interpretation

The radiological data collected prior to Quad Cities Nuclear Power Station becoming operational were used as a baseline with which these operational data were compared. For the purpose of this report, Quad Cities Nuclear Power Station was considered operational at initial criticality. 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) is specified by federal regulation as a minimum sensitivity value that must be achieved routinely by the analytical parameter.

2. Laboratory Measurements Uncertainty

The estimated uncertainty in measurement of tritium in environmental samples is frequently on the order of 50% of the measurement value.

Statistically, the exact value of a measurement is expressed as a range with a stated level of confidence. The convention is to report results with a 95% level of confidence. The uncertainty comes from calibration standards, sample volume or weight measurements, sampling uncertainty and other factors. Exelon reports the uncertainty of a measurement created by statistical process (counting error) as well as all sources of error (Total Propagated Uncertainty or TPU). Each result has two values calculated. Exelon reports the TPU by following the result with plus or minus \pm the estimated sample standard deviation, as TPU, that is obtained by propagating all sources of analytical uncertainty in measurements.

Analytical uncertainties are reported at the 95% confidence level in this report for reporting consistency with the Annual Radiological

Environmental Operating Report (AREOR).

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

For groundwater and surface water 11 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Nb-95, Zr-95, Cs-134, Cs-137, Ba-140 and La-140 were reported.

C. Background Analysis

A pre-operational radiological environmental monitoring program (pre-operational REMP) was conducted to establish background radioactivity levels prior to operation of the Station. The environmental media sampled and analyzed during the pre-operational REMP were atmospheric radiation, fall-out, domestic water, surface water, marine life, and vegetation. The results of the monitoring were detailed in the reports entitled, Quad Cities Nuclear Power Plant Environmental Monitoring Report, Commonwealth Edison Company, covering the period from July 1968 through September 1971.

The pre-operational REMP contained analytical results from samples collected from the surface water and groundwater.

1. Background Concentrations of Tritium

The purpose of the following discussion is to summarize background measurements of tritium in various media performed by others.

a. Tritium Production

Tritium is created in the environment from naturally occurring processes both cosmic and subterranean, as well as from anthropogenic (i.e., man-made) sources. In the upper atmosphere, "Cosmogenic" tritium is produced from the bombardment of stable nuclides and combines with oxygen to form tritiated water, which will then enter the hydrologic cycle. Below ground, "lithogenic" tritium is produced by the bombardment of natural lithium present in crystalline rocks by neutrons produced by the radioactive decay of naturally abundant uranium and thorium. Lithogenic production of tritium is usually negligible compared to other sources due to the limited abundance of lithium in rock. The lithogenic tritium is introduced directly to groundwater.

A major anthropogenic source of tritium and strontium-90 comes from the former atmospheric testing of thermonuclear weapons. Levels of tritium in precipitation increased significantly during the 1950s and early 1960s, and later with additional testing, resulting in the release of significant amounts of tritium to the atmosphere. The Canadian heavy water nuclear power reactors, other commercial power reactors, nuclear research and weapons production continue to influence tritium concentrations in the environment.

b. Precipitation Data

Precipitation samples are routinely collected at stations around the world for the analysis of tritium and other radionuclides. Two publicly available databases that provide tritium concentrations in precipitation are Global Network of Isotopes in Precipitation (GNIP) and USEPA's RadNet database. GNIP provides tritium precipitation concentration data for samples collected world wide from 1960 to 2006. RadNet provides tritium precipitation concentration data for samples collected at stations through out the U.S. from 1960 up to and including 2006. Based on GNIP data for sample stations located in the U.S. Midwest, tritium concentrations peaked around 1963. This peak, which approached 10,000 pCi/L for some stations, coincided with the atmospheric testing of thermonuclear weapons. Tritium concentrations in surface water showed a sharp decline up until 1975 followed by a gradual decline since that time. Tritium concentrations in Midwest precipitation have typically been below 100 pCi/L since around 1980. Tritium concentrations in wells may still be above the 200 pCi/L detection limit from the external causes described above.

c. Surface Water Data

Tritium concentrations are routinely measured in large surface water bodies, including the Mississippi River. Illinois surface water data were typically less than 100 pCi/L.

The USEPA RadNet surface water data typically has a reported 'Combined Standard Uncertainty' of 35 to 50 pCi/L. According to USEPA, this corresponds to a ± 70 to 100 pCi/L 95% confidence bound on each given measurement. Therefore, the typical background data provided may be subject to measurement uncertainty of approximately ± 70 to

100 pCi/L.

The radio-analytical laboratory is counting tritium results to an Exelon specified LLD of 200 pCi/L. Typically, the lowest positive measurement will be reported within a range of 40 – 240 pCi/L or 140 ± 100 pCi/L. Clearly, these sample results cannot be distinguished as different from background at this concentration.

IV. Results and Discussion

A. Groundwater Results

Groundwater

Samples were collected from on-site wells in accordance with the station radiological groundwater protection program. Analytical results and anomalies are discussed below.

Tritium

Samples from all locations were analyzed for tritium activity (Table B-I.1 and B-I.2, Appendix B). Tritium values ranged from the detection limit to 32,600 pCi/l. All samples obtained at the site boundaries were less than the detection limit of 200 pCi/L. The location most representative of potential offsite user of drinking water was <200 pCi/L.

Strontium

Strontium-90 was detected in two samples at concentrations of 1.0 and 1.2 pCi/liter. This was less than the required detection limit of 2.0 pCi/liter. (Table B-I.3 and B-I.4, Appendix B).

Gamma Emitters and Strontium

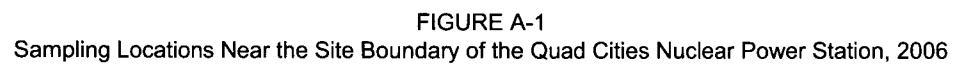
Naturally occurring Potassium-40 was detected in 13 of 73 samples. The concentrations ranged from 25 pCi/liter to 163 pCi/liter. No other gamma emitting nuclides were detected. (Table B-I.5 and B-I.6, Appendix B).

APPENDIX A

LOCATION DESIGNATION

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Quad Cities Nuclear Power Station, 2006

Site	Site Type
MW-QC-101S	Monitoring Well
MW-QC-101I	Monitoring Well
MW-QC-102S	Monitoring Well
MW-QC-102I	Monitoring Well
MW-QC-102D	Monitoring Well
MW-QC-103I	Monitoring Well
MW-QC-104S	Monitoring Well
MW-QC-105I	Monitoring Well
MW-QC-106S	Monitoring Well
MW-QC-106I	Monitoring Well
MW-QC-107I	Monitoring Well
MW-QC-108S	Monitoring Well
MW-QC-108I	Monitoring Well
MW-QC-108D	Monitoring Well
MW-QC-109S	Monitoring Well
MW-QC-109I	Monitoring Well
MW-QC-110I	Monitoring Well
MW-QC-111I	Monitoring Well
MW-QC-111D1	Monitoring Well
MW-QC-111D2	Monitoring Well
MW-QC-112I	Monitoring Well
MW-QC-113I	Monitoring Well
MW-QC-114I	Monitoring Well
MW-QC-115S	Monitoring Well
MW-QC-116S	Monitoring Well
MW-1	Monitoring Well
MW-2	Monitoring Well
QC-001	Surface Water
QC-002	Surface Water
WELL #1	Production Well
WELL #5	Production Well
LITTLE FISH WELL #6	Production Well
BIG FISH WELL #7	Production Well
FIRE TRAINING WELL #8	Production Well
DRY CASK Well #9	Production Well
FISH HOUSE WELL #10	Production Well
STP SAND POINT WELL	Production Well



APPENDIX B

DATA TABLES

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM IN GROUNDWATER SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER
STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE		COLLECTION DATE	
BIG FISH WELL		06/01/06	740 \pm 152
BIG FISH WELL		11/14/06	286 \pm 132*
BIG FISH WELL	RERUN	11/14/06	< 180 *
BIG FISH WELL	RERUN	12/13/06	720 \pm 143*
BIG FISH WELL		12/13/06	693 \pm 131*
BIG FISH WELL	RERUN	12/13/06	355 \pm 123*
BIG FISH WELL		12/13/06	309 \pm 119*
BIG FISH WELL	RERUN	12/14/06	1050 \pm 172*
BIG FISH WELL		12/14/06	729 \pm 132*
BIG FISH WELL		12/14/06	695 \pm 135*
BIG FISH WELL	RERUN	12/14/06	607 \pm 132*
BIG FISH WELL	RERUN	12/15/06	896 \pm 152*
BIG FISH WELL		12/15/06	821 \pm 138*
BIG FISH WELL	RERUN	12/16/06	847 \pm 147*
BIG FISH WELL		12/16/06	738 \pm 136*
BIG FISH WELL		12/17/06	746 \pm 136*
BIG FISH WELL	RERUN	12/17/06	740 \pm 138*
BIG FISH WELL		12/18/06	782 \pm 136*
BIG FISH WELL	RERUN	12/18/06	736 \pm 137*
BIG FISH WELL		12/19/06	1060 \pm 143*
BIG FISH WELL	RERUN	12/19/06	654 \pm 134*
DRY CASK STORAGE		06/01/06	< 187
DRY CASK STORAGE		11/14/06	< 199 *
FISH HOUSE WELL		05/31/06	< 184
FISH HOUSE WELL		11/14/06	< 195 *
FIRE TRAINING WELL		05/31/06	< 179
LITTLE FISH WELL		05/31/06	371 \pm 134
LITTLE FISH WELL	RERUN	11/14/06	< 177 *
MW-1		06/01/06	< 183
MW-1	RERUN	11/15/06	< 179 *
MW-2		06/01/06	250 \pm 126
MW-2		11/15/06	< 193 *
MW-QC-101I		11/16/06	< 194 *
MW-QC-101I		06/01/06	< 153
MW-QC-101S		06/01/06	< 185
MW-QC-101S		11/16/06	< 194 *
MW-QC-102D		06/28/06	3660 \pm 422*
MW-QC-102D		07/28/06	3930 \pm 450*
MW-QC-102D		11/15/06	3810 \pm 257*
MW-QC-102D	RERUN	11/15/06	3250 \pm 388*
MW-QC-102I	ORIG	05/31/06	32600 \pm 977
MW-QC-102I DUP	DUP	05/31/06	31800 \pm 972
MW-QC-102I	RERUN	11/16/06	8680 \pm 1740*
MW-QC-102I		11/16/06	8660 \pm 1430*
MW-QC-102S	ORIG	05/31/06	9410 \pm 655
MW-QC-102S DUP	DUP	05/31/06	9640 \pm 660
MW-QC-102S		11/16/06	< 193 *
MW-QC-103I	ORIG	06/01/06	< 169
MW-QC-103I DUP	DUP	06/01/06	187 \pm 121
MW-QC-103I		11/15/06	< 192 *

* INDICATES DISTILLED ANALYSIS

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM IN GROUNDWATER SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER
STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE		COLLECTION DATE	
MW-QC-104S		06/01/06	262 \pm 130
MW-QC-104S		11/15/06	190 \pm 120*
MW-QC-105I		06/01/06	< 180
MW-QC-105I		11/15/06	< 187 *
MW-QC-106I		05/31/06	< 179
MW-QC-106I		11/15/06	< 199 *
MW-QC-106S		05/31/06	< 181
MW-QC-106S		11/15/06	< 187 *
MW-QC-107I		05/31/06	< 191
MW-QC-107I		11/14/06	< 198 *
MW-QC-108D		12/12/06	3130 \pm 219*
MW-QC-108D	RERUN	12/12/06	3760 \pm 435*
MW-QC-108D		12/12/06	3100 \pm 217*
MW-QC-108D	RERUN	12/12/06	3450 \pm 403*
MW-QC-108I		06/28/06	1940 \pm 256*
MW-QC-108I		07/27/06	1890 \pm 252*
MW-QC-108I		11/14/06	1680 \pm 190*
MW-QC-108I	RERUN	11/14/06	1610 \pm 153*
MW-QC-108S		05/31/06	1460 \pm 217
MW-QC-108S		11/14/06	282 \pm 133*
MW-QC-108S	RERUN	11/14/06	459 \pm 138*
MW-QC-109I	ORIG	07/28/06	768 \pm 156*
MW-QC-109I DUP	DUP	07/28/06	1140 \pm 182*
MW-QC-109I		11/15/06	1310 \pm 175*
MW-QC-109I	RERUN	11/15/06	1440 \pm 224*
MW-QC-109S	ORIG	07/28/06	< 181 *
MW-QC-109S DUP	DUP	07/28/06	< 172 *
MW-QC-109S		11/15/06	< 197 *
MW-QC-110I		07/27/06	< 179 *
MW-QC-110I		11/14/06	< 189 *
MW-QC-111D1		12/12/06	< 180 *
MW-QC-111D2		12/11/06	< 180 *
MW-QC-111I		07/27/06	420 \pm 133*
MW-QC-111I		11/16/06	255 \pm 133*
MW-QC-111I	RERUN	11/16/06	316 \pm 134*
MW-QC-112I		07/27/06	< 183 *
MW-QC-112I	RERUN	12/12/06	< 173 *
MW-QC-113I		07/27/06	< 184 *
MW-QC-113I		11/14/06	< 185 *
MW-QC-114I		07/27/06	< 178 *
MW-QC-114I		11/14/06	< 194 *
MW-QC-115S		07/28/06	< 185 *
MW-QC-115S		11/14/06	< 195 *
MW-QC-116S		07/28/06	< 183 *
MW-QC-116S	RERUN	11/14/06	191 \pm 114*

* INDICATES DISTILLED ANALYSIS

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM IN GROUNDWATER SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER
STATION, 2006**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE		COLLECTION DATE	
QC-001		05/31/06	550 \pm 143
QC-001	RERUN	11/16/06	< 196 *
QC-001	RERUN	11/16/06	< 185 *
QC-002		05/31/06	497 \pm 140
QC-002	ORIG	11/16/06	< 197 *
QC-002	RERUN	11/16/06	< 173 *
STP SAND POINT WE		06/01/06	181 \pm 117
STP SAND POINT WE	RERUN	11/14/06	< 191 *
WELL #1		06/01/06	< 185
WELL #1	RERUN	11/14/06	304 \pm 126*
WELL #1	RERUN	11/14/06	245 \pm 129*
WELL #5		06/01/06	< 189
WELL #5	RERUN	11/14/06	< 194 *
WELL #5	RERUN	11/14/06	< 190 *

* INDICATES DISTILLED ANALYSIS

TABLE B-I.2

HIGHEST TO LOWEST CONCENTRATIONS OF TRITIUM IN
GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
QUAD CITIES NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE		COLLECTION DATE	
MW-QC-102I	ORIG	05/31/06	32600 \pm 977
MW-QC-102I DUP	DUP	05/31/06	31800 \pm 972
MW-QC-102S DUP	DUP	05/31/06	9640 \pm 660
MW-QC-102S	ORIG	05/31/06	9410 \pm 655
MW-QC-102I	RERUN	11/16/06	8680 \pm 1740*
MW-QC-102I		11/16/06	8660 \pm 1430*
MW-QC-102D		07/28/06	3930 \pm 450*
MW-QC-102D		11/15/06	3810 \pm 257*
MW-QC-108D	RERUN	12/12/06	3760 \pm 435*
MW-QC-102D		06/28/06	3660 \pm 422*
MW-QC-108D	RERUN	12/12/06	3450 \pm 403*
MW-QC-102D	RERUN	11/15/06	3250 \pm 388*
MW-QC-108D		12/12/06	3130 \pm 219*
MW-QC-108D		12/12/06	3100 \pm 217*
MW-QC-108I		06/28/06	1940 \pm 256*
MW-QC-108I		07/27/06	1890 \pm 252*
MW-QC-108I		11/14/06	1680 \pm 190*
MW-QC-108I	RERUN	11/14/06	1610 \pm 153*
MW-QC-108S		05/31/06	1460 \pm 217
MW-QC-109I	RERUN	11/15/06	1440 \pm 224*
MW-QC-109I		11/15/06	1310 \pm 175*
MW-QC-109I DUP	DUP	07/28/06	1140 \pm 182*
BIG FISH WELL		12/19/06	1060 \pm 143*
BIG FISH WELL	RERUN	12/14/06	1050 \pm 172*
BIG FISH WELL	RERUN	12/15/06	896 \pm 152*
BIG FISH WELL	RERUN	12/16/06	847 \pm 147*
BIG FISH WELL		12/15/06	821 \pm 138*
BIG FISH WELL		12/18/06	782 \pm 136*
MW-QC-109I	ORIG	07/28/06	768 \pm 156*
BIG FISH WELL		12/17/06	746 \pm 136*
BIG FISH WELL		06/01/06	740 \pm 152
BIG FISH WELL	RERUN	12/17/06	740 \pm 138*
BIG FISH WELL		12/16/06	738 \pm 136*
BIG FISH WELL	RERUN	12/18/06	736 \pm 137*
BIG FISH WELL		12/14/06	729 \pm 132*
BIG FISH WELL	RERUN	12/13/06	720 \pm 143*
BIG FISH WELL		12/14/06	695 \pm 135*
BIG FISH WELL		12/13/06	693 \pm 131*
BIG FISH WELL	RERUN	12/19/06	654 \pm 134*
BIG FISH WELL	RERUN	12/14/06	607 \pm 132*
QC-001		05/31/06	550 \pm 143
QC-002		05/31/06	497 \pm 140
MW-QC-108S	RERUN	11/14/06	459 \pm 138*
MW-QC-111I		07/27/06	420 \pm 133*
LITTLE FISH WELL		05/31/06	371 \pm 134
BIG FISH WELL	RERUN	12/13/06	355 \pm 123*
MW-QC-111I	RERUN	11/16/06	316 \pm 134*
BIG FISH WELL		12/13/06	309 \pm 119*
WELL #1	RERUN	11/14/06	304 \pm 126*

* INDICATES DISTILLED ANALYSIS

TABLE B-I.2

HIGHEST TO LOWEST CONCENTRATIONS OF TRITIUM IN
GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
QUAD CITIES NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE		COLLECTION DATE	
BIG FISH WELL		11/14/06	286 \pm 132*
MW-QC-108S		11/14/06	282 \pm 133*
MW-QC-104S		06/01/06	262 \pm 130
MW-QC-111I		11/16/06	255 \pm 133*
MW-2		06/01/06	250 \pm 126
WELL #1	RERUN	11/14/06	245 \pm 129*
DRY CASK STORAGE		11/14/06	< 199 *
MW-QC-106I		11/15/06	< 199 *
MW-QC-107I		11/14/06	< 198 *
MW-QC-109S		11/15/06	< 197 *
QC-002	ORIG	11/16/06	< 197 *
QC-001	RERUN	11/16/06	< 196 *
FISH HOUSE WELL		11/14/06	< 195 *
MW-QC-115S		11/14/06	< 195 *
MW-QC-101I		11/16/06	< 194 *
MW-QC-101S		11/16/06	< 194 *
MW-QC-114I		11/14/06	< 194 *
WELL #5	RERUN	11/14/06	< 194 *
MW-2		11/15/06	< 193 *
MW-QC-102S		11/16/06	< 193 *
MW-QC-103I		11/15/06	< 192 *
MW-QC-107I		05/31/06	< 191
MW-QC-116S	RERUN	11/14/06	191 \pm 114*
STP SAND POINT WE	RERUN	11/14/06	< 191 *
MW-QC-104S		11/15/06	190 \pm 120*
WELL #5	RERUN	11/14/06	< 190 *
MW-QC-110I		11/14/06	< 189 *
WELL #5		06/01/06	< 189
DCS		06/01/06	< 187
MW-QC-103I DUP	DUP	06/01/06	187 \pm 121
MW-QC-105I		11/15/06	< 187 *
MW-QC-106S		11/15/06	< 187 *
MW-QC-101S		06/01/06	< 185
MW-QC-113I		11/14/06	< 185 *
MW-QC-115S		07/28/06	< 185 *
QC-001	RERUN	11/16/06	< 185 *
WELL #1		06/01/06	< 185
FISH HOUSE WELL		05/31/06	< 184
MW-QC-113I		07/27/06	< 184 *
MW-1		06/01/06	< 183
MW-QC-112I		07/27/06	< 183 *
MW-QC-116S		07/28/06	< 183 *
MW-QC-106S		05/31/06	< 181
MW-QC-109S	ORIG	07/28/06	< 181 *
STP SAND POINT WE		06/01/06	181 \pm 117
BIG FISH WELL	RERUN	11/14/06	< 180 *
MW-QC-105I		06/01/06	< 180
MW-QC-111D1		12/12/06	< 180 *
MW-QC-111D2		12/11/06	< 180 *
FIRE TRAINING WELL		05/31/06	< 179

* INDICATES DISTILLED ANALYSIS

TABLE B-I.2

HIGHEST TO LOWEST CONCENTRATIONS OF TRITIUM IN
GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
QUAD CITIES NUCLEAR POWER STATION, 2006

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE		COLLECTION DATE		
MW-1	RERUN	11/15/06	< 179	*
MW-QC-106I		05/31/06	< 179	
MW-QC-110I		07/27/06	< 179	*
MW-QC-114I		07/27/06	< 178	*
LITTLE FISH WELL	RERUN	11/14/06	< 177	*
MW-QC-112I	RERUN	12/12/06	< 173	*
QC-002	RERUN	11/16/06	< 173	*
MW-QC-109S DUP	DUP	07/28/06	< 172	*
MW-QC-103I	ORIG	06/01/06	< 169	
MW-QC-101I		06/01/06	< 153	

* INDICATES DISTILLED ANALYSIS

TABLE B-I.3**CONCENTRATIONS OF STRONTIUM IN GROUNDWATER SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER
STATION, 2006**RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION	
	DATE	
MW-1	11/15/06	1.0 \pm 0.5
MW-QC-104S	06/01/06	1.2 \pm 0.6

TABLE B-I.4**HIGHEST TO LOWEST CONCENTRATIONS OF STRONTIUM IN
GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
QUAD CITIES NUCLEAR POWER STATION, 2006**RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION	
	DATE	
MW-QC-104S	06/01/06	1.2 \pm 0.6
MW-1	11/15/06	1.0 \pm 0.5

TABLE B-I.5

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES
COLLECTED IN THE VICINITY OF QUAD CITIES NUCLEAR POWER
STATION, 2006**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION		Be-7	K-40
	DATE			
DCS	06/01/06		-	106 \pm 34
DRY CASK STORAGE	11/14/06		-	147 \pm 44
MW-1	11/15/06		-	62 \pm 32
MW-2	06/01/06		-	145 \pm 51
MW-QC-102I DUP	DUP	05/31/06	-	85 \pm 37
MW-QC-102S DUP	DUP	05/31/06	-	39 \pm 29
MW-QC-102S		11/16/06	-	51 \pm 32
MW-QC-103I DUP	DUP	06/01/06	-	54 \pm 37
MW-QC-104S		11/15/06	-	126 \pm 24
MW-QC-108S		05/31/06	-	163 \pm 56
MW-QC-109S		11/15/06	-	25 \pm 24
QC-002		05/31/06	-	97 \pm 45
QC-102		11/16/06	-	43 \pm 28

TABLE B-I.6

**HIGHEST TO LOWEST CONCENTRATIONS OF GAMMA EMITTERS IN
GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
QUAD CITIES NUCLEAR POWER STATION, 2006**RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION	
	DATE	K-40
MW-QC-108S	05/31/06	163 \pm 56
DRY CASK STORAGE	11/14/06	147 \pm 44
MW-2	06/01/06	145 \pm 51
MW-QC-104S	11/15/06	126 \pm 24
DCS	06/01/06	106 \pm 34
QC-002	05/31/06	97 \pm 45
MW-QC-102I DUP	DUP 05/31/06	85 \pm 37
MW-1	11/15/06	62 \pm 32
MW-QC-103I DUP	DUP 06/01/06	54 \pm 37
MW-QC-102S	11/16/06	51 \pm 32
QC-102	11/16/06	43 \pm 28
MW-QC-102S DUP	DUP 05/31/06	39 \pm 29
MW-QC-109S	11/15/06	25 \pm 24