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Exelon Nuclear

RA05-39

May 16, 2005

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

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: 2004 Annual Radiological Environmental Operating Report

Enclosed is the Exelon Generation Company, LLC, LaSalle County Station 2004 Annual Radiological Environmental Operating Report, submitted in accordance with Technical Specification 5.6.2, "Annual Radiological Environmental Operating Report." This report contains the results of the Radiological Environmental and Meteorological Monitoring Programs.

Should you have any questions concerning this letter, please contact Mr. Terrence Simpkin, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

Susan R. Landahl

Susan R. Landahl
Site Vice President
LaSalle County Station

Attachment

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - LaSalle County Station

JE25

LASALLE COUNTY STATION

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

2004

MAY 2005

INTRODUCTION

LaSalle County Station, a two-unit BWR station is located near Marseilles, Illinois in LaSalle County, 3.5 miles south of the Illinois River. The output of Unit 1 is 1183 MWe; the output of Unit 2 is 1187 MWe. Unit 1 loaded fuel in March 1982. Unit 2 loaded fuel in late December 1983. The station has been designed to keep releases to the environment at levels below those specified in the regulations.

Liquid effluents from LaSalle County Station are released to the Illinois 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 routine grab samples of noble gases as well as continuously collected composite samples of iodine and particulate radioactivity 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 effluent and meteorological data.

Environmental monitoring is conducted by sampling at indicator and control (background) locations in the vicinity of the LaSalle County Station to measure changes in radiation or radioactivity levels that may be attributable to station operations. If significant changes attributable to LaSalle County 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 most critical pathways at this site; however, an environmental monitoring program is conducted which includes these and many other pathways which are less significant in terms of radiation protection.

SUMMARY

Gaseous and liquid effluents for the period contributed to only a small fraction of the LaSalle County Station Technical Specification limits. Calculations of environmental concentrations based on effluent, Illinois River flow, and meteorological data for the period indicate that consumption by the public of radionuclides attributable to LaSalle County Station does not exceed regulatory limits. Radiation exposure from radionuclides released to the atmosphere represented the critical pathway for the period with a maximum individual total dose estimated to be 1.46E-01 mrem for the year, where a shielding and occupancy factor of 0.7 is assumed. The assessment of radiation doses is performed in accordance with the Offsite Dose Calculation Manual (ODCM), specifically, a comparison of preoperational studies with operational controls or with previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. Control locations are basis for "preoperational data." Yearly data comparisons are provided in Sections 5.1 and 5.2; five-year graphical trend data is provided in Appendix III, Section 7.0. The results of analysis confirm that the station is operating in compliance with 10CFR50 Appendix I, 10CFR20 and 40CFR190.

1.0 EFFLUENTS

1.1 Gaseous Effluents to the Atmosphere

Measured concentrations of noble gases, radioiodine, and particulate radioactivity released to the atmosphere during the year, are listed in Table 1.1-1. A total of 1.13E+04 curies of fission and activation gases were released with a maximum quarterly average release rate of 4.39E+02 µCi/sec.

A total of 1.18E+00 curies of I-131 were released during the year with a maximum quarterly average release rate of 4.63E-02 µCi/sec.

A total of 3.22E-02 curies of beta-gamma emitters was released as airborne particulate matter with a maximum quarterly average release rate of 1.16E-03 µCi/sec. Alpha-emitting radionuclides were below the lower limit of detection (LLD).

A total of 7.82E+01 curies of tritium was released with a maximum quarterly average release rate of 4.17E+00 µCi/sec.

1.2 Liquids Released to Illinois River

There were no liquid batch releases in 2004. Continuous release path activity was below applicable Lower Limits of Detection.

2.0 SOLID RADIOACTIVE WASTE

Solid radioactive wastes were shipped by truck to the Envirocare Disposal Facility or to a waste processor. For further detail, refer to the LaSalle 2004 Radioactive Effluent Report. The submittal date of this report was April 29, 2005.

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.

Isopleth figures and any references to them were removed from the report in 2004 due to a Change Management decision between the station and the Met Tower contractor. Associated information for iodine and particulate concentrations in air under previous sections. 3.1.2.1 and 3.1.3 has also been removed. Subsequent sections have been renumbered accordingly.

3.1.1 Noble Gases

3.1.1.1 Gamma Dose Rates

Unit 1 and Unit 2 gaseous releases at LaSalle County Station are reported as Unit 1 releases due to a single station vent stack (SVS) release point. 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. Doses based on concurrent meteorological data are shown in Table 3.4-1. Based on measured effluents and meteorological data, the maximum total body dose to an individual would be 1.46E-01 mrem (Table 3.1-1) for the year, 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 1.11E-01 mrem. (Table 3.4-1).

The maximum gamma air dose was 1.94E-01 mrad (Table 3.1-1) and 2.38E-01 mrad based on concurrent meteorological data (Table 3.4-1).

3.1.1.2 Beta Air and Skin 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 the 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 1.55E-01 mrem (Table 3.1-1) and 1.32E-01 mrem (Table 3.4-1) based on concurrent meteorological data. The maximum offsite beta air dose for the year was 7.10E-03 mrad (Table 3.1-1) and 2.64E-02 mrad (Table 3.4-1) based on concurrent meteorological data.

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 plant, may be made available to man resulting in a dose to the thyroid. The principal pathway of interest for this radionuclide is ingestion of radioiodine in milk.

3.1.2.1 Dose to Thyroid

The hypothetical thyroid dose to a maximum exposed individual living near the station via ingestion of milk was calculated. The radionuclide considered was I-131 and the source of milk was taken to be the nearest dairy farm with the cows pastured from May through October. The maximum thyroid dose due to I-131 was 2.10E-01 mrem (child) for the year (Table 3.1-1).

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 applicable at a given

time 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 gastro-intestinal tracts, thyroid, bone, skin; specific parameters for use in the equations are given in the Offsite Dose Calculation Manual. The maximum whole body dose was 0.00E+00 and organ dose was 0.00E+00 for the year (Table 3.2-1).

3.3 Assessment of Dose to Member of Public

During the period January to December, 2004, LaSalle County Station did not exceed these limits as shown in Table 3.1-1 and Table 3.2-1 (based on yearly average meteorological data), and Table 3.4-1 (based on concurrent meteorological data), and as shown in Table 3.3-1:

- The Radiological Effluent Technical Standards (RETS) limits on dose or dose commitment to an individual due to radioactive materials in liquid effluents from each reactor unit (1.5 mrem to the whole body or 5 mrem to any organ during any calendar quarter; 3 mrem to the whole body or 10 mrem to any organ during any 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 mrads for gamma radiation or 20 mrad for beta radiation during any 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 10CFR20 limit on Total Effective Dose Equivalent to individual members of the public (100 mrem).

4.0 SITE METEOROLOGY

A summary of the site meteorological measurements taken during each calendar quarter of the year is given in Appendix II. The data are presented as cumulative joint frequency distributions of the wind direction for the 375' level and wind speed class by atmospheric stability class determined for the temperature difference between the 375' and 33' levels. Data recovery for these measurements was 99.6% during 2004 (Table 3.4-1)

5.0 ENVIRONMENTAL MONITORING

Table 5.0-1 provides an outline of the Radiological Environmental Monitoring Program (REMP) as required in the current Technical Standards. Tables 5.0-2 list the program

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

sampling locations, collection frequencies and analyses for all samples collected. Tables 5.0-3 to 5.0-6 summarize data for the year. A detailed listing of all data is given in Appendix III.

Specific findings for various environmental media are discussed below.

5.1 Gamma Radiation

External radiation dose from onsite sources and noble gases released to the atmosphere was measured using CaF_2 thermoluminescent dosimeters (TLDs). Each location normally consists of 2 TLD sets. The quarterly average external radiation dose for the year was 26.5 mR at the indicator locations and 22.5 mR at the control locations. TLD results are listed in Table 6.0 of Appendix III and locations are shown in Figures 5.0-1 and 5.0-2.

Quarterly external radiation dose at indicator air sampling locations averaged 25.4 mR and is similar to levels measured in 1986 (17.1 mR), 1987 (17.8 mR), 1988 (16.5 mR), 1989 (17.6 mR), 1990 (17.8 mR), 1991 (17.7 mR), 1992 (15.5 mR), 1993 (14.5 mR), 1994 (15.4 mR), 1995 (15.3 mR), 1996 (15.9 mR) and 1997 (16.1 mR), 1998 (17.0 mR), 1999 (17.0 mR), 2000 (17.9 mR), 2001 (20.1 mR), 2002 (23.3 mR) and 2003 (23.2 mR).

5.2 Airborne I-131 and Particulate Radioactivity

Locations of the samplers are shown in Figure 5.0-3. Airborne I-131 remained below the LLD of 0.07 pCi/m^3 throughout the year.

Gross beta concentrations ranged from 0.003 to 0.050 pCi/m^3 and averaged 0.024 pCi/m^3 and were similar to levels measured in 1985 (0.025 pCi/m^3), 1986 (0.027 pCi/m^3, except for the period from May 16 through June 6 when it was influenced by the nuclear reactor accident at Chernobyl), 1987 (0.027 pCi/m^3), 1988 (0.031 pCi/m^3), 1989 (0.028 pCi/m^3), 1990 (0.024 pCi/m^3), 1991 (0.022 pCi/m^3), 1992 (0.022 pCi/m^3), 1993 (0.022 pCi/m^3), 1994 (0.022 pCi/m^3), 1995 (0.021 pCi/m^3), 1996 (0.021 pCi/m^3), 1997 (0.022 pCi/m^3), 1998 (0.024 pCi/m^3), 1999 (0.027 pCi/m^3), 2000 (0.028 pCi/m^3), 2001 (0.027 pCi/m^3), 2002 (0.027 pCi/m^3) and 2003 (0.026 pCi/m^3).

Gamma isotopic results were below the LLD level of 0.01 pCi/m^3 in all quarterly composites.

No activity attributable to station operation was detected in any sample.

5.3 Aquatic Radioactivity

Well water was collected quarterly from one onsite well and one offsite well and analyzed for tritium and gamma-emitting nuclides. All results were below the limits of detection, indicating that there was no measurable amount of radioactivity due to the Station's releases.

Weekly surface water samples from the Illinois River at Seneca and Illinois River Downstream were composited monthly and analyzed for gamma and beta-emitting nuclides. Weekly samples from the same locations were composited quarterly and analyzed for tritium. None of the composited samples indicated the presence of gamma-emitting nuclides above their respective LLD levels.

Gross beta activity averaged 5.2 pCi/L in the Illinois River at Seneca samples, with a range of 4.1-6.1 pCi/L. The Illinois River, Downstream sample averaged 5.0 pCi/L, with a range of 3.8-5.8 pCi/L.

Tritium activity in the quarterly upstream samples, Illinois River at Seneca, averaged 521 pCi/L with a maximum third quarter concentration of 1,058 pCi/L. In the Illinois River Downstream samples, tritium activity averaged 439 pCi/L with a maximum third quarter concentration of 874 pCi/L. These values are well below the reporting level of 30,000 pCi/L.

Sediment samples were collected twice a year from two indicator locations (Illinois River, Downstream) and analyzed for gamma-emitters. Cs-134 and Cs-137 concentrations were below the detection limits of 0.15 pCi/g dry weight and 0.18 pCi/g dry weight, respectively, in all samples.

Levels of gamma radioactivity in fish were measured and found in all samples to be below the lower limit of detection for the program.

5.4 Milk

Milk samples were collected monthly from November through April and biweekly from May through October and analyzed for Iodine-131 and gamma-emitting nuclides.

I-131 remained below the detection limit of 1.0 pCi/L. Cs-134, Cs-137 and Ba/La-140 were below the LLD levels of 15, 18 and 15 pCi/L, respectively.

5.5 Terrestrial Radioactivity

Vegetables were collected in the third quarter and analyzed for iodine-131 and gamma-emitting nuclides. All nuclides were below the limits of detection, indicating there was no measurable amount of radioactivity attributable to the Station's releases.

5.6 Sample Collections

All samples were collected as scheduled except those listed in the Listing of Missed Samples, Section 2 of Appendix III.

5.7 Program Modifications

There were no modifications to the program in 2004.

6.0 ANALYTICAL PROCEDURES

Procedures used during the period covered in this report remained unchanged. A summary of the procedures used for analyzing radioactivity in environmental samples is given in

Appendix VI of the Annual Radiological Environmental Operating Report for 1993. The submittal date for this report was April 26, 1994.

7.0 MILCH ANIMALS AND NEAREST LIVESTOCK CENSUS

A census of milch animals was conducted within a 6.2-mile radius of the Station. The survey was conducted by "door-to-door" canvas by A. Lewis on August 29, 2004. The nearest livestock census was conducted by A. Lewis on August 29, 2004. The results of each census are presented on pages 33 and 34, Section 5.0 of Appendix III.

8.0 NEAREST RESIDENT CENSUS

A census of the nearest residences within a 6.2-mile radius was conducted by A. Lewis on August 29, 2004.

Results of the nearest residence census are presented on page 35, Section 5.0 of Appendix III.

9.0 INTERLABORATORY COMPARISON PROGRAM RESULTS

Environmental Incorporated's Interlaboratory Comparison Program Results are presented in Appendix IV.

10.0 ERRATA DATA

There is no errata data for 2004.

APPENDIX I

DATA TABLES AND FIGURES

Table 1.1-1

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2004)
UNITS ONE AND TWO
DOCKET NUMBERS 50-373 AND 50-374
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %	Estimated Total Error %
A. Fission and Activation Gas Releases						
1. Total Release Activity	Ci	3.45E+03	2.85E+03	2.36E+03	2.63E+03	3.50E+01	3.50E+01
2. Average Release Rate	uCi/sec	4.39E+02	3.63E+02	2.97E+02	3.31E+02		
3. Percent of Technical Specification Limit	%	*	*	*	*		
B. Iodine Releases							
1. Total I-131 Activity	Ci	3.64E-01	2.68E-01	2.62E-01	2.83E-01	3.50E+01	3.50E+01
2. Average Release Rate	uCi/sec	4.63E-02	3.40E-02	3.30E-02	3.56E-02		
3. Percent of Technical Specification Limit	%	*	*	*	*		
C. Particulate (> 8 day half-life) Releases							
1. Gross Activity	Ci	8.13E-03	6.48E-03	8.36E-03	9.21E-03	3.30E+01	3.30E+01
2. Average Release Rate	uCi/sec	1.03E-03	8.24E-04	1.05E-03	1.16E-03		
3. Percent of Technical Specification Limit	%	*	*	*	*		
3. Gross Alpha Activity	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11		
D. Tritium Releases							
1. Total Release Activity	Ci	8.15E+00	3.28E+01	1.29E+01	2.43E+01	2.10E+01	2.10E+01
2. Average Release Rate	uCi/sec	1.04E+00	4.17E+00	1.63E+00	3.06E+00		
3. Percent of Technical Specification Limit	%	*	*	*	*		

"*" This information is contained in the Radiological Impact on Man section of the report.
"<" Indicates activity of sample is less than LLD given in uCi/ml

Table 1.2-1

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2004)
LIQUID RELEASES
UNIT 1 and UNIT 2
SUMMATION OF ALL LIQUID RELEASES

	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %
A. Fission and Activation Products						
1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	
B. Tritium						
1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	
C. Dissolved Noble Gases						
1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	
D. Gross Alpha						
1. Total Activity Released (estimate)	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	
E. Volume of Liquid Waste to Discharge	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	N/A
F. Volume of Dilution Water	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	N/A

"*" This information is contained in the Radiological Impact on Man section of the report.
"<" Indicates activity of sample is less than LLD given in uCi/ml

TABLE 2.0-1

LASALLE

Table 2.0-1 has been deliberately deleted. For Solid Waste Disposal detail, refer to the LaSalle County Station 2004 Effluent Report.

Table 3.1-1

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 03/06/05
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	4.44E-02 (WSW)	5.54E-02 (WSW)	4.43E-02 (WSW)	4.96E-02 (WSW)	1.94E-01 (WSW)
BETA AIR (MRAD)	1.94E-03 (ESE)	1.92E-03 (ESE)	1.51E-03 (ESE)	1.73E-03 (ESE)	7.10E-03 (ESE)
TOT. BODY (MREM)	3.35E-02 (WSW)	4.19E-02 (WSW)	3.35E-02 (WSW)	3.75E-02 (WSW)	1.46E-01 (WSW)
SKIN (MREM)	3.56E-02 (WSW)	4.42E-02 (WSW)	3.53E-02 (WSW)	3.95E-02 (WSW)	1.55E-01 (WSW)
ORGAN (MREM)	1.65E-03 (ESE)	6.89E-02 (ESE)	9.17E-02 (ESE)	3.08E-02 (ESE)	1.93E-01 (ESE)
	THYROID	THYROID	THYROID	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.89	1.11	0.89	0.99	10.0	1.94
BETA AIR (MRAD)	10.0	0.02	0.02	0.02	0.02	20.0	0.04
TOT. BODY (MREM)	2.5	1.34	1.68	1.34	1.50	5.0	2.93
SKIN (MREM)	7.5	0.47	0.59	0.47	0.53	15.0	1.03
ORGAN (MREM)	7.5	0.02	0.92	1.22	0.41	15.0	1.29
		THYROID	THYROID	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.1-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 03/06/05
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	4.44E-02 (WSW)	5.54E-02 (WSW)	4.43E-02 (WSW)	4.96E-02 (WSW)	1.94E-01 (WSW)
BETA AIR (MRAD)	1.94E-03 (ESE)	1.92E-03 (ESE)	1.51E-03 (ESE)	1.73E-03 (ESE)	7.10E-03 (ESE)
TOT. BODY (MREM)	3.35E-02 (WSW)	4.19E-02 (WSW)	3.35E-02 (WSW)	3.75E-02 (WSW)	1.46E-01 (WSW)
SKIN (MREM)	3.56E-02 (WSW)	4.42E-02 (WSW)	3.53E-02 (WSW)	3.95E-02 (WSW)	1.55E-01 (WSW)
ORGAN (MREM)	1.42E-03 (ESE)	7.83E-02 (NNE)	9.57E-02 (ESE)	3.45E-02 (NNE)	2.10E-01 (ESE)
	THYROID	THYROID	THYROID	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.89	1.11	0.89	0.99	10.0	1.94
BETA AIR (MRAD)	10.0	0.02	0.02	0.02	0.02	20.0	0.04
TOT. BODY (MREM)	2.5	1.34	1.68	1.34	1.50	5.0	2.93
SKIN (MREM)	7.5	0.47	0.59	0.47	0.53	15.0	1.03
ORGAN (MREM)	7.5	0.02	1.04	1.28	0.46	15.0	1.40
		THYROID	THYROID	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.1-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 03/06/05
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	4.44E-02 (WSW)	5.54E-02 (WSW)	4.43E-02 (WSW)	4.96E-02 (WSW)	1.94E-01 (WSW)
BETA AIR (MRAD)	1.94E-03 (ESE)	1.92E-03 (ESE)	1.51E-03 (ESE)	1.73E-03 (ESE)	7.10E-03 (ESE)
TOT. BODY (MREM)	3.35E-02 (WSW)	4.19E-02 (WSW)	3.35E-02 (WSW)	3.75E-02 (WSW)	1.46E-01 (WSW)
SKIN (MREM)	3.56E-02 (WSW)	4.42E-02 (WSW)	3.53E-02 (WSW)	3.95E-02 (WSW)	1.55E-01 (WSW)
ORGAN (MREM)	1.14E-03 (NNE)	4.83E-02 (NNE)	5.80E-02 (NNE)	2.14E-02 (NNE)	1.29E-01 (NNE)
	THYROID	THYROID	THYROID	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.89	1.11	0.89	0.99	10.0	1.94
BETA AIR (MRAD)	10.0	0.02	0.02	0.02	0.02	20.0	0.04
TOT. BODY (MREM)	2.5	1.34	1.68	1.34	1.50	5.0	2.93
SKIN (MREM)	7.5	0.47	0.59	0.47	0.53	15.0	1.03
ORGAN (MREM)	7.5	0.02	0.64	0.77	0.29	15.0	0.86
		THYROID	THYROID	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.1-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 03/06/05
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	4.44E-02 (WSW)	5.54E-02 (WSW)	4.43E-02 (WSW)	4.96E-02 (WSW)	1.94E-01 (WSW)
BETA AIR (MRAD)	1.94E-03 (ESE)	1.92E-03 (ESE)	1.51E-03 (ESE)	1.73E-03 (ESE)	7.10E-03 (ESE)
TOT. BODY (MREM)	3.35E-02 (WSW)	4.19E-02 (WSW)	3.35E-02 (WSW)	3.75E-02 (WSW)	1.46E-01 (WSW)
SKIN (MREM)	3.56E-02 (WSW)	4.42E-02 (WSW)	3.53E-02 (WSW)	3.95E-02 (WSW)	1.55E-01 (WSW)
ORGAN (MREM)	1.11E-03 (NNE)	4.93E-02 (NNE)	6.01E-02 (NNE)	2.20E-02 (NNE)	1.33E-01 (NNE)
	THYROID	THYROID	THYROID	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.89	1.11	0.89	0.99	10.0	1.94
BETA AIR (MRAD)	10.0	0.02	0.02	0.02	0.02	20.0	0.04
TOT. BODY (MREM)	2.5	1.34	1.68	1.34	1.50	5.0	2.93
SKIN (MREM)	7.5	0.47	0.59	0.47	0.53	15.0	1.03
ORGAN (MREM)	7.5	0.01	0.66	0.80	0.29	15.0	0.88
		THYROID	THYROID	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.2-1

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 01/03/05
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.2-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 01/03/05
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.1-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 01/03/05
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	---------- % OF APP I. ---------- 1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.2-1 (continued)

LASALLE STATION UNIT ONE

ACTUAL 2004
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/04 TO 12/31/04 CALCULATED 01/03/05
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2004

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.3-1

LASALLE STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/04 TO 12/31/04

CALCULATED 03/06/05

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

Total Effective Dose Eqivalent,	mrem/yr	4.85E-01
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.49

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	9.20E-02	1.36E-01	1.26E-01	1.31E-01	0.49

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.3-1 (continued)

LASALLE STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/04 TO 12/31/04

CALCULATED 03/06/05

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

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body	Plume	1.46E-01		
(DDE)	Skyshine	3.24E-01		
	Ground	8.99E-04		
	Total	4.71E-01	25.0	1.89
Organ Dose	Thyroid	1.19E-01	75.0	0.16
(CDE)	Gonads	1.07E-02	25.0	0.04
	Breast	1.07E-02	25.0	0.04
	Lung	1.07E-02	25.0	0.04
	Marrow	1.08E-02	25.0	0.04
	Bone	1.08E-02	25.0	0.04
	Remainder	1.10E-02	25.0	0.04
	CEDE	1.40E-02		
	TEDE	4.85E-01	100.0	0.49

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.3-1 (continued)

LASALLE STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/04 TO 12/31/04

CALCULATED 03/06/05

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

Total Effective Dose Eqivalent,	mrem/yr	3.53E-01
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.35

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	8.91E-02	8.60E-02	8.81E-02	8.94E-02	0.35

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.3-1 (continued)

LASALLE STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/04 TO 12/31/04

CALCULATED 03/06/05

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

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body	Plume	0.00E+00		
(DDE)	Skyshine	3.53E-01		
	Ground	0.00E+00		
	Total	3.53E-01	25.0	1.41
Organ Dose	Thyroid	0.00E+00	75.0	0.00
(CDE)	Gonads	0.00E+00	25.0	0.00
	Breast	0.00E+00	25.0	0.00
	Lung	0.00E+00	25.0	0.00
	Marrow	0.00E+00	25.0	0.00
	Bone	0.00E+00	25.0	0.00
	Remainder	0.00E+00	25.0	0.00
	CEDE	0.00E+00		
	TEDE	3.53E-01	100.0	0.35

RESULTS BASED UPON: ODCM ANNEX REVISION 3.0 MAY 2001
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

Table 3.4-1

LaSalle Station - Unit 1

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

2004

TYPE OF DOSE	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	ANNUAL
GAMMA AIR (mrad)	2.770E-02(WSW)	4.110E-02(SW)	3.815E-02(SW)	3.925E-02(W)	1.191E-01(SW)
BETA AIR (mrad)	4.930E-03(ESE)	4.200E-03(NE)	3.465E-03(SSW)	3.260E-03(SSE)	1.321E-02(ESE)
WHOLE BODY (mrem)	9.800E-03(ESE)	1.850E-02(SSW)	1.770E-02(SSW)	1.140E-02(W)	5.540E-02(SSW)
SKIN (mrem)	1.480E-02(ESE)	2.205E-02(SSW)	2.115E-02(SSW)	1.365E-02(W)	6.595E-02(SSW)
ORGAN (mrem)	1.285E-03(ESE)	5.950E-04(NE)	5.950E-04(SSW)	4.990E-04(SSE)	2.557E-03(ESE)
CRITICAL PERSON	Child	Child	Child	Child	Child
CRITICAL ORGAN	Thyroid	Thyroid	Thyroid	Thyroid	Thyroid

COMPLIANCE STATUS

TYPE OF DOSE	10 CFR 50 APP. I QUARTERLY OBJECTIVE	% OF APP. I	10 CFR 50 APP.I YEARLY OBJECTIVE	% OF APP. I
GAMMA AIR (mrad)	5.0	0.82	10.0	1.19
BETA AIR (mrad)	10.0	0.05	20.0	0.07
WHOLE BODY (mrem)	2.5	0.74	5.0	1.11
SKIN (mrem)	7.5	0.29	15.0	0.44
ORGAN (mrem)	7.5	0.02	15.0	0.02
CRITICAL PERSON		Child		Child
CRITICAL ORGAN		Thyroid		Thyroid

Calculation used release data from the following:
Unit 0 - Chimney

Date of calculation: 4/13/2005

Table 3.4-1 (continued)

LaSalle Station - Unit 2

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

2004

TYPE OF DOSE	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	ANNUAL
GAMMA AIR (mrad)	2.770E-02(WSW)	4.110E-02(SW)	3.815E-02(SW)	3.925E-02(W)	1.191E-01(SW)
BETA AIR (mrad)	4.930E-03(ESE)	4.200E-03(NE)	3.465E-03(SSW)	3.260E-03(SSE)	1.321E-02(ESE)
WHOLE BODY (mrem)	9.800E-03(ESE)	1.850E-02(SSW)	1.770E-02(SSW)	1.140E-02(W)	5.540E-02(SSW)
SKIN (mrem)	1.480E-02(ESE)	2.205E-02(SSW)	2.115E-02(SSW)	1.365E-02(W)	6.595E-02(SSW)
ORGAN (mrem)	1.285E-03(ESE)	5.950E-04(NE)	5.950E-04(SSW)	4.990E-04(SSE)	2.557E-03(ESE)
CRITICAL PERSON	Child	Child	Child	Child	Child
CRITICAL ORGAN	Thyroid	Thyroid	Thyroid	Thyroid	Thyroid

COMPLIANCE STATUS

TYPE OF DOSE	10 CFR 50 APP. I QUARTERLY OBJECTIVE	% OF APP. I	10 CFR 50 APP.I YEARLY OBJECTIVE	% OF APP. I
GAMMA AIR (mrad)	5.0	0.82	10.0	1.19
BETA AIR (mrad)	10.0	0.05	20.0	0.07
WHOLE BODY (mrem)	2.5	0.74	5.0	1.11
SKIN (mrem)	7.5	0.29	15.0	0.44
ORGAN (mrem)	7.5	0.02	15.0	0.02
CRITICAL PERSON		Child		Child
CRITICAL ORGAN		Thyroid		Thyroid

Calculation used release data from the following:
Unit 0 - Chimney

Data Recovery (priority parameters) 99.6%

Figure 5.0-1

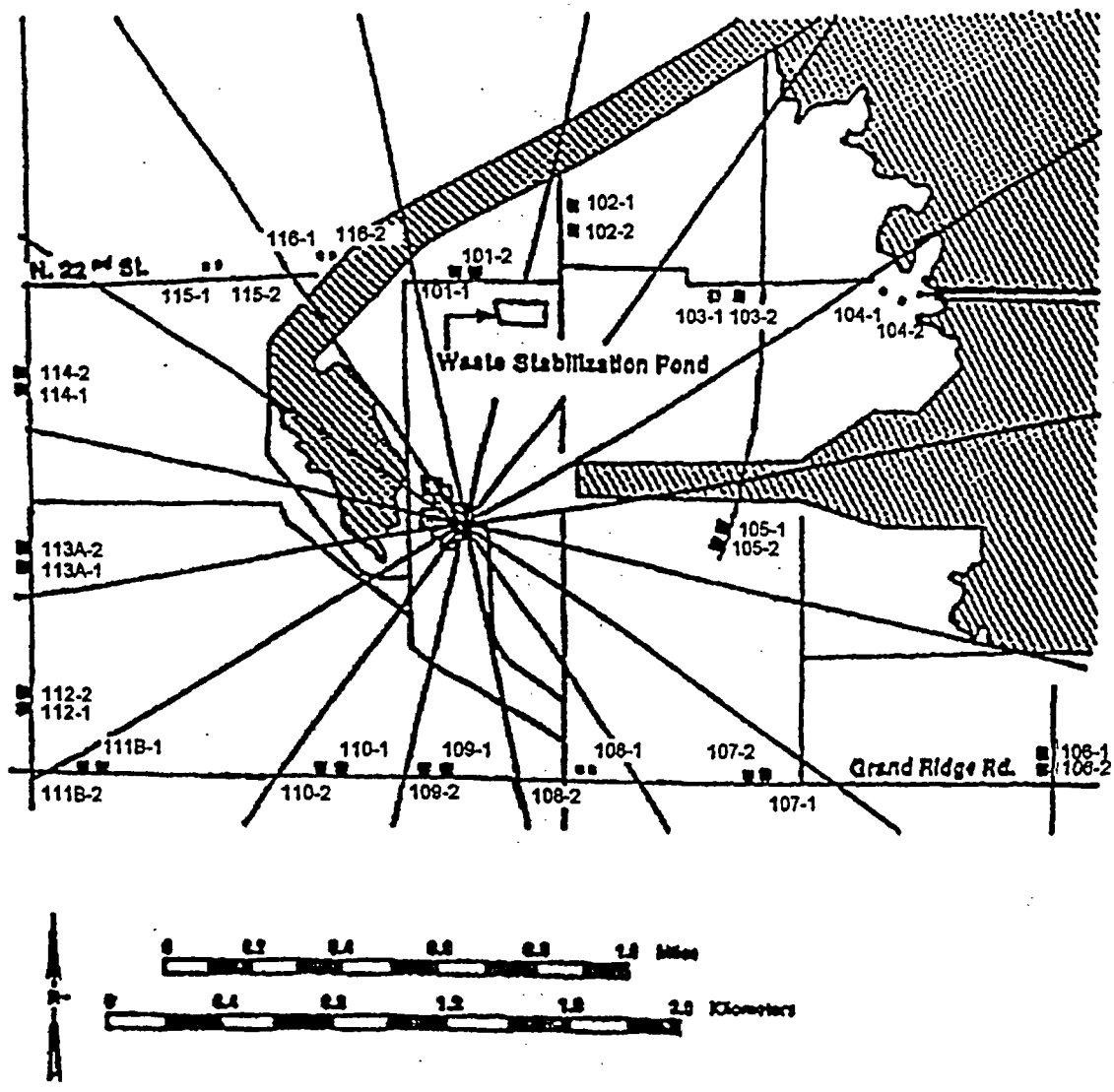

N. 22nd St.
116-1
116-2
115-1
115-2
101-2
101-1
102-1
102-2
103-1
103-2
104-1
104-2
Waste Stabilization Pond
114-2
114-1
113A-2
113A-1
112-2
112-1
105-1
105-2
111B-1
111B-2
110-1
110-2
109-1
109-2
108-1
108-2
107-2
107-1
Grand Ridge Rd.
106-1
106-2
TLD Location
LASALLE COUNTY STATION
INNER RING TLD LOCATIONS

Figure 5.0-2

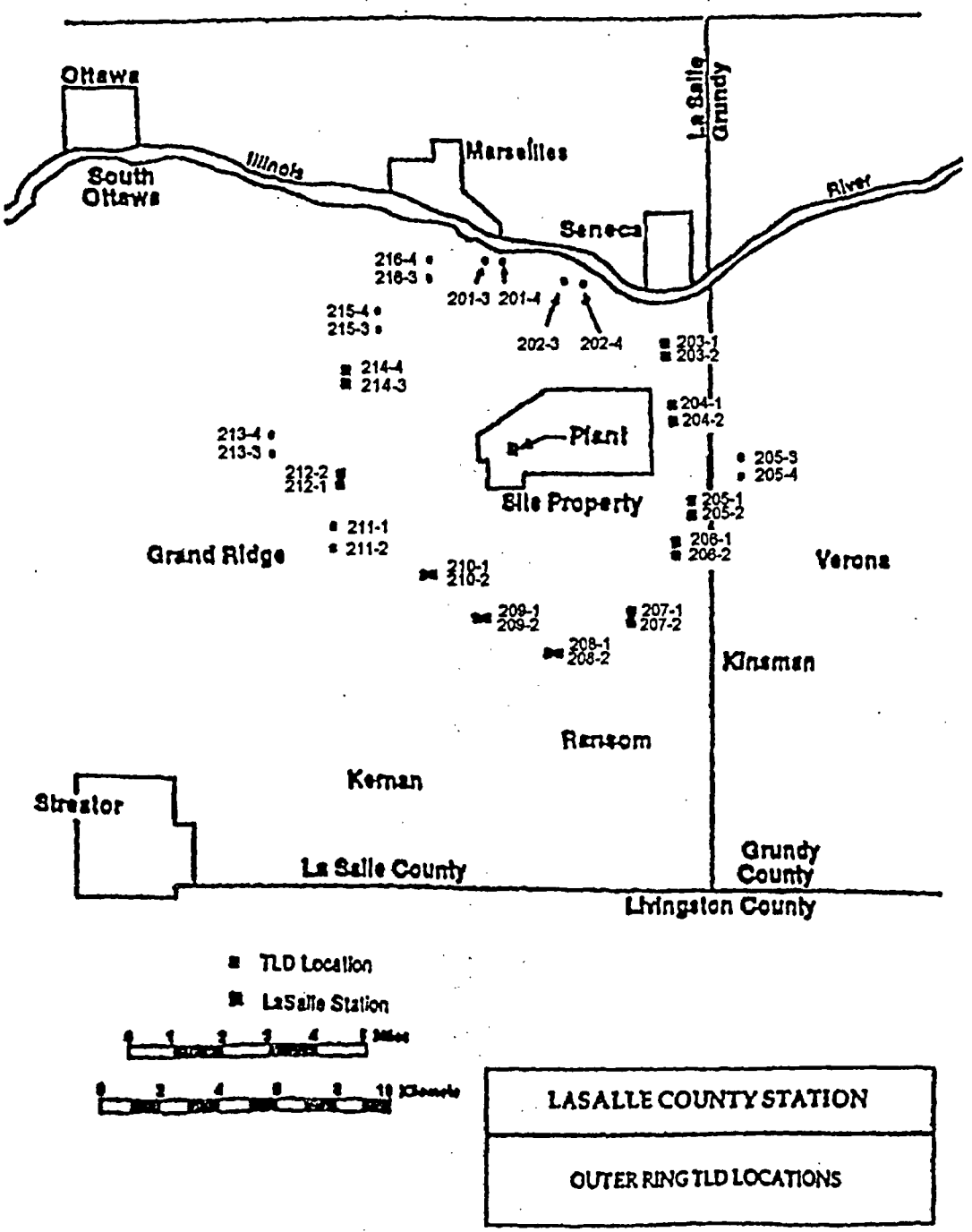

Ottawa
South Ottawa
Illinois
Marseilles
La Salle
Grundy
River
Seneca
216-4
216-3
201-3
201-4
215-4
215-3
202-3
202-4
203-1
203-2
214-4
214-3
204-1
204-2
213-4
213-3
Plant
205-3
205-4
212-2
212-1
Site Property
205-1
205-2
211-1
211-2
206-1
206-2
Grand Ridge
Verona
210-1
210-2
209-1
209-2
207-1
207-2
208-1
208-2
Kinsman
Ransom
Kerman
Streator
La Salle County
Grundy County
Livingston County
TLD Location
LaSalle Station
LASALLE COUNTY STATION
OUTER RING TLD LOCATIONS

Figure 5.0-3

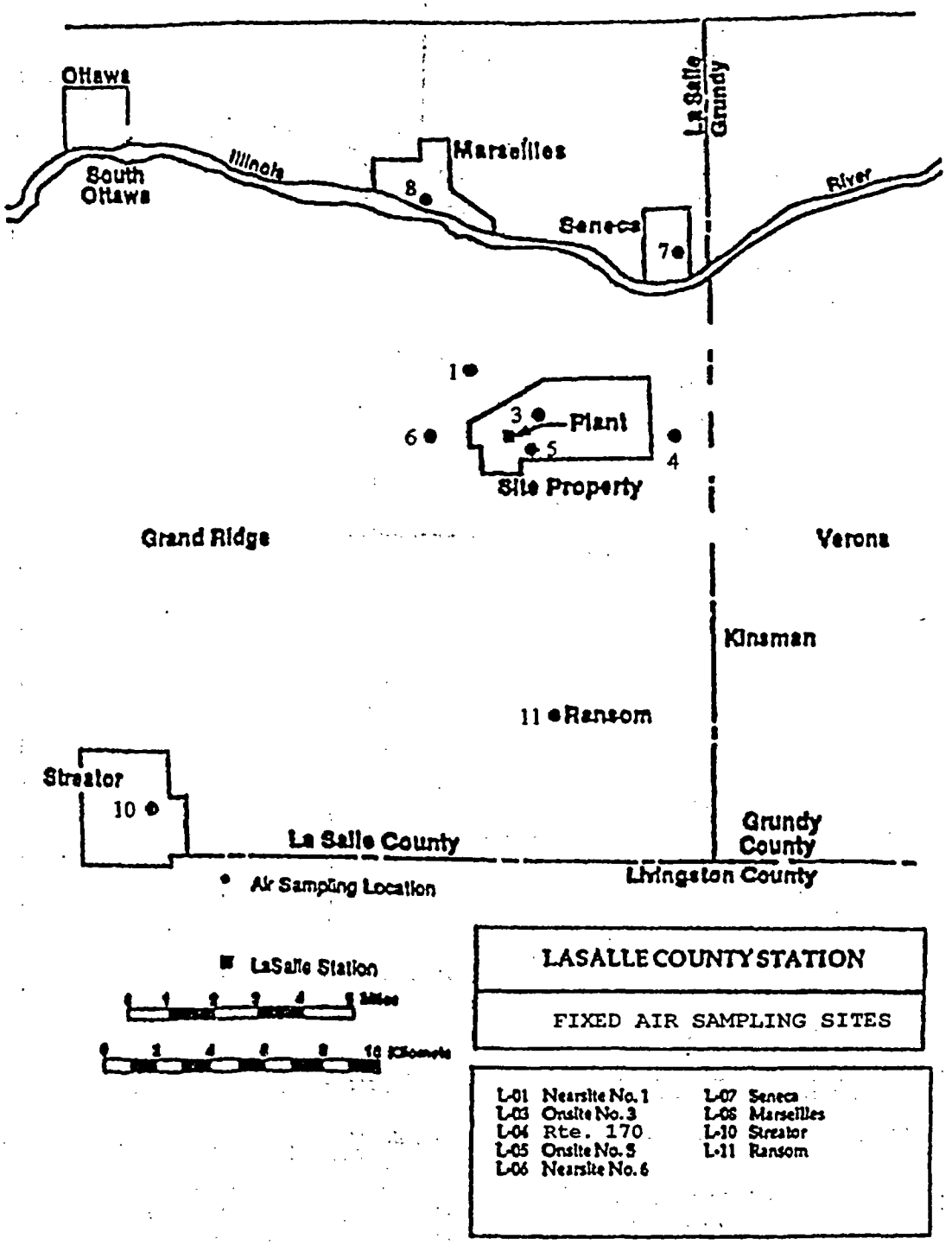
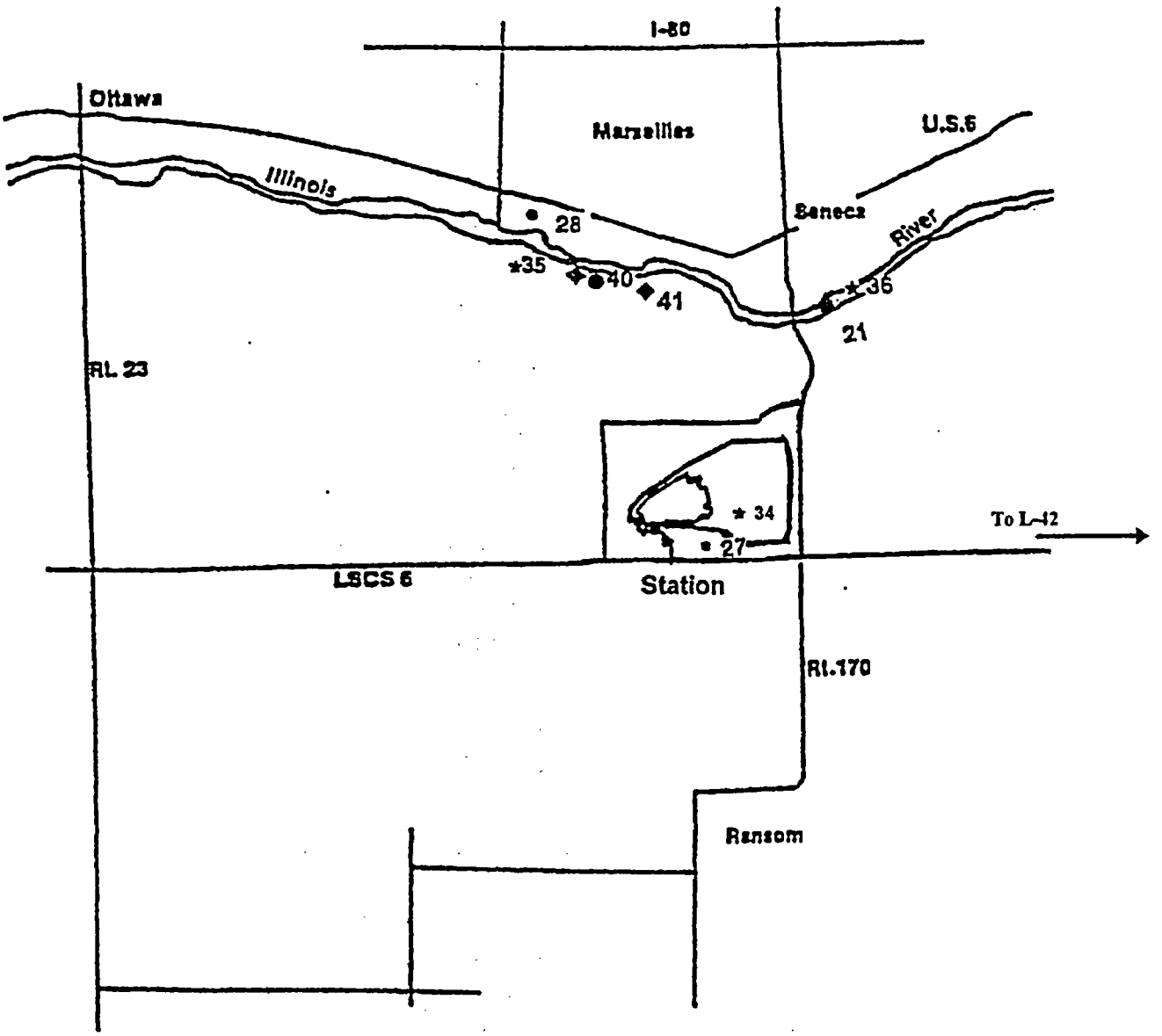
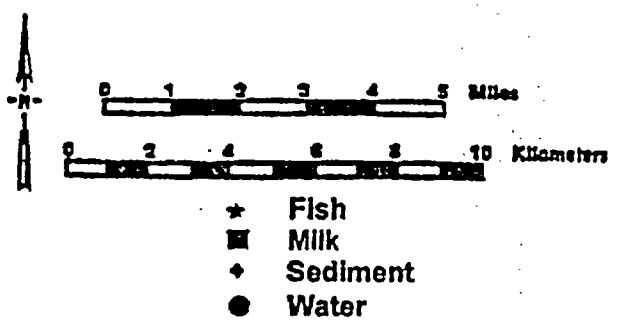

Ottawa
South Ottawa
Illinois
Marseilles
8
La Salle
Grundy
River
Seneca
7
1
3
Plant
6
5
4
Site Property
Grand Ridge
Verona
Kinsman
11 Ransom
Streator
10
La Salle County
Grundy County
Livingston County
Air Sampling Location
LaSalle Station
LASALLE COUNTY STATION
FIXED AIR SAMPLING SITES
L-01 Nearsite No. 1
L-03 Onsite No. 3
L-04 Rte. 170
L-05 Onsite No. 5
L-06 Nearsite No. 6
L-07 Seneca
L-08 Marseilles
L-10 Streator
L-11 Ransom

Figure 5.0-4





LaSalle County Station

Ingestion and Waterborne Exposure Pathway Sample Locations

L-21 Illinois River at Seneca
L-27 LSCS Onsite Well at Station
L-28 Marseilles Well
L-35 Marseilles Pool of Illinois River
L-36 Illinois River Upstream of Discharge
L-40 Illinois River Downstream
L-41 Illinois River Downstream
L-42 Biros Farm

L-34 LaSalle Cooling Lake

TABLE 5.0-1

LaSalle County Station Radiological Environmental Monitoring Stations	Air Sampling	TLD	Fish	Milk	Sediment	Surface Water	Vegetables	Well Water
L-01 Nearsite No. 1	✓	✓	.	.	.	.	.	.
L-03 Onsite No. 3	✓	✓	.	.	.	.	.	.
L-04 Rte. 170	✓	✓	.	.	.	.	.	.
L-05 Onsite No. 5	✓	✓	.	.	.	.	.	.
L-06 Nearsite No. 6	✓	✓	.	.	.	.	.	.
L-07 Seneca	✓	✓	.	.	.	.	.	.
L-08 Marseilles	✓	✓	.	.	.	.	.	.
L-10 Streator	✓	✓	.	.	.	.	.	.
L-11 Ransom	✓	✓	.	.	.	.	.	.
L-21 Illinois River at Seneca	.	.	.	.	.	✓	.	.
L-27 LSCS Onsite Well at Station	.	.	.	.	.	.	.	✓
L-28 Marseilles Well	.	.	.	.	.	.	.	✓
L-34 LaSalle Cooling Lake	.	.	✓	.	.	.	.	.
L-35 Marseilles Pool of Illinois River	.	.	✓	.	.	.	.	.
L-36 Illinois River Upstream of Discharge	.	.	✓	.	.	.	.	.
L-40 Illinois River Downstream	.	.	.	.	✓	✓	.	.
L-41 Illinois River Downstream	.	.	.	.	✓	.	.	.
L-42 Biros Farm	.	.	.	✓	.	.	.	.
L-Quadrant 1	.	.	.	.	.	.	✓	.
L-Quadrant 2	.	.	.	.	.	.	✓	.
L-Quadrant 3	.	.	.	.	.	.	✓	.
L-Quadrant 4	.	.	.	.	.	.	✓	.
L-Control	.	.	.	.	.	.	✓	.

CENSUS
Dairy
Residence
Livestock

TABLE 5.0-2

LASALLE STATION

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

1. AIR SAMPLERS

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-01	Nearsite No. 1	1.5	NNW	R
L-03	Onsite No. 3	1.0	ENE	D
L-04	Rte. 170	3.2	E	E
L-05	Onsite No. 5	0.3	ESE	F
L-06	Nearsite No. 6	0.4	WSW	M
L-07	Seneca	5.2	NNE	B
L-08	Marseilles	6.0	NNW	R
L-10 (C)	Streator	13.5	SW	L
L-11	Ransom	6.0	S	J

2. TLDs

a. Same as No. 1.

b. Special TLD locations

Site Code	Distance (miles)	Direction	Sector
Inner Ring			
L-101-1,2	0.5	N	A
L-102-1,2	0.6	NNE	B
L-103-1,2	0.7	NE	C
L-104-1,2	0.8	ENE	D
L-105-1,2	0.7	E	E
L-106-1,2	1.4	ESE	F
L-107-1,2	0.8	SE	G
L-108-1,2	0.5	SSE	H
L-109-1,2	0.6	S	J
L-110-1,2	0.6	SSW	K
L-111b-1,2	0.8	SW	L
L-112-1,2	0.9	WSW	M
L-113a-1,2	0.8	W	N
L-114-1,2	0.9	WNW	P
L-115-1,2	0.7	NW	Q
L-116-1,2	0.6	NNW	R

[a] Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

TABLE 5.0-2 (continued)

LASALLE STATION

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

2. TLDs

b. Special TLD locations (continued)

Site Code	Distance (miles)	Direction	Sector
Outer Ring			
L-201-3,4	4.0	N	A
L-202-3,4	3.6	NNE	B
L-203-1,2	4.0	NE	C
L-204-1,2	3.2	ENE	D
L-205-1,2	3.2	ESE	F
L-205-3,4	5.1	E	E
L-206-1,2	4.3	SE	G
L-207-1,2	4.5	SSE	H
L-208-1,2	4.5	S	J
L-209-1,2	4.0	SSW	K
L-210-1,2	3.3	SW	L
L-211-1,2	4.5	WSW	M
L-212-1,2	4.0	WSW	M
L-213-3,4	4.9	W	N
L-214-3,4	5.1	WNW	P
L-215-3,4	5.0	NW	Q
L-216-3,4	5.0	NNW	R

3. MILK

Site Code[a]	Location	Distance (mile)	Direction	Sector
L-42 (C)	Biros Farm	14.2	E	E

4. GROUND/WELL WATER

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-27	LSCS Onsite Well at Station	At Station		
L-28	Marseilles Well	7.0	NW	Q

[a] Control (background) locations are denoted by a "C" after site code. All other locations are indicators

TABLE 5.0-2 (continued)

LASALLE STATION

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

5. SURFACE WATER

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-21 (C)	Illinois River at Seneca	4.0	NE	C
L-40	Illinois River Downstream	5.2	NNW	R

6. FISH

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-34	LaSalle Cooling Lake	2.0	E	E
L-35	Marseilles Pool of Illinois River	6.5	NW	Q
L-36 (C)	Illinois River Upstream of Discharge	4.3	NNE	B

7. SHORELINE SEDIMENTS

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-40	Illinois River Downstream	5.2	NNW	R
L-41	Illinois River Downstream	4.6	NNW	A

8. VEGETATION

Site Code[a]	Location	Distance (miles)	Direction	Sector
L-Quadrant-1	Diane Partridge	4.5	NE	C
L-Quadrant-2	Mike & Gina Welbourne	3.8	ESE	H
L-Quadrant-3	Michael Olsen	1.5	WSW	M
L-Quadrant-4	Robert Eisers	4.5	NW	Q
L-Control(C)	Eugene Clements	10.0	NW	Q

[a] Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

TABLE 5.0-2 (continued)

LASALLE COUNTY STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location Code[a]	Location Site	Collection Frequency	Type of Analysis	Frequency of Analysis
1. Airborne Particulates	Onsite, Nearfield and Control		Filter exchange weekly	Gross Beta Gamma Isot.	Weekly Quarterly Composite (or if weekly gross beta in a sample exceeds 5X the average concentration of preceding calendar quarter).
	L-01	Nearsite No. 1			
	L-03	Onsite No. 3			
	L-05	Onsite No. 5			
	L-06	Nearsite No. 6			
	L-10 (C)	Streator			
	Far Field			Gamma Isot.	If gross beta in a sample exceeds 10 times the yearly mean of control samples and radioactivity is confirmed as having its origin in airborne effluents from station.
	L-04	Rte. 170			
	L-07	Seneca			
	L-08	Marseilles			
	L-11	Ranson			
2. Airborne Iodine	Same as 1.		Canister exchange biweekly	I-131	Biweekly
3. Air Sampling Train	Same as 1.		-	Test and Maintenance	Weekly
4. TLDs	a. Same as 1. (two TLDs per location)		Quarterly	Gamma	Quarterly
	b. L-101-1,2	Inner Ring			
	102-1,2				
	103-1,2				
	104-1,2				
	105-1,2				
	106-1,2				
	107-1,2				
	108-1,2				
	109-1,2				
	110-1,2				
	111b-1,2				
	112-1,2				
	113a-1,2				
	114-1,2				
	115-1,2				
	116-1,2				
	c. L-201-3,4	Outer Ring			
	202-3,4				
	203-1,2				
	204-1,2				
	205-1,2				
	205-3,4				
	206-1,2				
	207-1,2				
	208-1,2				
	209-1,2				
	210-1,2				
	211-1,2				

[a] Control (background) locations are denoted by a "C" in this column. All other location are indicators.

TABLE 5.0-2 (continued)

LASALLE COUNTY STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location Code[a]	Location Site	Collection Frequency	Type of Analysis	Frequency of Analysis
4. TLDs (continued)					
	Outer Ring		Quarterly	Gamma	Quarterly
	L-212-1,2				
	213-3,4				
	214-3,4				
	215-3,4				
	216-3,4				
5. Milk	L-42 (C)	Biros Farm	Biweekly: May-October Monthly: November-April	I-131 Gamma Isot.	Biweekly: May-October Monthly: November-April
6. Vegetables	Quad 1	D. Partridge	Annually - two varieties from each location as available at harvest.	Gamma Isot. I-131	Annually Annually
	Quad 2	Mike & Gina Welbourne			
	Quad 3	M. Olson			
	Quad 4	R. Eisers			
	Control	E. Clements			
7. Ground/Well Water	L-27	LSCS Onsite Well	Quarterly	Gamma Isot. Tritium	Quarterly
	L-28	Marseilles Well			
8. Surface Water	L-21 (C)	Illinois River at Seneca	Weekly	Gross Beta Gamma Isot.	Monthly composite. Monthly composite.
	L-40	Illinois River Downstream		Tritium	Quarterly composite.
9. Fish (at least two species)	L-34	LaSalle Cooling Lake	Two times/year	Gamma Isot.	Two times/year on edible portions only.
	L-35	Marseilles Pool of Illinois River			
	L-36 (C)	Illinois River Upstream of Discharge			
10. Sediments	L-40	Illinois River Downstream	Semiannually	Gamma Isot.	Semiannually
	L-41	Illinois River Downstream			
11. Land Use Census					
Milch Animals					
a.	Site Boundary to 2 miles		-	a. Enumeration by a door to door or equivalent counting technique.	Annually during grazing season.
b.	2 miles to 6.2 miles		-	b. Using referenced information from county agricultural agents or other reliable sources.	

[a] Control (background) locations are denoted by a "C" in this column. All other location are indicators.

TABLE 5.0-2 (continued)

LASALLE COUNTY STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location Code[a]	Location Site	Collection Frequency	Type of Analysis	Frequency of Analysis
11. Land Use Census (continued)					
	c.	At dairies listed in Item 5.	-	c. Inquire as to feeding practices: 1. Pasture only. 2. Feed and chop only. 3. Pasture and feed: if both, ask farmer to estimate fraction of food from pasture: <25%, 25-50%, 50-75%, or >75%.	Annually during grazing season.
Nearest Residence		In all sectors up to 6.2 miles.	-	-	Annually during grazing season.

[a] Control (background) locations are denoted by a "C" in this column. All other location are indicators.

Table 5.0-3

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 1st Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Air Particulates (pCi/m^3)	Gross Beta 65	0.01	0.028 (52/52) (0.014-0.047)	L-05[b], Onsite No. 5 0.8 mi. ESE, Sector F	0.029 (13/13) (0.016-0.045)	0.028 (13/13) (0.016-0.050)	0
	Gamma Spec. 5						
	Cs-134	0.01	<LLD	-	-	<LLD	0
	Cs-137	0.01	<LLD	-	-	<LLD	0
	Other Gammas	0.01-0.04	<LLD	-	-	<LLD	0
Airborne Iodine (pCi/m^3)	I-131 30	0.07	<LLD	-	-	<LLD	0
Milk (pCi/L)	I-131 3	5	None	-	-	<LLD	0
	Gamma Spec. 3						
	Cs-134	15	None	-	-	<LLD	0
	Cs-137	18	None	-	-	<LLD	0
	Ba/La-140	15	None	-	-	<LLD	0
	Other Gammas	10-15	None	-	-	<LLD	0
Surface Water (pCi/L)	Gross Beta 6	4	5.2 (2/3) (4.9-5.4)	L-21, Illinois River at Seneca 4.0 mi. NE, Sector C	5.4 (3/3) (5.0-5.7)	5.4 (3/3) (5.0-5.7)	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	<LLD	0
	Cs-137	18	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	<LLD	0
	Tritium 2	200	<LLD	L-21, Illinois River at Seneca 4.0 mi. NE, Sector C	489 (1/1)	489 (1/1)	0
Well Water (pCi/L)	Tritium 2	200	<LLD	-	-	None	0
	Gamma Spec. 2						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 84	9.7	27.5 (82/82) (24.0-32.0)	L-105-1[c], 0.7 mi. E, Sector E	32.0 (1/1	23.5 (2/2) (22.0-25.0)	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.
[b] Locations L-05 and L-06 had identical means of 0.029 pCi/m^3. Only L-05 is detailed in this summary.
[c] Locations L-105-1 and L-216-3 had identical results of 32.0 mR. Only L-105-1 is detailed in this summary.

Table 5.0-4

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 2nd Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Air Particulates (pCi/m^3)	Gross Beta 65	0.01	0.019 (50/52) (0.011-0.029)	L-06[b] Nearsite No. 6, 0.4 mi. WSW, Sector M	0.020 (13/13) (0.014-0.029)	0.020 (13/13) (0.013-0.029)	0
	Gamma Spec. 5						
	Cs-134	0.05	<LLD	-	-	<LLD	0
	Cs-137	0.06	<LLD	-	-	<LLD	0
	Other Gammas	0.01-0.04	<LLD	-	-	<LLD	0
Airborne Iodine (pCi/m^3)	I-131 35	0.07	<LLD	-	-	<LLD	0
Milk (pCi/L)	I-131 5	1	None	-	-	<LLD	0
	Gamma Spec. 5						
	Cs-134	15	None	-	-	<LLD	0
	Cs-137	18	None	-	-	<LLD	0
	Ba-140	60	None	-	-	<LLD	0
	La-140	15	None	-	-	<LLD	0
	Other Gammas	10-15	None	-	-	<LLD	0
Fish (pCi/g wet)	Gamma Spec. 6						
	Cs-134	0.13	<LLD	-	-	<LLD	0
	Cs-137	0.15	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	0.13-0.26	<LLD	-	-	<LLD	0
	Other Gammas	0.20-0.30	<LLD	-	-	<LLD	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 2						
	Cs-134	0.15	<LLD	-	-	None	0
	Cs-137	0.18	<LLD	-	-	None	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.
[b] Locations L-06 and L-10 (C) had identical means of 0.020 pCi/m^3. Both are detailed in this summary.

Table 5.0-4 (continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 2nd Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Surface Water (pCi/L)	Gross Beta 6	4	4.5 (3/3) (4.1-4.8)	L-40, Illinois River Downstream 5.2 mi. NNW, Sector R	4.5 (3/3) (4.1-4.8)	4.3 (3/3) (4.1-4.4)	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	<LLD	0
	Cs-137	18	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	<LLD	0
	Tritium 2	200	<LLD	-	-	<LLD	0
Well Water (pCi/L)	Tritium 2	200	<LLD	-	-	None	0
	Gamma Spec. 2						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 84	9.7	25.1 (82/82) (21.0-32.0)	L-207-2 4.5 mi. SSE, Sector H	32.0 (1/1)	22.0 (2/2) (22.0-22.0)	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.

Table 5.0-5

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 3rd Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Air Particulates (pCi/m^3)	Gross Beta 65	0.01	0.023 (51/52) (0.012-0.036)	L-10, Streator, 13.5 mi. SW, Sector L	0.025 (13/13) (0.017-0.036)	0.025 (13/13) (0.017-0.036)	0
	Gamma Spec. 5						
	Cs-134	0.01	<LLD	-	-	<LLD	0
	Cs-137	0.01	<LLD	-	-	<LLD	0
	Other Gammas	0.01-0.04	<LLD	-	-	<LLD	0
Airborne Iodine (pCi/m^3)	I-131 30	0.07	<LLD	-	-	<LLD	0
Milk (pCi/L)	I-131 7	1	None	-	-	<LLD	0
	Gamma Spec. 7						
	Cs-134	15	None	-	-	<LLD	0
	Cs-137	18	None	-	-	<LLD	0
	Ba-140	60	None	-	-	<LLD	0
	La-140	15	None	-	-	<LLD	0
	Other Gammas	10-15					
Vegetation (pCi/g wet)	I-131 10	0.06	<LLD	-	-	<LLD	0
	Gamma Spec. 10						
	Cs-134	0.06	<LLD	-	-	<LLD	0
	Cs-137	0.08	<LLD	-	-	<LLD	0
	Other Gammas	0.01-0.10	<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gross Beta 6	4	5.5 (3/3) (4.9-5.8)	L-40, Illinois River Downstream 5.2 mi. NNW, Sector R	5.5 (3/3) (4.9-5.8)	5.4 (3/3) (4.8-6.1)	0
	Gamma Spec. 6						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	20	<LLD	-	-	<LLD	0
	Tritium 2	200	874 (1/1)	L-21, Illinois River at Seneca 4.0 mi. NE, Sector C	1,058 (1/1)	1,058 (1/1)	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.

Table 5.0-5 (continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 3rd Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Well Water (pCi/L)	Tritium 2	200	<LLD	-	-	None	0
	Gamma Spec. 2						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 84	9.7	23.1 (82/82) (18.0-28.0)	L-213-4 4.9 mi. W, Sector N	28.0 (1/1)	19.5 (2/2) (19.0-20.0)	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.

Table 5.0-6

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 4th Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Air Particulates (pCi/m^3)	Gross Beta 65	0.01	0.027 (52/52) (0.015-0.044)	L-10, Streator 13.5 mi. SW, Sector L	0.029 (13/13) (0.017-0.043)	0.029 (13/13) (0.017-0.043)	0
	Gamma Spec. 5						
	Cs-134	0.05	<LLD	-	-	<LLD	0
	Cs-137	0.06	<LLD	-	-	<LLD	0
	Other Gammas	0.01-0.04	<LLD	-	-	<LLD	0
Airborne Iodine (pCi/m^3)	I-131 35	0.07	<LLD	-	-	<LLD	0
Milk (pCi/L)	I-131 4	1	None	-	-	<LLD	0
	Gamma Spec. 4						
	Cs-134	15	None	-	-	<LLD	0
	Cs-137	18	None	-	-	<LLD	0
	La-140	15	None	-	-	<LLD	0
	Ba-140	60	None	-	-	<LLD	0
	Other Gammas	10-15					
Fish (pCi/g wet)	Gamma Spec. 6						
	Cs-134	0.13	<LLD	-	-	<LLD	0
	Cs-137	0.15	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	0.13-0.26	<LLD	-	-	<LLD	0
	Other Gammas	0.20-0.30	<LLD	-	-	<LLD	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 2						
	Cs-134	0.15	<LLD	-	-	None	0
	Cs-137	0.18	<LLD	-	-	None	0
	Other Gammas	0.10-0.60	<LLD	-	-	None	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.

Table 5.0-6 (continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374
Location of Facility LaSalle County, Illinois Reporting Period 4th Quarter 2004
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean[a] Range	Location with Highest Quarterly Mean	Highest Mean[a] Range	Control Locations Mean[a] Range	Number of Non-routine Results
Surface Water (pCi/L)	Gross Beta 6	4	5.4 (3/3) (5.2-5.8)	L-21, Illinois River at Seneca, 4.0 mi. NE, Sector C	5.6 (3/3) (5.5-5.7)	5.6 (3/3) (5.5-5.7)	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	<LLD	0
	Cs-137	18	<LLD	-	-	<LLD	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	<LLD	0
	Tritium 2	200	550 (1/1)	L-40, Illinois Downstream, 4.0 mi. NNW, Sector R	550 (1/1)	426 (1/1)	0
Well Water (pCi/L)	Gamma Spec. 2						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other ODCM-Required Gammas	15-30	<LLD	-	-	None	0
	Tritium 2	200	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 84	9.7	30.4 (82/82) (25.0-35.0)	L-105-2[b], 0.7 mi. E, Sector E	35.0 (1/1)	25.0 (2/2) (25.0-25.0)	0

[a] Mean and range based on detectable measurements only. Fractions indicated in parentheses.
[b] Locations L-105-2, 204-1 and 215-4 had identical means of 35.0 mR. Only L-105-2 is detailed in this summary.

APPENDIX II

METEOROLOGICAL DATA

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

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

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	4	1	0	0	5
NNE	0	0	1	0	0	0	1
NE	0	0	1	0	0	0	1
ENE	0	0	1	1	0	0	2
E	0	0	3	1	0	0	4
ESE	0	0	2	1	0	0	3
SE	0	1	1	0	0	0	2
SSE	0	0	0	0	0	0	0
S	0	0	0	0	3	1	4
SSW	0	1	3	0	0	1	5
SW	0	0	1	3	2	0	6
WSW	0	0	3	0	1	0	4
W	0	0	5	6	1	2	14
WNW	0	0	4	8	1	1	14
NW	0	0	1	3	3	1	8
NNW	0	0	1	2	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	2	31	26	11	6	76

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	21	30	13	4	0	68
NNE	0	16	30	5	0	0	51
NE	0	8	13	14	4	0	39
ENE	0	4	13	12	8	9	46
E	0	7	23	14	11	0	55
ESE	1	12	19	37	4	0	73
SE	1	1	14	5	0	0	21
SSE	2	4	1	3	1	0	11
S	1	3	7	9	9	1	30
SSW	1	9	11	20	7	0	48
SW	0	2	13	11	6	0	32
WSW	1	7	14	11	4	3	40
W	2	7	22	30	10	5	76
WNW	1	12	28	53	13	18	125
NW	0	9	25	40	10	9	93
NNW	0	10	42	42	9	2	105
Variable	0	0	0	0	0	0	0
Total	10	132	305	319	100	47	913

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	3	11	11	2	0	0	27
NNE	1	15	10	4	0	0	30
NE	1	5	4	6	5	0	21
ENE	1	0	10	32	3	0	46
E	0	2	22	16	1	0	41
ESE	0	6	5	4	0	0	15
SE	2	8	13	16	0	0	39
SSE	2	5	12	14	0	0	33
S	2	7	11	14	8	3	45
SSW	1	2	13	33	7	9	65
SW	1	4	14	26	7	3	55
WSW	1	1	11	19	10	1	43
W	3	15	27	33	13	0	91
WNW	0	16	35	11	9	2	73
NW	2	8	21	7	0	0	38
NNW	2	13	4	16	0	0	35
Variable	0	0	0	0	0	0	0
Total	22	118	223	253	63	18	697

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	0	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	0	2	0	0	2
ENE	0	0	1	0	4	0	5
E	0	1	6	3	0	0	10
ESE	0	14	11	0	0	0	25
SE	3	5	7	2	0	0	17
SSE	0	6	8	5	0	0	19
S	0	12	15	4	0	1	32
SSW	0	3	21	11	0	0	35
SW	0	8	10	13	0	0	31
WSW	0	9	16	13	0	0	38
W	0	5	23	4	0	0	32
WNW	0	8	5	5	0	0	18
NW	1	6	2	0	0	0	9
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	4	79	125	62	4	1	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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	2	4	0	0	0	6
SE	0	2	5	0	0	0	7
SSE	2	11	11	0	0	0	24
S	0	8	11	0	0	0	19
SSW	0	3	8	0	0	0	11
SW	0	4	12	3	0	0	19
WSW	0	4	2	4	0	0	10
W	0	0	1	0	0	0	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	2	34	54	7	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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	1	2	0	3
NNE	0	0	0	1	2	0	3
NE	0	0	0	0	0	3	3
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	1	0	1
SSE	0	0	0	0	2	0	2
S	0	0	0	0	0	4	4
SSW	0	0	0	0	0	1	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	1	0	0	1
W	0	0	0	0	1	4	5
WNW	0	0	0	0	0	5	5
NW	0	0	0	2	2	0	4
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	5	10	17	32

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	1	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	1	0	1	2
ENE	0	0	0	4	0	6	10
E	0	0	0	1	0	0	1
ESE	0	0	1	0	0	0	1
SE	0	0	0	1	1	0	2
SSE	0	0	0	0	3	0	3
S	0	0	0	0	0	3	3
SSW	0	0	0	0	1	0	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	1	1	1	3
W	0	0	0	0	0	3	3
WNW	0	0	0	5	0	1	6
NW	0	0	0	3	1	4	8
NNW	0	0	0	0	1	0	1
Variable	0	0	0	0	0	0	0
Total	0	0	1	16	9	19	45

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	10	19	30	11	7	78
NNE	0	7	26	24	4	0	61
NE	0	4	9	16	23	5	57
ENE	0	1	11	25	40	30	107
E	0	0	14	13	9	7	43
ESE	0	5	9	27	34	2	77
SE	2	2	11	6	5	0	26
SSE	0	3	2	4	7	2	18
S	1	4	8	12	13	19	57
SSW	1	5	6	14	18	18	62
SW	0	1	2	19	15	14	51
WSW	1	5	13	11	8	15	53
W	2	9	13	22	28	30	104
WNW	0	7	9	52	46	65	179
NW	0	4	19	43	41	37	144
NNW	1	6	23	31	37	7	105
Variable	0	0	0	0	0	0	0
Total	9	73	194	349	339	258	1222

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 9
Hours of missing stability measurements in all stability classes: 4

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	2	6	9	0	0	18
NNE	0	1	7	7	1	0	16
NE	0	1	2	7	0	0	10
ENE	0	4	5	4	2	3	18
E	0	2	6	8	6	1	23
ESE	1	3	4	8	4	8	28
SE	0	4	0	3	2	16	25
SSE	0	3	1	8	4	16	32
S	6	3	2	6	16	19	52
SSW	0	0	5	5	13	52	75
SW	3	1	3	13	11	35	66
WSW	0	1	4	5	11	24	45
W	0	4	5	3	22	41	75
WNW	1	6	5	12	24	20	68
NW	1	5	5	12	15	2	40
NNW	0	3	1	7	1	0	12
Variable	0	0	0	0	0	0	0
Total	13	43	61	117	132	237	603

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

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	1	0	1
NNE	0	0	0	2	0	0	2
NE	0	1	0	1	0	0	2
ENE	0	0	1	1	0	0	2
E	0	2	0	0	3	1	6
ESE	0	0	0	2	1	2	5
SE	0	2	3	5	7	10	27
SSE	0	0	3	6	2	9	20
S	0	0	2	1	4	2	9
SSW	0	2	2	2	7	22	35
SW	1	1	3	4	7	19	35
WSW	0	0	1	0	1	10	12
W	0	1	3	7	8	12	31
WNW	0	0	1	1	3	0	5
NW	0	1	1	1	0	0	3
NNW	0	2	0	2	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	12	20	35	44	87	199

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: 4

LaSalle Nuclear Station

Period of Record: January - March 2004
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	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	1	1
SE	2	0	0	0	0	0	2
SSE	0	0	0	0	1	3	4
S	0	0	0	0	0	10	10
SSW	1	0	0	1	3	14	19
SW	0	0	0	0	0	3	3
WSW	0	0	0	0	4	3	7
W	0	3	0	0	0	0	3
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	3	3	0	1	8	34	49

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	3	2	1	0	6
NNE	0	0	8	1	0	0	9
NE	0	0	0	5	0	0	5
ENE	0	0	0	1	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	2	0	0	2
SE	0	0	1	0	0	0	1
SSE	0	0	0	1	0	0	1
S	0	0	0	2	0	0	2
SSW	0	0	1	6	4	3	14
SW	0	2	1	10	5	2	20
WSW	0	2	2	8	3	1	16
W	0	0	8	5	1	1	15
WNW	0	2	8	1	0	1	12
NW	0	0	2	2	0	0	4
NNW	0	0	1	5	0	0	6
Variable	0	0	0	0	0	0	0
Total	0	6	35	51	14	8	114

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	7	4	0	0	13
NNE	0	6	8	1	0	0	15
NE	0	1	1	2	1	0	5
ENE	0	0	1	0	1	0	2
E	0	0	3	0	0	0	3
ESE	0	0	2	0	0	0	2
SE	0	0	2	3	0	0	5
SSE	0	1	4	1	0	0	6
S	0	0	1	1	0	0	2
SSW	0	1	2	3	2	0	8
SW	0	0	10	11	4	1	26
WSW	0	1	3	7	6	0	17
W	0	2	10	3	2	0	17
WNW	0	5	12	2	0	0	19
NW	0	2	4	2	0	1	9
NNW	0	2	12	1	1	0	16
Variable	0	0	0	0	0	0	0
Total	0	23	82	41	17	2	165

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	3	17	31	7	1	0	59
NNE	1	30	23	0	1	0	55
NE	1	16	26	29	2	1	75
ENE	0	17	7	18	14	0	56
E	0	9	14	12	5	0	40
ESE	1	8	7	12	1	0	29
SE	0	6	14	7	4	0	31
SSE	0	4	13	6	4	0	27
S	0	8	13	5	0	0	26
SSW	0	7	16	13	3	3	42
SW	0	9	20	24	17	3	73
WSW	0	15	24	15	21	0	75
W	1	9	12	14	6	0	42
WNW	1	13	17	7	2	2	42
NW	0	13	14	12	2	1	42
NNW	1	10	41	15	8	1	76
Variable	0	0	0	0	0	0	0
Total	9	191	292	196	91	11	790

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	22	17	9	0	0	48
NNE	1	35	14	0	0	0	50
NE	2	7	18	3	0	0	30
ENE	0	4	11	3	0	0	18
E	0	18	39	7	1	0	65
ESE	2	12	11	2	0	0	27
SE	1	10	9	15	1	0	36
SSE	0	6	6	3	1	0	16
S	0	6	26	6	3	0	41
SSW	1	10	34	17	6	6	74
SW	0	18	32	41	5	6	102
WSW	1	7	13	12	1	1	35
W	0	6	7	6	2	1	22
WNW	0	7	9	7	3	1	27
NW	1	15	4	4	0	0	24
NNW	4	12	9	0	0	0	25
Variable	0	0	0	0	0	0	0
Total	13	195	259	135	23	15	640

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	7	0	0	0	0	8
NNE	0	5	0	0	0	0	5
NE	0	1	0	0	0	0	1
ENE	1	0	0	0	0	0	1
E	1	8	4	0	0	0	13
ESE	1	11	4	0	0	0	16
SE	0	13	1	0	0	0	14
SSE	1	6	9	0	0	0	16
S	1	9	11	10	1	0	32
SSW	2	5	14	7	0	0	28
SW	0	8	12	2	0	0	22
WSW	1	4	14	2	0	0	21
W	3	13	10	0	0	0	26
WNW	1	20	1	0	0	0	22
NW	1	5	5	0	0	0	11
NNW	1	4	2	0	0	0	7
Variable	0	0	0	0	0	0	0
Total	15	119	87	21	1	0	243

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	1	0	0	0	0	1
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	1	0	0	0	0	0	1
ESE	0	3	1	0	0	0	4
SE	0	8	0	0	0	0	8
SSE	0	4	6	0	0	0	10
S	0	2	10	0	0	0	12
SSW	0	2	14	2	0	0	18
SW	0	13	19	0	0	0	32
WSW	0	7	16	0	0	0	23
W	1	15	9	1	0	0	26
WNW	2	15	4	0	0	0	21
NW	1	1	0	0	0	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	5	72	79	3	0	0	159

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

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	3	1	4
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	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	3	3
SW	0	0	0	0	0	7	7
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	3	11	14

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	2	1	1	4
NNE	0	0	1	2	2	0	5
NE	0	0	0	1	1	0	2
ENE	0	0	0	1	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	1	1	0	2
SSW	0	0	0	0	4	7	11
SW	0	0	0	1	5	8	14
WSW	0	0	0	1	4	0	5
W	0	0	2	1	0	0	3
WNW	0	0	1	3	0	0	4
NW	0	0	0	0	2	0	2
NNW	0	0	0	1	0	0	1
Variable	0	0	0	0	0	0	0
Total	0	0	4	14	20	16	54

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	8	27	25	7	9	78
NNE	1	8	39	19	4	1	72
NE	0	8	17	21	29	12	87
ENE	0	10	9	12	14	13	58
E	0	1	10	15	8	1	35
ESE	3	5	5	6	9	3	31
SE	0	2	9	13	4	6	34
SSE	0	1	8	4	2	3	18
S	0	7	12	8	4	5	36
SSW	0	4	6	10	16	33	69
SW	0	4	21	31	25	40	121
WSW	0	9	18	17	29	31	104
W	0	6	22	19	8	11	66
WNW	1	6	27	21	8	13	76
NW	0	13	19	20	7	10	69
NNW	0	8	18	27	9	6	68
Variable	0	0	0	0	0	0	0
Total	7	100	267	268	183	197	1022

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	9	18	9	0	40
NNE	2	6	8	23	3	0	42
NE	1	3	14	22	9	0	49
ENE	0	4	9	13	7	2	35
E	1	6	7	15	11	5	45
ESE	0	1	6	7	6	4	24
SE	1	1	3	1	3	14	23
SSE	0	2	4	5	7	1	19
S	0	2	8	9	9	25	53
SSW	0	5	7	17	20	69	118
SW	0	0	8	17	27	51	103
WSW	0	2	4	5	14	8	33
W	1	2	2	10	7	8	30
WNW	1	1	7	11	9	8	37
NW	1	3	5	9	6	2	26
NNW	0	3	8	9	4	2	26
Variable	0	0	0	0	0	0	0
Total	8	45	109	191	151	199	703

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	2	4	0	0	6
NNE	0	0	3	3	0	0	6
NE	0	2	2	1	0	0	5
ENE	0	0	2	0	0	0	2
E	0	0	1	1	0	0	2
ESE	1	1	6	4	2	0	14
SE	0	1	3	3	0	0	7
SSE	0	1	3	0	1	0	5
S	0	0	1	5	6	7	19
SSW	1	2	1	5	4	16	29
SW	0	0	1	3	6	15	25
WSW	1	2	3	7	8	3	24
W	0	2	0	8	5	7	22
WNW	0	2	3	8	7	2	22
NW	0	0	2	5	5	0	12
NNW	0	0	3	3	0	0	6
Variable	0	0	0	0	0	0	0
Total	3	13	36	60	44	50	206

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: 100

LaSalle Nuclear Station

Period of Record: April - June 2004
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	2	2	0	0	4
ESE	0	0	1	0	0	0	1
SE	0	0	1	1	0	0	2
SSE	0	0	0	0	1	0	1
S	0	0	0	0	3	3	6
SSW	0	0	1	0	3	7	11
SW	0	0	1	1	7	5	14
WSW	0	1	0	0	1	3	5
W	0	1	2	9	3	0	15
WNW	0	0	3	4	5	1	13
NW	0	0	1	2	1	1	5
NNW	0	0	2	2	0	0	4
Variable	0	0	0	0	0	0	0
Total	0	2	14	21	24	20	81

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: 100

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	2	1	0	0	3
NE	0	0	3	0	0	0	3
ENE	0	0	1	0	0	0	1
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	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	10	0	2	0	12
SW	0	0	7	0	0	0	7
WSW	0	0	1	4	0	0	5
W	0	0	0	7	0	0	7
WNW	0	0	5	4	0	0	9
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	30	16	2	0	48

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	8	0	0	0	8
NNE	0	3	9	0	0	0	12
NE	0	2	5	2	0	0	9
ENE	0	0	5	1	0	0	6
E	0	0	0	0	0	0	0
ESE	0	0	3	0	0	0	3
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	2	4	0	0	0	6
SSW	0	0	13	4	1	0	18
SW	0	2	14	2	0	0	18
WSW	0	0	4	2	0	0	6
W	0	1	2	3	0	0	6
WNW	0	2	6	8	0	0	16
NW	0	2	5	1	0	0	8
NNW	0	2	1	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	16	79	23	1	0	119

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	9	1	0	0	14
NNE	0	8	5	1	0	0	14
NE	0	4	5	4	0	0	13
ENE	0	2	3	2	0	0	7
E	0	0	3	0	0	0	3
ESE	0	0	3	3	0	0	6
SE	0	1	4	1	0	0	6
SSE	0	5	2	1	0	0	8
S	0	10	6	5	0	0	21
SSW	0	2	11	1	1	0	15
SW	0	1	8	3	0	0	12
WSW	0	4	5	0	0	0	9
W	0	4	8	3	0	0	15
WNW	0	8	8	9	0	0	25
NW	0	4	5	0	0	0	9
NNW	0	1	6	3	0	0	10
Variable	0	0	0	0	0	0	0
Total	0	58	91	37	1	0	187

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	39	25	1	0	0	65
NNE	2	32	23	0	0	0	57
NE	1	17	20	9	0	0	47
ENE	1	12	16	5	0	0	34
E	1	7	12	4	0	0	24
ESE	1	6	4	2	0	0	13
SE	3	12	12	6	0	0	33
SSE	2	21	17	8	0	0	48
S	2	33	24	11	0	0	70
SSW	3	18	9	5	0	0	35
SW	0	11	10	2	0	1	24
WSW	3	9	17	8	0	0	37
W	2	8	25	8	0	0	43
WNW	2	17	17	6	1	0	43
NW	0	8	3	3	0	0	14
NNW	0	20	17	1	1	0	39
Variable	0	0	0	0	0	0	0
Total	23	270	251	79	2	1	626

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	42	13	1	0	0	58
NNE	0	34	8	0	0	0	42
NE	0	5	32	0	0	0	37
ENE	0	5	13	0	0	0	18
E	2	7	19	1	0	0	29
ESE	0	11	8	0	0	0	19
SE	1	13	6	0	0	0	20
SSE	4	12	14	3	0	0	33
S	1	12	23	5	1	0	42
SSW	4	28	10	1	0	0	43
SW	4	16	18	0	0	0	38
WSW	1	8	9	2	0	0	20
W	1	11	10	2	0	0	24
WNW	2	15	17	1	0	0	35
NW	3	18	8	1	0	0	30
NNW	3	8	8	1	0	0	20
Variable	0	0	0	0	0	0	0
Total	28	245	216	18	1	0	508

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	14	0	0	0	0	15
NNE	0	16	0	0	0	0	16
NE	2	0	0	0	0	0	2
ENE	0	2	0	0	0	0	2
E	2	12	12	0	0	0	26
ESE	2	12	0	0	0	0	14
SE	0	15	4	0	0	0	19
SSE	2	15	5	0	0	0	22
S	3	21	8	0	0	0	32
SSW	3	8	4	0	0	0	15
SW	1	13	5	0	0	0	19
WSW	4	16	9	1	0	0	30
W	5	10	9	0	0	0	24
WNW	1	11	2	0	0	0	14
NW	3	15	3	0	0	0	21
NNW	4	2	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	33	182	61	1	0	0	277

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	4	0	0	0	0	5
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	1	3	4	0	0	0	8
ESE	1	21	4	0	0	0	26
SE	4	33	7	0	0	0	44
SSE	5	55	6	0	0	0	66
S	1	41	15	0	0	0	57
SSW	1	57	23	0	0	0	81
SW	3	36	6	0	0	0	45
WSW	1	25	4	0	0	0	30
W	1	18	3	0	0	0	22
WNW	2	29	1	0	0	0	32
NW	0	7	1	0	0	0	8
NNW	1	3	1	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	23	332	75	0	0	0	430

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	1	4	0	0	5
NNE	0	0	2	6	1	0	9
NE	0	0	1	6	0	0	7
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	2	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	1
S	0	0	1	0	0	0	1
SSW	0	0	7	4	0	1	12
SW	0	0	0	4	1	0	5
WSW	0	0	1	2	3	0	6
W	0	0	3	1	3	0	7
WNW	0	0	4	0	0	0	4
NW	0	0	0	0	1	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	21	29	9	1	60

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	21	21	29	2	0	73
NNE	1	16	31	26	10	0	84
NE	1	13	22	32	19	1	88
ENE	0	8	9	10	5	0	32
E	1	8	7	10	0	0	26
ESE	0	4	5	10	0	0	19
SE	3	10	14	8	7	0	42
SSE	2	20	21	12	8	0	63
S	0	21	35	30	7	1	94
SSW	1	11	25	23	9	5	74
SW	1	5	10	19	7	0	42
WSW	1	7	17	16	10	2	53
W	1	15	18	21	14	2	71
WNW	0	13	18	20	11	0	62
NW	0	10	20	14	2	1	47
NNW	1	10	26	10	1	0	48
Variable	0	0	0	0	0	0	0
Total	13	192	299	290	112	12	918

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	7	5	13	9	0	34
NNE	0	2	13	33	15	0	63
NE	0	2	9	29	6	0	46
ENE	0	2	11	13	1	0	27
E	0	5	9	12	8	0	34
ESE	0	1	4	6	6	0	17
SE	1	2	9	8	3	0	23
SSE	0	6	6	13	8	3	36
S	0	5	4	10	9	19	47
SSW	0	1	13	19	18	5	56
SW	3	3	8	8	14	0	36
WSW	3	4	8	10	6	0	31
W	2	4	6	19	11	3	45
WNW	1	2	3	12	15	4	37
NW	2	7	16	8	11	3	47
NNW	0	7	11	6	2	1	27
Variable	0	0	0	0	0	0	0
Total	12	60	135	219	142	38	606

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 3
Hours of missing stability measurements in all stability classes: 11

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	4	3	3	2	0	0	12
NNE	0	2	1	11	2	0	16
NE	2	0	1	5	6	0	14
ENE	0	1	3	2	0	0	6
E	1	4	3	6	3	0	17
ESE	0	2	6	15	7	0	30
SE	0	3	10	6	4	3	26
SSE	1	3	12	8	6	5	35
S	1	7	6	2	7	9	32
SSW	0	1	4	26	7	10	48
SW	1	4	2	13	13	4	37
WSW	0	6	7	3	2	0	18
W	0	7	9	11	9	0	36
WNW	0	4	7	8	8	0	27
NW	0	6	4	3	6	0	19
NNW	0	2	1	2	7	1	13
Variable	0	0	0	0	0	0	0
Total	10	55	79	123	87	32	386

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

LaSalle Nuclear Station

Period of Record: July - September 2004
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	0	0	0	0	0	2
NNE	1	1	0	0	0	0	2
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	1	2	3
SE	0	0	0	4	2	10	16
SSE	0	0	0	14	5	6	25
S	0	0	6	10	6	13	35
SSW	0	0	4	13	24	9	50
SW	1	0	4	18	19	11	53
WSW	0	1	7	1	1	1	11
W	1	2	1	2	0	0	6
WNW	0	3	1	3	1	0	8
NW	0	0	2	2	2	0	6
NNW	0	2	1	1	1	0	5
Variable	0	0	0	0	0	0	0
Total	5	9	27	68	62	52	223

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

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

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

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

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	2	5	1	0	8
NNE	0	0	0	0	0	0	0
NE	0	0	3	0	0	0	3
ENE	0	0	4	1	0	0	5
E	0	0	1	4	0	0	5
ESE	0	0	1	0	0	0	1
SE	0	0	1	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	0	0	4	0	2	6
SSW	0	2	1	0	0	0	3
SW	0	1	0	2	2	0	5
WSW	0	3	0	7	1	0	11
W	0	0	0	1	2	0	3
WNW	0	0	4	1	0	0	5
NW	0	0	4	0	0	0	4
NNW	0	0	1	1	0	0	2
Variable	0	0	0	0	0	0	0
Total	0	6	22	26	6	2	62

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	13	29	34	11	0	89
NNE	0	26	13	8	1	0	48
NE	1	7	29	13	5	1	56
ENE	0	3	38	22	13	2	78
E	0	6	39	24	4	0	73
ESE	0	5	18	5	0	0	28
SE	0	3	9	5	0	0	17
SSE	0	4	13	17	0	0	34
S	1	9	11	23	14	3	61
SSW	2	10	17	9	3	0	41
SW	0	17	25	29	12	0	83
WSW	1	12	9	7	6	4	39
W	0	7	21	27	8	4	67
WNW	1	8	39	39	15	4	106
NW	0	9	13	24	5	6	57
NNW	0	12	42	46	20	4	124
Variable	0	0	0	0	0	0	0
Total	8	151	365	332	117	28	1001

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	24	8	0	0	0	34
NNE	3	19	11	0	0	0	33
NE	2	2	15	1	0	0	20
ENE	1	0	16	13	1	0	31
E	2	5	54	7	0	0	68
ESE	0	9	12	2	0	0	23
SE	1	1	17	4	0	0	23
SSE	2	12	23	9	0	0	46
S	1	8	13	16	1	0	39
SSW	0	9	28	21	7	3	68
SW	2	3	19	30	14	0	68
WSW	2	10	11	13	2	1	39
W	1	6	18	8	1	0	34
WNW	2	4	10	18	17	16	67
NW	3	10	15	6	1	0	35
NNW	2	11	8	5	0	0	26
Variable	0	0	0	0	0	0	0
Total	26	133	278	153	44	20	654

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	14	1	0	0	0	15
NNE	0	5	0	0	0	0	5
NE	1	0	0	0	0	0	1
ENE	1	1	0	0	0	0	2
E	1	2	12	0	0	0	15
ESE	1	3	5	0	0	0	9
SE	0	12	5	0	0	0	17
SSE	1	5	7	1	0	0	14
S	2	13	9	6	0	0	30
SSW	0	10	10	5	1	0	26
SW	2	10	28	7	0	0	47
WSW	0	4	25	3	0	0	32
W	1	5	17	0	0	0	23
WNW	0	3	8	1	0	0	12
NW	2	7	17	1	0	0	27
NNW	0	5	0	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	12	99	144	24	1	0	280

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	0	0	0	0	2
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	5	6	0	0	0	11
ESE	0	6	3	0	0	0	9
SE	0	6	2	0	0	0	8
SSE	2	17	4	0	0	0	23
S	0	11	7	1	0	0	19
SSW	0	5	20	0	0	0	25
SW	1	12	21	3	0	0	37
WSW	1	4	12	1	0	0	18
W	2	5	9	0	0	0	16
WNW	0	7	2	0	0	0	9
NW	0	2	0	0	0	0	2
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	6	83	86	5	0	0	180

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

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

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	8	9	22	22	10	72
NNE	0	4	15	11	7	10	47
NE	0	0	14	40	14	9	77
ENE	0	3	14	51	21	16	105
E	1	1	17	26	13	7	65
ESE	0	3	6	11	3	0	23
SE	0	1	1	10	8	0	20
SSE	1	3	9	12	9	4	38
S	1	2	14	20	11	22	70
SSW	1	6	15	12	9	16	59
SW	0	9	17	17	27	22	92
WSW	1	5	9	17	7	16	55
W	0	5	11	27	18	10	71
WNW	0	4	13	27	33	17	94
NW	0	4	14	20	32	25	95
NNW	1	5	26	28	30	19	109
Variable	0	0	0	0	0	0	0
Total	7	63	204	351	264	203	1092

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	5	7	9	5	1	29
NNE	1	6	13	9	5	0	34
NE	0	4	12	3	10	0	29
ENE	1	2	7	11	11	1	33
E	2	5	6	24	19	6	62
ESE	0	4	2	4	8	3	21
SE	0	2	4	3	9	4	22
SSE	2	3	6	5	15	16	47
S	0	3	4	5	18	29	59
SSW	0	3	5	10	14	57	89
SW	0	3	6	7	17	43	76
WSW	0	1	6	5	14	9	35
W	0	0	2	8	21	26	57
WNW	0	2	1	8	14	59	84
NW	0	0	1	7	6	8	22
NNW	0	4	8	7	5	6	30
Variable	0	0	0	0	0	0	0
Total	8	47	90	125	191	268	729

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	1	3	2	0	0	6
NNE	0	0	6	8	2	0	16
NE	0	0	1	1	3	0	5
ENE	0	0	0	1	0	0	1
E	0	1	0	3	0	1	5
ESE	0	2	2	1	9	2	16
SE	0	2	1	2	9	6	20
SSE	0	1	5	1	4	2	13
S	0	2	1	2	2	9	16
SSW	1	0	4	5	11	15	36
SW	0	0	4	3	14	26	47
WSW	0	0	0	1	11	11	23
W	0	0	4	3	10	4	21
WNW	0	0	4	3	12	4	23
NW	0	0	1	0	8	2	11
NNW	0	0	1	7	4	1	13
Variable	0	0	0	0	0	0	0
Total	1	9	37	43	99	83	272

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

LaSalle Nuclear Station

Period of Record: October - December2004
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	1	0	0	1
ESE	0	0	0	0	2	0	2
SE	0	0	0	3	0	0	3
SSE	0	0	0	3	3	2	8
S	0	0	1	5	8	5	19
SSW	0	0	3	3	12	8	26
SW	0	0	0	3	0	9	12
WSW	0	0	1	4	3	6	14
W	0	0	1	2	1	1	5
WNW	0	1	0	0	1	1	3
NW	0	0	1	1	1	0	3
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	1	7	25	31	32	96

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

APPENDIX III

2004 REMP SAMPLE RESULTS

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1.0 INTRODUCTION

The following constitutes the 2004 Progress Report for the Radiological Environmental Monitoring Program conducted at the LaSalle County Station, Marseilles, Illinois. Results of completed analyses are presented in the attached tables.

Data obtained in the program are well within the ranges previously encountered in the program and to be expected in the environmental media sampled.

For all gamma isotopic analyses, spectrum is computer scanned from 80 to 2048 keV. Specifically included are Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Ba-140, La-140, Cs-134 and Cs-137. Naturally occurring gamma-emitters, such as K-40 and Ra daughters, are frequently detected but not listed here. The data is reported in the format of x±2s;2TPU, where "x" is the significant result, "s" is the one standard deviation counting uncertainty, and TPU is the total propagated uncertainty at the one sigma confidence level.

Locations denoted by a "(C)" after site code refer to control locations.

All concentrations, except gross beta, are decay corrected to the time of collection.

TLD data is provided by Exelon Generation Company.

Deviations from Scheduled Sampling and Corrective Actions Taken

All samples were collected within the scheduled period unless noted otherwise in the Listing of Missed Samples.

Unusual Environmental Measurements

None for 2004

Sample Type	Location Code	Collection Date	Comments

2.0 LISTING OF MISSED SAMPLES

Sample Type	Location Code	Expected Collection Date	Reason
None for 2004.			

3.0 LISTING OF SAMPLE ANOMALIES

Sample Type	Location Code	Collection Date	Reason
A	L-03	04-29-04	No apparent reason for low reading of 157.3 hrs.
A/I	L-01	07-29-04	Low meter reading of 50.3 hours due to pump siezure; pump due for annual service; collector replaced pump.
A	L-05	08-05-04	Low meter reading of 134.5 hrs. possibly due to storms in area.
A	L-06	08-05-04	Low meter reading of 152.2 hrs. possible due to storms in area.
A/I	L-05	08-11-04	AP filter light for no apparent reason; pump running; timer functioning.

4.0 2004 ANALYSES DATA TABLES

Table 1. Airborne Particulates and Iodine Cartridges

Collection: Air Particulates - Continuous; weekly exchange
Iodine Cartridges - Continuous; biweekly exchange

Required LLD: Gross Beta = 0.01, I-131 = 0.07 pCi/m³

Units: 10^{-2} pCi/m³

L-01 Nearsite No. 1

Date Collected	Volume (m³)	Gross Beta	I-131[a]	Date Collected	Volume (m³)	Gross Beta	I-131[a]
01-08-04	325	3.4 ± 0.4 ; 0.7	-	07-08-04	316	2.4 ± 0.4 ; 0.6	-
01-15-04	283	3.5 ± 0.4 ; 0.7	0.8 ± 0.3 ; 0.3	07-15-04	284	1.2 ± 0.3 ; 0.4	-0.6 ± 0.3 ; 0.3
01-22-04	285	2.7 ± 0.4 ; 0.6	-	07-22-04	285	2.7 ± 0.4 ; 0.6	-
01-28-04	242	2.2 ± 0.4 ; 0.6	-0.2 ± 0.4 ; 0.4	07-29-04	85.[b]	1.6 ± 0.8 ; 0.8	0.5 ± 0.5 ; 0.5
02-05-04	333	4.7 ± 0.4 ; 1.0	-	08-05-04	287	3.2 ± 0.4 ; 0.7	-
02-12-04	285	3.8 ± 0.4 ; 0.8	-1.0 ± 0.3 ; 0.4	08-11-04	257	1.8 ± 0.4 ; 0.5	0.6 ± 0.3 ; 0.4
02-19-04	292	2.7 ± 0.4 ; 0.6	-	08-18-04	284	2.5 ± 0.3 ; 0.6	-
02-26-04	288	2.7 ± 0.3 ; 0.6	0.1 ± 0.3 ; 0.3	08-26-04	314	2.2 ± 0.3 ; 0.6	-0.2 ± 0.3 ; 0.3
03-04-04	284	2.4 ± 0.3 ; 0.6	-	09-02-04	284	1.8 ± 0.4 ; 0.5	-
03-11-04	285	2.8 ± 0.3 ; 0.6	0.1 ± 0.3 ; 0.3	09-09-04	287	3.2 ± 0.4 ; 0.7	0.4 ± 0.3 ; 0.3
03-17-04	242	1.5 ± 0.4 ; 0.5	-	09-16-04	281	2.4 ± 0.4 ; 0.6	-
03-25-04	326	1.9 ± 0.3 ; 0.5	-0.3 ± 0.3 ; 0.3	09-23-04	295	2.8 ± 0.4 ; 0.6	-0.8 ± 0.3 ; 0.4
03-31-04	251	1.4 ± 0.3 ; 0.4	-	09-30-04	281	2.0 ± 0.3 ; 0.5	-
1st Qtr. Mean±s.d.		2.7 ± 0.9	-0.1 ± 0.6	3rd Qtr. Mean±s.d.		2.3 ± 0.6	-0.0 ± 0.6
04-08-04	319	2.1 ± 0.3 ; 0.5	0.0 ± 0.3 ; 0.3	10-06-04	241	1.9 ± 0.3 ; 0.5	-0.7 ± 0.3 ; 0.3
04-15-04	279	1.5 ± 0.3 ; 0.4	-	10-14-04	330	2.5 ± 0.3 ; 0.6	-
04-22-04	288	2.4 ± 0.4 ; 0.6	0.3 ± 0.3 ; 0.3	10-21-04	292	1.5 ± 0.3 ; 0.4	-0.4 ± 0.3 ; 0.3
04-29-04	283	2.1 ± 0.4 ; 0.5	-	10-28-04	275	3.3 ± 0.4 ; 0.7	-
05-06-04	291	2.2 ± 0.3 ; 0.5	-0.2 ± 0.3 ; 0.3	11-04-04	287	2.5 ± 0.4 ; 0.6	0.7 ± 0.3 ; 0.3
05-13-04	284	2.7 ± 0.3 ; 0.6	-	11-11-04	285	2.6 ± 0.4 ; 0.6	-
05-20-04	281	1.1 ± 0.3 ; 0.3	0.8 ± 0.3 ; 0.4	11-18-04	285	2.8 ± 0.4 ; 0.6	0.4 ± 0.3 ; 0.3
05-27-04	285	1.4 ± 0.3 ; 0.4	-	11-24-04	245	2.6 ± 0.4 ; 0.6	-
06-03-04	288	1.1 ± 0.3 ; 0.4	0.9 ± 0.3 ; 0.4	12-02-04	326	1.9 ± 0.3 ; 0.4	0.8 ± 0.3 ; 0.4
06-10-04	283	2.1 ± 0.3 ; 0.5	-	12-09-04	285	3.4 ± 0.4 ; 0.7	-
06-17-04	285	1.4 ± 0.3 ; 0.4	-0.0 ± 0.3 ; 0.3	12-16-04	286	3.4 ± 0.4 ; 0.7	-0.1 ± 0.4 ; 0.4
06-24-04	287	1.5 ± 0.3 ; 0.4	-	12-23-04	283	2.9 ± 0.4 ; 0.6	-
06-30-04	251	1.8 ± 0.4 ; 0.5	-0.4 ± 0.4 ; 0.4	12-29-04	245	4.0 ± 0.5 ; 0.9	1.2 ± 0.3 ; 0.4
2nd Qtr. Mean±s.d.		1.8 ± 0.5	0.2 ± 0.5	4th Qtr. Mean±s.d.		2.7 ± 0.7	0.3 ± 0.7

[a] Volume based on two week collection period.

[b] Volume low due to pump seizure; pump due for annual maintenance; collector replaced pump. Charcol volume based on 1 week plus 50.3 hours.

Table 1. Airborne Particulates and Iodine Cartridges

Collection: Air Particulates - Continuous; weekly exchange
Iodine Cartridges - Continuous; biweekly exchange

Required LLD: Gross Beta = 0.01, I-131 = 0.07 pCi/m³

Units: 10^{-2} pCi/m³

L-03 Onsite No. 3

Date Collected	Volume (m³)	Gross Beta	I-131[a]	Date Collected	Volume (m³)	Gross Beta	I-131[a]
01-08-04	321	3.7 ± 0.4 ; 0.8	-	07-08-04	316	2.1 ± 0.3 ; 0.5	-
01-15-04	284	2.5 ± 0.3 ; 0.6	0.6 ± 0.4 ; 0.4	07-15-04	284	1.5 ± 0.3 ; 0.4	-0.3 ± 0.3 ; 0.3
01-22-04	284	2.4 ± 0.4 ; 0.6	-	07-22-04	284	2.6 ± 0.4 ; 0.6	-
01-28-04	243	2.0 ± 0.4 ; 0.5	-0.2 ± 0.3 ; 0.3	07-29-04	286	2.1 ± 0.3 ; 0.5	-0.3 ± 0.3 ; 0.3
02-05-04	327	4.0 ± 0.4 ; 0.8	-	08-05-04	287	3.0 ± 0.4 ; 0.7	-
02-12-04	285	4.1 ± 0.5 ; 0.9	0.1 ± 0.3 ; 0.3	08-11-04	258	1.7 ± 0.4 ; 0.5	0.4 ± 0.3 ; 0.3
02-19-04	282	2.8 ± 0.4 ; 0.6	-	08-18-04	284	2.2 ± 0.3 ; 0.5	-
02-26-04	293	2.5 ± 0.3 ; 0.5	0.2 ± 0.3 ; 0.3	08-26-04	313	2.2 ± 0.3 ; 0.5	0.2 ± 0.3 ; 0.3
03-04-04	289	2.1 ± 0.3 ; 0.5	-	09-02-04	284	1.5 ± 0.3 ; 0.4	-
03-11-04	284	2.8 ± 0.3 ; 0.6	0.5 ± 0.3 ; 0.3	09-09-04	287	3.0 ± 0.4 ; 0.7	0.2 ± 0.3 ; 0.3
03-17-04	242	1.7 ± 0.4 ; 0.5	-	09-16-04	281	2.3 ± 0.4 ; 0.6	-
03-25-04	326	1.8 ± 0.3 ; 0.5	0.4 ± 0.3 ; 0.3	09-23-04	291	2.9 ± 0.4 ; 0.7	0.4 ± 0.4 ; 0.4
03-31-04	251	1.7 ± 0.3 ; 0.4	-	09-30-04	285	1.7 ± 0.3 ; 0.4	-
1st Qtr. Mean±s.d.		2.6 ± 0.8	0.3 ± 0.3	3rd Qtr. Mean±s.d.		2.2 ± 0.5	0.1 ± 0.3
04-08-04	324	2.2 ± 0.3 ; 0.5	0.8 ± 0.3 ; 0.4	10-06-04	237	2.1 ± 0.4 ; 0.5	-0.9 ± 0.4 ; 0.4
04-15-04	279	1.8 ± 0.4 ; 0.5	-	10-14-04	329	2.7 ± 0.3 ; 0.6	-
04-22-04	288	2.3 ± 0.4 ; 0.6	0.1 ± 0.4 ; 0.4	10-21-04	293	1.5 ± 0.3 ; 0.4	-0.5 ± 0.3 ; 0.3
04-29-04	267[b]	1.9 ± 0.4 ; 0.5	-	10-28-04	275	3.3 ± 0.4 ; 0.7	-
05-06-04	290	2.2 ± 0.3 ; 0.5	-0.4 ± 0.4 ; 0.4	11-04-04	282	2.0 ± 0.4 ; 0.5	-0.0 ± 0.3 ; 0.3
05-13-04	283	2.5 ± 0.3 ; 0.6	-	11-11-04	285	2.7 ± 0.4 ; 0.6	-
05-20-04	277	1.3 ± 0.3 ; 0.4	-0.1 ± 0.3 ; 0.3	11-18-04	285	2.5 ± 0.4 ; 0.6	0.4 ± 0.3 ; 0.3
05-27-04	284	1.3 ± 0.3 ; 0.4	-	11-24-04	245	2.6 ± 0.4 ; 0.6	-
06-03-04	293	1.2 ± 0.3 ; 0.4	0.7 ± 0.3 ; 0.3	12-02-04	326	1.9 ± 0.3 ; 0.4	0.2 ± 0.4 ; 0.4
06-10-04	277	2.3 ± 0.3 ; 0.5	-	12-09-04	285	3.1 ± 0.4 ; 0.7	-
06-17-04	284	1.9 ± 0.4 ; 0.5	0.1 ± 0.3 ; 0.3	12-16-04	286	3.6 ± 0.4 ; 0.7	0.2 ± 0.3 ; 0.3
06-24-04	286	1.6 ± 0.3 ; 0.4	-	12-23-04	283	2.7 ± 0.3 ; 0.6	-
06-30-04	261	2.1 ± 0.4 ; 0.5	0.7 ± 0.4 ; 0.4	12-29-04	244	3.4 ± 0.5 ; 0.8	-0.8 ± 0.4 ; 0.4
2nd Qtr. Mean±s.d.		1.9 ± 0.4	0.2 ± 0.5	4th Qtr. Mean±s.d.		2.6 ± 0.6	-0.2 ± 0.5

[a] Volume based on two week collection period.
[b] Volume low; no apparent reason for low meter reading of 157.3 hours.

Table 1. Airborne Particulates and Iodine Cartridges

Collection: Air Particulates - Continuous; weekly exchange
Iodine Cartridges - Continuous; biweekly exchange

Required LLD: Gross Beta = 0.01, I-131 = 0.07 pCi/m³

Units: 10^{-2} pCi/m³

L-05 Onsite Station No. 5

Date Collected	Volume (m³)	Gross Beta	I-131[a]	Date Collected	Volume (m³)	Gross Beta	I-131[a]
01-08-04	323	3.7 ± 0.4 ; 0.8	-	07-08-04	320	2.5 ± 0.4 ; 0.6	-
01-15-04	283	3.5 ± 0.4 ; 0.7	0.4 ± 0.3 ; 0.3	07-15-04	283	1.4 ± 0.3 ; 0.4	0.5 ± 0.3 ; 0.3
01-22-04	285	2.7 ± 0.4 ; 0.6	-	07-22-04	285	2.9 ± 0.4 ; 0.7	-
01-28-04	251	1.9 ± 0.4 ; 0.5	0.6 ± 0.3 ; 0.4	07-29-04	285	1.9 ± 0.3 ; 0.5	-1.7 ± 0.4 ; 0.5
02-05-04	327	4.5 ± 0.4 ; 0.9	-	08-05-04	228[b]	3.5 ± 0.5 ; 0.8	-
02-12-04	284	4.4 ± 0.5 ; 0.9	-0.1 ± 0.3 ; 0.3	08-11-04	257[c]	-0.3 ± 0.3 ; 0.3	-1.7 ± 0.4 ; 0.5
02-19-04	283	2.7 ± 0.4 ; 0.6	-	08-18-04	284	2.2 ± 0.3 ; 0.5	-
02-26-04	287	3.2 ± 0.4 ; 0.7	0.8 ± 0.3 ; 0.4	08-26-04	312	2.8 ± 0.4 ; 0.5	0.7 ± 0.3 ; 0.3
03-04-04	284	2.6 ± 0.3 ; 0.6	-	09-02-04	289	1.9 ± 0.4 ; 0.5	-
03-11-04	284	2.9 ± 0.4 ; 0.6	-0.4 ± 0.3 ; 0.3	09-09-04	288	2.9 ± 0.4 ; 0.7	0.2 ± 0.4 ; 0.4
03-17-04	244	1.6 ± 0.4 ; 0.5	-	09-16-04	281	2.3 ± 0.4 ; 0.6	-
03-25-04	326	1.8 ± 0.3 ; 0.5	0.4 ± 0.3 ; 0.3	09-23-04	295	2.9 ± 0.4 ; 0.7	-0.1 ± 0.3 ; 0.3
03-31-04	249	1.6 ± 0.3 ; 0.4	-	09-30-04	280	1.7 ± 0.3 ; 0.4	-
1st Qtr. Mean±s.d.		2.9 ± 1.0	0.3± 0.4	3rd Qtr. Mean±s.d.		2.2 ± 1.0	-0.4± 1.1
04-08-04	320	2.2 ± 0.3 ; 0.5	-0.9 ± 0.3 ; 0.3	10-06-04	237	2.3 ± 0.4 ; 0.5	0.7 ± 0.4 ; 0.4
04-15-04	280	1.5 ± 0.3 ; 0.4	-	10-14-04	323	2.3 ± 0.3 ; 0.5	-
04-22-04	287	2.3 ± 0.4 ; 0.5	-0.5 ± 0.8 ; 0.8	10-21-04	293	1.5 ± 0.3 ; 0.4	0.4 ± 0.3 ; 0.3
04-29-04	283	1.9 ± 0.3 ; 0.5	-	10-28-04	275	3.1 ± 0.4 ; 0.7	-
05-06-04	286	2.0 ± 0.3 ; 0.5	0.1 ± 0.3 ; 0.3	11-04-04	287	2.1 ± 0.4 ; 0.5	-1.1 ± 0.3 ; 0.4
05-13-04	278	2.9 ± 0.4 ; 0.6	-	11-11-04	285	2.6 ± 0.4 ; 0.6	-
05-20-04	284	1.2 ± 0.3 ; 0.4	0.1 ± 0.4 ; 0.4	11-18-04	285	2.5 ± 0.4 ; 0.6	-0.6 ± 0.3 ; 0.4
05-27-04	284	1.4 ± 0.3 ; 0.4	-	11-24-04	244	2.8 ± 0.4 ; 0.7	-
06-03-04	285	1.3 ± 0.3 ; 0.4	-0.1 ± 0.3 ; 0.3	12-02-04	326	2.0 ± 0.3 ; 0.5	0.1 ± 0.3 ; 0.3
06-10-04	282	0.9 ± 0.3 ; 0.3	-	12-09-04	285	3.2 ± 0.4 ; 0.7	-
06-17-04	283	0.3 ± 0.3 ; 0.3	-0.3 ± 0.3 ; 0.3	12-16-04	285	3.5 ± 0.4 ; 0.7	0.0 ± 0.3 ; 0.3
06-24-04	285	1.5 ± 0.3 ; 0.4	-	12-23-04	285	2.7 ± 0.3 ; 0.6	-
06-30-04	243	1.8 ± 0.4 ; 0.5	0.2 ± 0.4 ; 0.4	12-29-04	245	4.4 ± 0.5 ; 0.9	0.8 ± 0.3 ; 0.4
2nd Qtr. Mean±s.d.		1.6 ± 0.7	-0.2± 0.4	4th Qtr. Mean±s.d.		2.7 ± 0.7	0.0± 0.7

[a] Volume based on two week collection period.
[b] Volume low, possibly due to storms in area.
[c] Filter light for no apparent reason; pump running; timer functioning.

Table 1. Airborne Particulates and Iodine Cartridges

Collection: Air Particulates - Continuous; weekly exchange
Iodine Cartridges - Continuous; biweekly exchange

Required LLD: Gross Beta = 0.01, I-131 = 0.07 pCi/m³

Units: 10^{-2} pCi/m³

L-06 Nearsite No. 6

Date Collected	Volume (m³)	Gross Beta	I-131[a]	Date Collected	Volume (m³)	Gross Beta	I-131[a]
01-08-04	325	3.2 ± 0.4 ; 0.7	-	07-08-04	316	2.2 ± 0.3 ; 0.5	-
01-15-04	283	3.9 ± 0.4 ; 0.8	0.1 ± 0.3 ; 0.3	07-15-04	284	1.7 ± 0.3 ; 0.5	-0.2 ± 0.3 ; 0.3
01-22-04	284	3.3 ± 0.4 ; 0.7	-	07-22-04	285	2.7 ± 0.4 ; 0.6	-
01-28-04	243	2.1 ± 0.4 ; 0.5	1.1 ± 0.3 ; 0.4	07-29-04	286	2.0 ± 0.3 ; 0.5	-0.1 ± 0.3 ; 0.3
02-05-04	333	3.9 ± 0.4 ; 0.8	-	08-05-04	258[b]	3.6 ± 0.5 ; 0.8	-
02-12-04	285	4.6 ± 0.5 ; 1.0	0.4 ± 0.3 ; 0.3	08-11-04	257	1.9 ± 0.4 ; 0.5	0.5 ± 0.4 ; 0.4
02-19-04	281	2.7 ± 0.4 ; 0.6	-	08-18-04	284	2.6 ± 0.3 ; 0.6	-
02-26-04	288	2.6 ± 0.3 ; 0.6	0.7 ± 0.3 ; 0.3	08-26-04	314	2.2 ± 0.3 ; 0.6	0.9 ± 0.3 ; 0.4
03-04-04	279	2.5 ± 0.3 ; 0.6	-	09-02-04	284	1.9 ± 0.4 ; 0.5	-
03-11-04	285	3.0 ± 0.4 ; 0.6	0.5 ± 0.3 ; 0.3	09-09-04	287	3.3 ± 0.4 ; 0.7	0.3 ± 0.3 ; 0.3
03-17-04	242	1.6 ± 0.4 ; 0.5	-	09-16-04	281	2.5 ± 0.4 ; 0.6	-
03-25-04	326	1.9 ± 0.3 ; 0.5	-0.9 ± 0.3 ; 0.4	09-23-04	291	3.1 ± 0.4 ; 0.7	0.1 ± 0.3 ; 0.3
03-31-04	251	1.9 ± 0.3 ; 0.5	-	09-30-04	281	2.2 ± 0.3 ; 0.5	-
1st Qtr. Mean±s.d.		2.9 ± 0.9	0.3± 0.7	3rd Qtr. Mean±s.d.		2.4 ± 0.6	0.3± 0.4
04-08-04	319	2.2 ± 0.3 ; 0.5	0.5 ± 0.3 ; 0.3	10-06-04	241	2.3 ± 0.4 ; 0.6	-0.1 ± 0.4 ; 0.4
04-15-04	279	1.8 ± 0.4 ; 0.5	-	10-14-04	330	2.6 ± 0.3 ; 0.6	-
04-22-04	287	2.6 ± 0.4 ; 0.6	-0.8 ± 0.3 ; 0.4	10-21-04	292	1.7 ± 0.3 ; 0.4	0.2 ± 0.3 ; 0.3
04-29-04	283	2.1 ± 0.4 ; 0.5	-	10-28-04	275	3.3 ± 0.4 ; 0.7	-
05-06-04	291	2.2 ± 0.3 ; 0.5	-0.5 ± 0.4 ; 0.4	11-04-04	287	2.1 ± 0.4 ; 0.5	-1.5 ± 0.4 ; 0.5
05-13-04	283	2.9 ± 0.4 ; 0.6	-	11-11-04	285	2.8 ± 0.4 ; 0.6	-
05-20-04	277	1.4 ± 0.3 ; 0.4	-0.2 ± 0.3 ; 0.3	11-18-04	280	2.4 ± 0.4 ; 0.6	0.2 ± 0.3 ; 0.3
05-27-04	285	1.6 ± 0.3 ; 0.4	-	11-24-04	245	2.9 ± 0.4 ; 0.7	-
06-03-04	293	1.4 ± 0.3 ; 0.4	0.1 ± 0.3 ; 0.3	12-02-04	326	2.3 ± 0.3 ; 0.5	-1.1 ± 0.4 ; 0.4
06-10-04	282	2.3 ± 0.3 ; 0.5	-	12-09-04	285	3.6 ± 0.4 ; 0.7	-
06-17-04	285	1.7 ± 0.4 ; 0.5	-1.3 ± 0.3 ; 0.4	12-16-04	291	3.5 ± 0.4 ; 0.7	0.5 ± 0.3 ; 0.3
06-24-04	286	1.5 ± 0.3 ; 0.4	-	12-23-04	283	2.8 ± 0.3 ; 0.6	-
06-30-04	253	1.7 ± 0.4 ; 0.5	0.6 ± 0.3 ; 0.3	12-29-04	245	4.1 ± 0.5 ; 0.9	-0.2 ± 0.4 ; 0.4
2nd Qtr. Mean±s.d.		2.0 ± 0.5	-0.2± 0.7	4th Qtr. Mean±s.d.		2.8 ± 0.7	-0.3± 0.7

[a] Volume based on two week collection period.
[b] Volume low, possibly due to storms in area.

Table 1. Airborne Particulates and Iodine Cartridges

Collection: Air Particulates - Continuous; weekly exchange
Iodine Cartridges - Continuous; biweekly exchange

Required LLD: Gross Beta = 0.01, I-131 = 0.07 pCi/m³

Units: 10^{-2} pCi/m³

L-10 (C) Streator

Date Collected	Volume (m³)	Gross Beta	I-131*	Date Collected	Volume (m³)	Gross Beta	I-131*
01-08-04	330	3.1 ± 0.4 ; 0.7	-	07-08-04	321	2.5 ± 0.4 ; 0.6	-
01-15-04	283	3.3 ± 0.4 ; 0.7	0.3 ± 0.3 ; 0.3	07-15-04	283	1.7 ± 0.3 ; 0.5	-0.0 ± 0.3 ; 0.3
01-22-04	285	2.4 ± 0.4 ; 0.6	-	07-22-04	285	2.9 ± 0.4 ; 0.6	-
01-28-04	242	2.4 ± 0.4 ; 0.6	0.3 ± 0.4 ; 0.4	07-29-04	290	2.4 ± 0.3 ; 0.5	0.2 ± 0.4 ; 0.4
02-05-04	333	4.5 ± 0.4 ; 0.9	-	08-05-04	287	3.6 ± 0.4 ; 0.8	-
02-12-04	285	5.0 ± 0.5 ; 1.0	0.1 ± 0.3 ; 0.3	08-11-04	258	1.8 ± 0.4 ; 0.5	0.7 ± 0.3 ; 0.3
02-19-04	289	2.8 ± 0.4 ; 0.6	-	08-18-04	284	3.0 ± 0.4 ; 0.7	-
02-26-04	281	2.6 ± 0.3 ; 0.6	0.4 ± 0.3 ; 0.3	08-26-04	312	2.2 ± 0.3 ; 0.7	-0.1 ± 0.3 ; 0.3
03-04-04	284	1.9 ± 0.3 ; 0.5	-	09-02-04	284	1.7 ± 0.4 ; 0.5	-
03-11-04	284	2.9 ± 0.3 ; 0.6	-0.2 ± 0.4 ; 0.4	09-09-04	284	3.2 ± 0.4 ; 0.7	-1.1 ± 0.3 ; 0.4
03-17-04	244	2.1 ± 0.4 ; 0.6	-	09-16-04	290	2.9 ± 0.4 ; 0.7	-
03-25-04	326	1.6 ± 0.3 ; 0.4	-0.2 ± 0.3 ; 0.3	09-23-04	290	2.8 ± 0.4 ; 0.6	0.5 ± 0.3 ; 0.3
03-31-04	246	1.6 ± 0.3 ; 0.4	-	09-30-04	285	2.1 ± 0.3 ; 0.5	-
1st Qtr. Mean±s.d.		2.8 ± 1.0	0.1 ± 0.3	3rd Qtr. Mean±s.d.		2.5 ± 0.6	0.0 ± 0.6
04-08-04	322	2.1 ± 0.3 ; 0.5	-0.3 ± 0.3 ; 0.3	10-06-04	243	2.3 ± 0.4 ; 0.6	1.7 ± 0.4 ; 0.5
04-15-04	286	2.0 ± 0.4 ; 0.5	-	10-14-04	329	3.0 ± 0.3 ; 0.6	-
04-22-04	282	2.7 ± 0.4 ; 0.6	0.1 ± 0.3 ; 0.3	10-21-04	293	1.7 ± 0.3 ; 0.4	-0.0 ± 0.3 ; 0.3
04-29-04	283	2.2 ± 0.4 ; 0.5	-	10-28-04	279	3.1 ± 0.4 ; 0.7	-
05-06-04	294	2.1 ± 0.3 ; 0.5	-0.0 ± 0.4 ; 0.4	11-04-04	282	1.8 ± 0.3 ; 0.5	-1.3 ± 0.4 ; 0.4
05-13-04	282	2.9 ± 0.4 ; 0.6	-	11-11-04	290	2.9 ± 0.4 ; 0.7	-
05-20-04	284	1.3 ± 0.3 ; 0.4	-1.3 ± 0.4 ; 0.5	11-18-04	285	2.5 ± 0.4 ; 0.6	0.8 ± 0.3 ; 0.4
05-27-04	290	1.5 ± 0.3 ; 0.4	-	11-24-04	244	3.4 ± 0.4 ; 0.7	-
06-03-04	285	1.4 ± 0.3 ; 0.4	-0.2 ± 0.4 ; 0.4	12-02-04	326	2.2 ± 0.3 ; 0.5	-0.1 ± 0.3 ; 0.3
06-10-04	286	2.3 ± 0.3 ; 0.5	-	12-09-04	285	4.0 ± 0.4 ; 0.8	-
06-17-04	284	1.9 ± 0.4 ; 0.5	0.7 ± 0.4 ; 0.4	12-16-04	285	3.5 ± 0.4 ; 0.7	1.1 ± 0.3 ; 0.4
06-24-04	290	1.6 ± 0.3 ; 0.4	-	12-23-04	290	3.3 ± 0.4 ; 0.7	-
06-30-04	249	2.2 ± 0.4 ; 0.6	0.7 ± 0.3 ; 0.3	12-29-04	244	4.3 ± 0.5 ; 0.9	0.1 ± 0.4 ; 0.4
2nd Qtr. Mean±s.d.		2.0 ± 0.5	-0.1 ± 0.7	4th Qtr. Mean±s.d.		2.9 ± 0.8	0.3 ± 1.0

* Volume based on two week collection period.

Table 2. Airborne Particulates

Collection: Quarterly composites of weekly collections
ODCM-
Required LLDs: Cs-134 = 0.05, Cs-137 = 0.06 pCi/m³
Other LLDs: Mn-54 = 0.01; Fe-59 = 0.015; Co-58, Co-60 = 0.01; Zn-65 = 0.04; Zr/Nb-95 = 0.01; Ba/La-140 = 0.025 pCi/m³

Units: 10^{-4} pCi/m³

Sample Description and Concentration

L-01 Nearsite No. 1

2004 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	LAP-2035,6	LAP-4347	LAP-6635	LAP-7814
Volume	3,727	3,711	3,546	3,672
Mn-54	-3.2 ± 4.8 ; 4.8	-2.3 ± 6.4 ; 6.4	-1.5 ± 4.5 ; 4.5	-1.2 ± 7.0 ; 7.0
Fe-59	5.4 ± 7.5 ; 7.6	-1.0 ± 12.8 ; 12.8	12.5 ± 9.5 ; 9.7	2.1 ± 8.6 ; 8.6
Co-58	-1.0 ± 3.3 ; 3.3	-6.9 ± 6.5 ; 6.7	-2.2 ± 3.7 ; 3.7	-5.2 ± 4.8 ; 4.9
Co-60	-0.4 ± 5.4 ; 5.4	-4.0 ± 5.4 ; 5.5	-0.9 ± 4.4 ; 4.4	5.5 ± 5.9 ; 6.0
Zn-65	-3.9 ± 8.4 ; 8.5	-8.8 ± 14.3 ; 14.4	1.7 ± 11.8 ; 11.8	-2.4 ± 10.7 ; 10.7
Nb/Zr-95	-1.6 ±3.6; 3.6	-8.7 ±4.9; 5.1	2.2 ±4.1 ; 4.1	0.8 ±5.8; 5.8
Cs-134	4.7 ± 4.5 ; 4.6	1.6 ± 7.0 ; 7.0	2.9 ± 4.5 ; 4.5	5.4 ± 6.3 ; 6.4
Cs-137	-1.7 ± 3.9 ; 3.9	-1.6 ± 7.1 ; 7.1	-0.2 ± 5.1 ; 5.1	0.8 ± 6.8 ; 6.8
Ba/La-140	-1.7 ± 5.3 ;5.3	20.7 ± 7.5 ;8.3	6.6 ± 3.7 ;3.9	-13.4 ± 7.0 ;7.4

L-03 Onsite No. 3

2004 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	LAP-2037	LAP-4348	LAP-6636	LAP-7815
Volume	3,719	3,701	3,747	3,661
Mn-54	2.1 ± 4.8 ; 4.8	8.2 ± 5.3 ; 5.5	-3.4 ± 4.4 ; 4.5	-10.9 ± 6.3 ; 6.6
Fe-59	2.2 ± 8.5 ; 8.5	4.0 ± 9.7 ; 9.7	-9.6 ± 5.9 ; 6.1	-11.5 ± 11.4 ; 11.6
Co-58	-3.2 ± 5.5 ; 5.6	-10.6 ± 6.6 ; 6.9	-1.1 ± 3.8 ; 3.8	-4.5 ± 4.9 ; 5.0
Co-60	1.9 ± 4.8 ; 4.8	-8.2 ± 8.6 ; 8.7	-0.3 ± 3.4 ; 3.4	1.2 ± 6.2 ; 6.2
Zn-65	13.5 ± 10.5 ; 10.8	-20.9 ± 18.1 ; 18.5	-11.3 ± 10.1 ; 10.3	-6.4 ± 14.9 ; 14.9
Nb/Zr-95	6.6 ±4.5; 4.6	9.6 ±5.8; 6.0	1.5 ±5.1; 5.1	-3.8 ±4.9; 4.9
Cs-134	-2.0 ± 6.5 ; 6.5	0.4 ± 6.5 ; 6.5	2.6 ± 5.3 ; 5.4	0.7 ± 6.5 ; 6.5
Cs-137	2.9 ± 4.5 ; 4.6	1.4 ± 6.9 ; 6.9	-1.6 ± 4.4 ; 4.4	-0.7 ± 6.2 ; 6.2
Ba/La-140	-1.2 ± 5.3 ;5.4	3.3 ± 7.4 ;7.4	-27.0 ± 5.5 ;7.3	-31.9 ± 7.9 ;9.8

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Table 2. Airborne Particulates

Collection:	Quarterly composites of weekly collections
ODCM-Required LLDs:	Cs-134 = 0.05, Cs-137 = 0.06 pCi/m³
Other LLDs:	Mn-54 = 0.01; Fe-59 = 0.015; Co-58, Co-60 = 0.01; Zn-65 = 0.04; Zr/Nb-95 = 0.01; Ba/La-140 = 0.025 pCi/m³
Units:	10^{-4} pCi/m³

Sample Description and Concentration

L-05 Onsite Station No. 5

2004 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	LAP-2038	LAP-4349,50	LAP-6637	LAP-7816
Volume	3,717	3,687	3,695	3,662
Mn-54	6.6 ± 5.0 ; 5.2	1.2 ± 3.2 ; 3.2	-0.7 ± 5.5 ; 5.5	-2.4 ± 5.7 ; 5.8
Fe-59	-19.6 ± 11.5 ; 12.0	-0.1 ± 6.3 ; 6.3	-8.4 ± 9.6 ; 9.7	6.3 ± 9.3 ; 9.4
Co-58	-8.0 ± 5.7 ; 5.9	-0.9 ± 3.1 ; 3.1	-6.3 ± 6.3 ; 6.4	-1.5 ± 5.4 ; 5.4
Co-60	2.9 ± 6.6 ; 6.6	-0.6 ± 3.8 ; 3.8	8.9 ± 5.3 ; 5.5	5.3 ± 4.2 ; 4.3
Zn-65	0.8 ± 11.3 ; 11.3	3.1 ± 6.7 ; 6.7	4.1 ± 11.7 ; 11.8	-15.2 ± 11.4 ; 11.7
Nb/Zr-95	9.5 ± 5.3 ; 5.6	-6.0 ± 3.6 ; 3.8	9.5 ± 6.4 ; 6.6	6.9 ± 5.6 ; 5.7
Cs-134	-3.5 ± 7.2 ; 7.2	1.9 ± 3.5 ; 3.5	8.2 ± 6.8 ; 7.0	0.5 ± 7.1 ; 7.1
Cs-137	-0.3 ± 6.6 ; 6.6	2.0 ± 3.6 ; 3.6	-2.0 ± 7.0 ; 7.0	5.6 ± 5.6 ; 5.6
Ba/La-140	26.6 ± 6.9 ; 8.3	-11.5 ± 4.4 ; 4.9	7.5 ± 4.7 ; 4.9	-27.1 ± 9.9 ; 11.0

L-06 Nearsite No. 6

2004 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	LAP-2039	LAP-4351	LAP-6638	LAP-7817
Volume	3,711	3,709	3,713	3,672
Mn-54	-0.6 ± 6.0 ; 6.0	-3.4 ± 4.2 ; 4.3	4.6 ± 5.7 ; 5.8	4.2 ± 5.8 ; 5.9
Fe-59	-1.1 ± 9.8 ; 9.8	7.7 ± 8.3 ; 8.4	11.1 ± 9.3 ; 9.5	-3.1 ± 4.8 ; 4.8
Co-58	-4.8 ± 5.8 ; 5.9	3.2 ± 4.1 ; 4.2	0.3 ± 4.1 ; 4.1	-10.8 ± 5.4 ; 5.8
Co-60	8.9 ± 6.9 ; 7.0	-2.2 ± 4.3 ; 4.3	4.5 ± 4.5 ; 4.6	3.7 ± 5.5 ; 5.5
Zn-65	-2.4 ± 10.6 ; 10.6	-17.0 ± 9.4 ; 9.9	-1.7 ± 12.0 ; 12.0	-0.8 ± 14.4 ; 14.4
Nb/Zr-95	5.1 ± 5.7 ; 5.8	6.8 ± 4.8 ; 5.0	-4.8 ± 5.2 ; 5.2	0.8 ± 5.8 ; 5.8
Cs-134	0.1 ± 5.8 ; 5.8	3.6 ± 5.0 ; 5.0	3.4 ± 5.6 ; 5.6	-6.7 ± 6.1 ; 6.3
Cs-137	-0.4 ± 4.8 ; 4.8	2.7 ± 4.4 ; 4.4	0.2 ± 6.0 ; 6.0	6.9 ± 4.4 ; 4.6
Ba/La-140	-9.3 ± 7.3 ; 7.4	-27.4 ± 4.9 ; 6.9	-6.2 ± 4.5 ; 4.6	4.8 ± 5.8 ; 5.9

Table 2. Airborne Particulates

Collection: Quarterly composites of weekly collections
ODCM-
Required LLDs: Cs-134 = 0.05, Cs-137 = 0.06 pCi/m³
Other LLDs: Mn-54 = 0.01; Fe-59 = 0.015; Co-58, Co-60 = 0.01; Zn-65 = 0.04; Zr/Nb-95 = 0.01; Ba/La-140 = 0.025 pCi/m³

Units: 10^{-3} pCi/m³

Sample Description and Concentration

L-10 (C) Streator

2004 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	LAP-2040	LAP-4352	LAP-6639	LAP-7818
Volume	3,720	3,723	3,759	3,682
Mn-54	5.1 ± 5.4 ; 5.5	-6.5 ± 7.0 ; 7.1	1.1 ± 4.8 ; 4.8	-2.4 ± 5.7 ; 5.7
Fe-59	16.4 ± 9.0 ; 9.5	6.7 ± 11.2 ; 11.3	4.9 ± 8.5 ; 8.6	9.4 ± 7.9 ; 8.1
Co-58	1.8 ± 4.8 ; 4.8	-2.3 ± 7.2 ; 7.2	3.8 ± 3.6 ; 3.7	-4.7 ± 5.9 ; 5.9
Co-60	3.6 ± 5.4 ; 5.4	4.5 ± 6.9 ; 6.9	4.1 ± 4.7 ; 4.7	-2.9 ± 7.6 ; 7.6
Zn-65	6.3 ± 10.7 ; 10.8	3.1 ± 13.6 ; 13.6	-11.2 ± 10.2 ; 10.4	-12.7 ± 13.5 ; 13.7
Nb/Zr-95	-0.5 ± 6.4 ; 6.4	-0.2 ± 6.4 ; 6.4	-7.3 ± 4.6 ; 4.8	3.0 ± 5.2 ; 5.2
Cs-134	5.7 ± 4.5 ; 4.6	-2.2 ± 6.7 ; 6.7	-0.5 ± 5.7 ; 5.7	-0.4 ± 5.1 ; 5.1
Cs-137	2.4 ± 6.9 ; 7.0	-0.8 ± 7.1 ; 7.1	2.5 ± 5.4 ; 5.4	2.1 ± 5.8 ; 5.8
Ba/La-140	19.8 ± 6.5 ; 7.4	-48.3 ± 7.1 ; 11.1	-17.6 ± 4.7 ; 5.6	-37.8 ± 7.6 ; 10.2

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Table 3. Milk

Collection: Biweekly (May - October)
Monthly (November - April)

ODCM-Required LLDs: I-131 = 1, Cs-134 = 15; Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Other LLDs: Mn-54 = 10; Fe-59 = 15; Co-58, Co-60 = 10; Zn-65 = 15; Nb/Zr-95 = 10 pCi/L

Units: pCi/L

Sample Description and Concentration

L-42 (C) Biros Farm

Date Collected	01-02-04	02-05-04	03-04-04	04-02-04
Lab Code	LMI-5	LMI-516	LMI-907	LMI-1382
I-131	0.05 ± 0.12 ; 0.12	-0.06 ± 0.14 ; 0.14	-0.10 ± 0.15 ; 0.15	-0.16 ± 0.19 ; 0.19
Mn-54	-0.6 ± 2.6 ; 2.6	0.5 ± 4.0 ; 4.0	1.5 ± 2.7 ; 2.7	2.3 ± 4.3 ; 4.3
Fe-59	4.2 ± 4.2 ; 4.2	-12.8 ± 8.4 ; 8.6	-0.2 ± 5.1 ; 5.1	-6.9 ± 9.6 ; 9.7
Co-58	-0.2 ± 2.4 ; 2.4	2.8 ± 3.8 ; 3.8	0.5 ± 2.3 ; 2.3	-2.3 ± 4.8 ; 4.8
Co-60	0.1 ± 2.4 ; 2.4	1.8 ± 4.9 ; 4.9	-2.0 ± 2.6 ; 2.6	-3.1 ± 4.7 ; 4.7
Zn-65	-2.0 ± 6.0 ; 6.1	-10.3 ± 8.9 ; 9.0	-2.4 ± 5.4 ; 5.4	-4.6 ± 9.7 ; 9.7
Nb/Zr-95	-2.3 ± 2.2 ; 2.3	0.5 ± 3.5 ; 3.5	-2.0 ± 2.2 ; 2.3	-0.3 ± 4.0 ; 4.0
Cs-134	1.6 ± 2.3 ; 2.3	1.1 ± 4.4 ; 4.4	0.1 ± 2.4 ; 2.4	5.2 ± 4.9 ; 4.9
Cs-137	-2.3 ± 2.2 ; 2.2	1.0 ± 3.6 ; 3.6	0.5 ± 2.4 ; 2.4	-0.6 ± 3.6 ; 3.6
Ba-140	2.2 ± 8.0 ; 8.0	-3.3 ± 12.6 ; 12.6	-7.9 ± 8.4 ; 8.5	-2.2 ± 12.4 ; 12.4
La-140	0.4 ±2.4 ; 2.4	-1.7 ±2.8 ; 2.8	-1.0 ±1.7 ; 1.7	2.5 ±4.1 ; 4.1
Date Collected	05-06-04	05-20-04	06-03-04	06-17-04
Lab Code	LMI-2191	LMI-2496	LMI-2758	LMI-3052
I-131	0.01 ± 0.14 ; 0.14	-0.09 ± 0.20 ; 0.20	-0.10 ± 0.17 ; 0.17	0.17 ± 0.25 ; 0.25
Mn-54	-0.6 ± 2.4 ; 2.4	-2.0 ± 2.2 ; 2.2	-1.4 ± 3.8 ; 3.8	2.3 ± 3.8 ; 3.8
Fe-59	-1.5 ± 5.1 ; 5.1	-3.1 ± 5.4 ; 5.4	0.4 ± 6.9 ; 6.9	9.8 ± 8.6 ; 8.7
Co-58	-0.5 ± 2.3 ; 2.3	0.5 ± 1.9 ; 1.9	-1.0 ± 4.1 ; 4.1	5.8 ± 4.1 ; 4.2
Co-60	2.2 ± 2.3 ; 2.3	1.1 ± 2.5 ; 2.5	4.6 ± 3.6 ; 3.6	3.5 ± 4.4 ; 4.5
Zn-65	-1.2 ± 4.7 ; 4.7	-1.1 ± 6.4 ; 6.4	-4.5 ± 8.9 ; 9.0	2.3 ± 10.0 ; 10.0
Nb/Zr-95	1.3 ± 2.1 ; 2.1	-1.3 ± 2.3 ; 2.3	-0.5 ± 3.4 ; 3.4	-0.6 ± 3.3 ; 3.3
Cs-134	-0.3 ± 2.9 ; 2.9	-0.4 ± 2.4 ; 2.4	-0.9 ± 4.8 ; 4.8	2.5 ± 5.4 ; 5.4
Cs-137	0.7 ± 2.4 ; 2.4	-2.1 ± 2.7 ; 2.7	-1.8 ± 3.5 ; 3.5	1.2 ± 4.4 ; 4.4
Ba-140	8.0 ± 8.6 ; 8.7	7.9 ± 7.8 ; 7.9	-11.8 ± 12.1 ; 12.2	-14.9 ± 14.3 ; 14.4
La-140	0.7 ±2.1 ; 2.1	-4.2 ±2.3 ; 2.3	2.2 ±3.0 ; 3.0	4.9 ±4.2 ; 4.3

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Table 3. Milk

Collection: Biweekly (May - October)
Monthly (November - April)

ODCM-Required LLDs: I-131 = 1, Cs-134 = 15; Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Other LLDs: Mn-54 = 10; Fe-59 = 15; Co-58, Co-60 = 10; Zn-65 = 15; Nb/Zr-95 = 10 pCi/L

Units: pCi/L

Sample Description and Concentration

L-42 (C) Biros Farm

Date Collected	07-01-04	07-15-04	07-29-04	08-11-04
Lab Code	LMI-3336	LMI-3804	LMI-4160	LMI-4554
I-131	0.02 ± 0.20 ; 0.20	-0.17 ± 0.15 ; 0.15	-0.18 ± 0.23 ; 0.23	0.07 ± 0.17 ; 0.17
Mn-54	1.8 ± 2.3 ; 2.3	-0.2 ± 3.3 ; 3.3	-2.6 ± 3.5 ; 3.5	-3.3 ± 3.9 ; 4.0
Fe-59	4.6 ± 4.8 ; 4.8	3.4 ± 6.1 ; 6.1	5.2 ± 5.9 ; 5.9	-5.7 ± 8.3 ; 8.4
Co-58	-1.2 ± 2.4 ; 2.4	2.1 ± 2.9 ; 2.9	2.2 ± 3.5 ; 3.5	-0.3 ± 3.2 ; 3.2
Co-60	-0.1 ± 2.5 ; 2.5	2.0 ± 3.2 ; 3.3	-0.3 ± 4.6 ; 4.6	2.0 ± 4.1 ; 4.1
Zn-65	-0.8 ± 5.8 ; 5.8	-7.9 ± 7.9 ; 7.9	-2.4 ± 7.9 ; 7.9	-9.3 ± 7.8 ; 7.9
Nb/Zr-95	-0.9 ± 2.4 ; 2.4	-0.1 ± 2.4 ; 2.4	-0.7 ± 3.9 ; 3.9	0.3 ± 3.7 ; 3.7
Cs-134	1.2 ± 2.4 ; 2.4	-0.5 ± 3.2 ; 3.2	0.1 ± 3.8 ; 3.8	-1.6 ± 3.8 ; 3.8
Cs-137	-1.6 ± 2.4 ; 2.4	3.2 ± 2.8 ; 2.8	5.0 ± 4.3 ; 4.4	2.4 ± 3.8 ; 3.8
Ba-140	7.0 ± 7.8 ; 7.9	-0.4 ± 8.9 ; 8.9	5.5 ± 11.8 ; 11.8	6.8 ± 11.8 ; 11.9
La-140	-0.3 ± 1.7 ; 1.7	2.0 ± 2.8 ; 2.8	3.5 ± 2.8 ; 2.9	5.1 ± 2.1 ; 2.2

Date Collected	08-26-04	09-09-04	09-23-04	10-06-04
Lab Code	LMI-4788	LMI-5106	LMI-5423	LMI-5868
I-131	-0.15 ± 0.18 ; 0.18	-0.22 ± 0.18 ; 0.18	0.01 ± 0.15 ; 0.15	0.08 ± 0.19 ; 0.19
Mn-54	0.5 ± 3.8 ; 3.8	-2.8 ± 2.4 ; 2.5	-2.7 ± 2.7 ; 2.7	-1.1 ± 4.3 ; 4.3
Fe-59	3.0 ± 7.7 ; 7.7	3.2 ± 5.0 ; 5.0	4.2 ± 5.7 ; 5.7	1.7 ± 8.2 ; 8.2
Co-58	-0.3 ± 3.7 ; 3.7	1.0 ± 1.9 ; 1.9	-0.7 ± 3.2 ; 3.2	-0.3 ± 3.5 ; 3.5
Co-60	1.5 ± 4.4 ; 4.4	-2.3 ± 2.8 ; 2.8	0.8 ± 3.3 ; 3.3	2.2 ± 4.2 ; 4.2
Zn-65	5.8 ± 10.1 ; 10.2	-3.4 ± 4.9 ; 4.9	-7.1 ± 7.2 ; 7.3	-13.7 ± 9.2 ; 9.4
Nb/Zr-95	-0.2 ± 3.4 ; 3.4	-1.7 ± 2.2 ; 2.2	0.4 ± 3.6 ; 3.6	2.4 ± 3.6 ; 3.6
Cs-134	2.0 ± 4.6 ; 4.6	0.5 ± 2.5 ; 2.5	0.5 ± 3.9 ; 3.9	-0.3 ± 4.3 ; 4.3
Cs-137	-1.2 ± 4.2 ; 4.2	-3.0 ± 2.7 ; 2.7	1.1 ± 3.6 ; 3.6	-0.2 ± 3.5 ; 3.5
Ba-140	-19.0 ± 11.9 ; 12.1	2.0 ± 9.3 ; 9.3	-20.2 ± 13.5 ; 13.8	7.6 ± 13.0 ; 13.0
La-140	0.5 ± 4.2 ; 4.2	-1.0 ± 1.9 ; 1.9	1.4 ± 3.2 ; 3.2	-1.6 ± 3.9 ; 3.9

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Table 3. Milk

Collection:	Biweekly (May - October) Monthly (November - April)
ODCM-Required LLDs:	I-131 = 1, Cs-134 = 15; Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L
Other LLDs:	Mn-54 = 10; Fe-59 = 15; Co-58, Co-60 = 10; Zn-65 = 15; Nb/Zr-95 = 10 pCi/L
Units:	pCi/L

Sample Description and Concentration

L-42 (C) Biros Farm

Date Collected	10-21-04	11-04-04	12-02-04
Lab Code	LMI-6279,80	LMI-6600	LMI-7102
I-131	0.02 ± 0.14 ; 0.14	-0.08 ± 0.16 ; 0.16	0.14 ± 0.17 ; 0.17
Mn-54	0.5 ± 2.5 ; 2.5	1.0 ± 3.5 ; 3.5	2.2 ± 2.6 ; 2.7
Fe-59	0.1 ± 4.9 ; 4.9	2.9 ± 7.1 ; 7.2	-2.4 ± 4.3 ; 4.3
Co-58	0.8 ± 2.3 ; 2.3	3.2 ± 3.6 ; 3.6	0.1 ± 2.2 ; 2.2
Co-60	0.6 ± 2.2 ; 2.2	1.1 ± 3.8 ; 3.8	0.9 ± 2.4 ; 2.4
Zn-65	0.3 ± 5.9 ; 5.9	-5.0 ± 9.6 ; 9.7	-7.9 ± 6.0 ; 6.1
Nb/Zr-95	0.9 ± 2.1 ; 2.1	-1.9 ± 3.4 ; 3.4	-0.8 ± 2.2 ; 2.2
Cs-134	1.3 ± 2.7 ; 2.7	1.1 ± 3.9 ; 3.9	0.5 ± 2.1 ; 2.1
Cs-137	0.9 ± 2.4 ; 2.4	-3.1 ± 3.5 ; 3.5	0.6 ± 2.5 ; 2.5
Ba-140	-0.4 ± 8.0 ; 8.0	22.2 ± 12.1 ; 12.4	-6.3 ± 7.7 ; 7.7
La-140	2.7 ± 2.2 ; 2.2	8.7 ± 2.9 ; 3.1	-3.3 ± 2.6 ; 2.6

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Table 4. Fish, Edible Portions

Collection: Semiannually

ODCM-Required LLDs: Mn-54 = 0.13, Fe-59 = 0.26, Co-58 = 0.13, Co-60 = 0.13, Zn-65 = 0.26, Cs-134 = 0.1, Cs-137 = 0.1 pCi/g wet weight

Other LLDs: Zr/Nb-95 = 0.20, Ba/La-140 = 0.30 pCi/g wet weight

Units: 10^{-2} pCi/g wet weight

Sample Description and Concentration

L-34 (C) LaSalle Cooling Lake

Date Collected	05-20-04	05-20-04	10-11-04	10-11-04
Lab Code	LF-2451	LF-2452	LF-5954	LF-5955
Type	Channel Catfish	Largemouth Bass	Smallmouth Bass	Bluegill Sunfish
Mn-54	0.3 ± 1.0 ; 1.0	0.2 ± 0.8 ; 0.8	0.6 ± 0.6 ; 0.6	0.6 ± 1.4 ; 1.4
Fe-59	3.8 ± 1.4 ; 1.5	-3.0 ± 2.0 ; 2.0	0.6 ± 1.5 ; 1.5	-1.5 ± 2.9 ; 2.9
Co-58	0.7 ± 0.9 ; 0.9	-0.5 ± 0.9 ; 0.9	-0.3 ± 0.7 ; 0.7	-0.1 ± 1.5 ; 1.5
Co-60	-0.7 ± 1.3 ; 1.3	-0.4 ± 1.0 ; 1.0	0.3 ± 0.6 ; 0.6	-1.2 ± 1.3 ; 1.3
Zn-65	2.3 ± 1.7 ; 1.7	-0.3 ± 2.3 ; 2.3	-0.5 ± 1.8 ; 1.8	-3.4 ± 3.2 ; 3.2
Nb/Zr-95	-0.7 ± 0.9 ; 0.9	1.9 ± 0.6 ; 0.7	-1.5 ± 0.7 ; 0.8	-0.6 ± 1.5 ; 1.5
Cs-134	0.4 ± 1.0 ; 1.0	-0.5 ± 1.2 ; 1.2	-0.3 ± 0.7 ; 0.7	0.8 ± 1.7 ; 1.7
Cs-137	0.1 ± 1.0 ; 1.0	-0.1 ± 0.8 ; 0.8	0.3 ± 0.7 ; 0.7	0.8 ± 1.5 ; 1.5
Ba/La-140	2.7 ± 0.8 ; 0.9	0.5 ± 0.8 ; 0.8	0.3 ± 0.9 ; 0.9	2.2 ± 1.5 ; 1.6

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Table 4. Fish, Edible Portions

Collection: Semiannually

ODCM-Required LLDs: Mn-54 = 0.13, Fe-59 = 0.26, Co-58 = 0.13, Co-60 = 0.13, Zn-65 = 0.26, Cs-134 = 0.1, Cs-137 = 0.1 pCi/g wet weight

Other LLDs: Zr/Nb-95 = 0.20, Ba/La-140 = 0.30 pCi/g wet weight

Units: 10^{-2} pCi/g wet weight

Sample Description and Concentration

L-35 (C) Marseilles Pool of Illinois River

Date Collected	05-20-04	05-20-04	10-11-04	10-11-04
Lab Code	LF-2455	LF-2456	LF-5956	LF-5957
Type	Channel Catfish	Freshwater Drum	Channel Catfish	Smallmouth Buffalo
Mn-54	0.4 ± 0.8 ; 0.8	-0.4 ± 1.2 ; 1.2	0.3 ± 0.8 ; 0.8	-0.0 ± 0.6 ; 0.6
Fe-59	-0.4 ± 2.0 ; 2.0	-1.5 ± 2.1 ; 2.1	0.3 ± 1.5 ; 1.5	-2.4 ± 1.6 ; 1.7
Co-58	0.8 ± 0.7 ; 0.7	-1.0 ± 1.1 ; 1.1	0.4 ± 0.7 ; 0.7	-0.4 ± 0.7 ; 0.7
Co-60	-0.4 ± 1.1 ; 1.1	0.2 ± 1.3 ; 1.3	0.3 ± 0.7 ; 0.7	-0.2 ± 0.7 ; 0.7
Zn-65	-0.5 ± 2.5 ; 2.5	0.2 ± 2.7 ; 2.7	-1.3 ± 1.5 ; 1.5	-0.8 ± 1.8 ; 1.8
Nb/Zr-95	0.8 ± 0.8 ; 0.8	-0.4 ± 1.0 ; 1.0	-0.5 ± 0.7 ; 0.7	-1.1 ± 0.7 ; 0.7
Cs-134	1.4 ± 1.0 ; 1.1	0.2 ± 1.2 ; 1.2	0.0 ± 0.8 ; 0.8	-0.7 ± 0.8 ; 0.8
Cs-137	-0.0 ± 0.8 ; 0.8	-0.2 ± 1.3 ; 1.3	0.2 ± 0.7 ; 0.7	0.6 ± 0.6 ; 0.6
Ba/La-140	-2.7 ± 1.0 ; 1.1	-4.4 ± 1.4 ; 1.5	-1.4 ± 0.8 ; 0.8	-0.8 ± 0.6 ; 0.6

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Table 4. Fish, Edible Portions

Collection: Semiannually

ODCM-Required LLDs: Mn-54 = 0.13, Fe-59 = 0.26, Co-58 = 0.13, Co-60 = 0.13, Zn-65 = 0.26, Cs-134 = 0.1, Cs-137 = 0.1 pCi/g wet weight

Other LLDs: Zr/Nb-95 = 0.20, Ba/La-140 = 0.30 pCi/g wet weight

Units: 10^{-2} pCi/g wet weight

Sample Description and Concentration

L-36 Illinois River, Upstream of Discharge

Date Collected	05-20-04	05-20-04	10-11-04	10-11-04
Lab Code	LF-2453	LF-2454	LF-5958	LF-5959
Type	Channel Catfish	Freshwater Drum	Channel Catfish	Smallmouth Buffalo
Mn-54	0.7 ± 1.2 ; 1.2	0.1 ± 0.7 ; 0.7	1.2 ± 1.1 ; 1.1	-0.1 ± 1.2 ; 1.2
Fe-59	3.0 ± 2.5 ; 2.6	0.5 ± 1.6 ; 1.6	-1.5 ± 2.2 ; 2.2	-0.3 ± 2.5 ; 2.5
Co-58	-0.4 ± 1.3 ; 1.3	-1.5 ± 0.8 ; 0.8	-0.3 ± 0.9 ; 0.9	-1.0 ± 1.1 ; 1.1
Co-60	-1.2 ± 2.1 ; 2.1	-0.6 ± 1.0 ; 1.0	0.2 ± 1.0 ; 1.0	0.2 ± 1.5 ; 1.5
Zn-65	-3.1 ± 3.2 ; 3.2	-1.4 ± 2.0 ; 2.1	1.6 ± 2.2 ; 2.2	-0.7 ± 2.9 ; 2.9
Nb/Zr-95	1.6 ± 1.1 ; 1.1	-0.8 ± 0.9 ; 0.9	-1.3 ± 1.2 ; 1.2	1.1 ± 1.1 ; 1.1
Cs-134	0.7 ± 1.5 ; 1.5	-0.2 ± 1.0 ; 1.0	-0.1 ± 1.1 ; 1.1	0.1 ± 1.5 ; 1.5
Cs-137	-0.8 ± 1.4 ; 1.4	-0.1 ± 1.0 ; 1.0	0.5 ± 0.9 ; 0.9	0.1 ± 1.2 ; 1.2
Ba/La-140	-5.7 ± 1.9 ; 2.1	6.9 ± 6.2 ; 6.2	-1.9 ± 1.3 ; 1.3	2.8 ± 1.2 ; 1.2

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Table 5. Bottom Sediments

Collection: Semiannually

ODCM-Required LLDs: Cs-134 = 0.15, Cs-137 = 0.18 pCi/g dry weight

Other LLDs: Mn-54 = 0.15; Fe-59 = 0.60; Co-58, Co-60 = 0.10; Zn-65 = 0.60; Zr/Nb-95 = 0.20; Ba/La = 0.60 pCi/g dry weight

Units: 10^{-2} pCi/g dry weight

Sample Description and Concentration		
	L-40 Illinios River Downstream	
Date Collected	05-06-04	10-06-04
Lab Code	LBS-2201,2	LBS-5881
Mn-54	-0.3 ± 1.0 ; 1.0	-0.7 ± 0.7 ; 0.7
Fe-59	0.7 ± 1.9 ; 1.9	-2.6 ± 1.6 ; 1.6
Co-58	0.7 ± 0.9 ; 0.9	0.1 ± 0.7 ; 0.7
Co-60	0.3 ± 1.1 ; 1.1	0.5 ± 0.8 ; 0.8
Zn-65	-0.4 ± 2.5 ; 2.5	-0.6 ± 1.9 ; 1.9
Nb/Zr-95	-2.4 ± 1.0 ; 1.0	-2.1 ± 0.7 ; 0.8
Cs-134	0.4 ± 1.3 ; 1.3	1.7 ± 0.8 ; 0.9
Cs-137	5.6 ± 1.8 ; 2.0	3.8 ± 1.3 ; 1.4
Ba/La-140	-7.9 ± 0.9 ; 1.4	-10.5 ± 0.7 ; 1.6
	L-41 Illinios River Downstream	
Date Collected	05-06-04	10-06-04
Lab Code	LBS-2203	LBS-5882
Mn-54	1.7 ± 1.0 ; 1.1	0.3 ± 1.2 ; 1.2
Fe-59	-0.4 ± 2.4 ; 2.4	-1.5 ± 2.3 ; 2.3
Co-58	1.3 ± 1.0 ; 1.1	0.9 ± 1.1 ; 1.1
Co-60	0.9 ± 1.2 ; 1.2	-1.2 ± 1.4 ; 1.4
Zn-65	-0.1 ± 2.6 ; 2.6	-5.3 ± 3.0 ; 3.1
Nb/Zr-95	-1.2 ± 1.2 ; 1.2	-1.3 ± 1.2 ; 1.2
Cs-134	1.0 ± 1.2 ; 1.2	0.1 ± 1.4 ; 1.4
Cs-137	0.2 ± 1.1 ; 1.1	1.1 ± 1.2 ; 1.2
Ba/La-140	-2.1 ± 1.4 ; 1.5	-29.2 ± 1.2 ; 4.1

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Table 6. Vegetation

Collection:	Annually
ODCM-Required LLDs:	I-131 = 0.06, Cs-134 = 0.06, Cs-137 = 0.08 pCi/g wet weight
Other LLDs:	Mn-54 = 0.05; Fe-59 = 0.10; Co-58, Co-60, Zn-65 = 0.05; Zr/Nb-95 = 0.01; Ba/La-140 = 0.02 pCi/g wet weight
Units:	10^{-2} pCi/g wet weight

Sample Description and Concentration		
	L-Control (C) Eugene Clements	
Date Collected	09-30-04	09-30-04
Lab Code	LVE-5550	LVE-5551
Type	Potatoes	Cabbage
Mn-54	-0.1 ± 0.6 ; 0.6	0.6 ± 0.7 ; 0.7
Fe-59	0.4 ± 1.5 ; 1.5	-0.2 ± 1.3 ; 1.3
Co-58	-0.7 ± 0.6 ; 0.6	-0.5 ± 0.6 ; 0.6
Co-60	-0.0 ± 0.7 ; 0.7	-0.4 ± 0.6 ; 0.6
Zn-65	-0.6 ± 1.7 ;1.7	-0.1 ± 1.6 ;1.6
Nb/Zr-95	-0.3 ± 0.6 ;0.6	-0.0 ± 0.6 ;0.6
I-131	0.3 ± 0.5 ;0.5	0.1 ± 0.5 ;0.5
Cs-134	0.0 ± 0.7 ; 0.7	-0.1 ± 0.8 ; 0.8
Cs-137	0.9 ± 0.6 ; 0.7	0.5 ± 0.7 ; 0.7
Ba/La-140	-0.6 ± 0.5 ;0.5	-0.4 ± 0.6 ;0.6
	L-Quad 1 Diane Partridge	
Date Collected	09-09-04	09-09-04
Lab Code	LVE-5116	LVE-5117
Type	Beets	Cabbage
Mn-54	-0.8 ± 1.0 ; 1.0	0.4 ± 0.5 ; 0.5
Fe-59	-0.7 ± 1.8 ; 1.8	-0.4 ± 0.9 ; 0.9
Co-58	0.1 ± 0.9 ; 0.9	0.2 ± 0.4 ; 0.4
Co-60	-0.4 ± 0.9 ; 0.9	0.3 ± 0.5 ; 0.5
Zn-65	0.5 ± 2.2 ;2.2	-1.2 ± 1.3 ;1.3
Nb/Zr-95	0.6 ± 0.7 ;0.7	-0.4 ± 0.4 ;0.4
I-131	-0.2 ± 0.8 ;0.8	-0.1 ± 0.5 ;0.5
Cs-134	-0.5 ± 1.2 ; 1.2	0.1 ± 0.5 ; 0.5
Cs-137	0.6 ± 0.9 ; 0.9	0.1 ± 0.5 ; 0.5
Ba/La-140	-1.1 ± 0.8 ;0.8	-0.1 ± 0.5 ;0.5

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Table 6. Vegetation

Collection: Annually

ODCM-Required LLDs: I-131 = 0.06, Cs-134 = 0.06, Cs-137 = 0.08 pCi/g wet weight

Other LLDs: Mn-54 = 0.05; Fe-59 = 0.10; Co-58, Co-60, Zn-65 = 0.05; Zr/Nb-95 = 0.01; Ba/La-140 = 0.02 pCi/g wet weight

Units: 10^{-2} pCi/g wet weight

Sample Description and Concentration

	L-Quad 2 Mike & Gina Welbourne	
Date Collected	09-09-04	09-09-04
Lab Code	LVE-5118	LVE-5119
Type	Beets	Beet Tops
Mn-54	0.3 ± 0.9 ; 0.9	-0.7 ± 1.0 ; 1.0
Fe-59	-0.7 ± 2.4 ; 2.4	-1.4 ± 2.5 ; 2.5
Co-58	0.6 ± 0.9 ; 0.9	0.1 ± 1.1 ; 1.1
Co-60	0.8 ± 0.9 ; 0.9	-0.7 ± 1.2 ; 1.2
Zn-65	-2.3 ± 2.4 ;2.4	0.2 ± 2.6 ;2.6
Nb/Zr-95	-0.1 ± 0.9 ;0.9	-0.2 ± 1.1 ;1.1
I-131	0.2 ± 0.7 ;0.7	-1.5 ± 0.8 ;0.9
Cs-134	-0.0 ± 1.0 ; 1.0	0.1 ± 1.1 ; 1.1
Cs-137	0.3 ± 0.9 ; 0.9	0.0 ± 1.3 ; 1.3
Ba/La-140	0.1 ± 0.9 ;1.0	-0.1 ± 0.5 ;0.5
	L-Quad 3 Michael Olson	
Date Collected	09-11-04	09-11-04
Lab Code	LVE-5120,1	LVE-5122
Type	Onions	Cabbage
Mn-54	-0.0 ± 0.6 ; 0.6	0.2 ± 0.8 ; 0.8
Fe-59	-0.3 ± 1.3 ; 1.3	0.2 ± 1.8 ; 1.8
Co-58	0.0 ± 0.5 ; 0.5	-0.0 ± 0.9 ; 0.9
Co-60	-0.1 ± 0.6 ; 0.6	0.9 ± 0.9 ; 0.9
Zn-65	1.4 ± 1.5 ;1.5	-1.3 ± 2.1 ;2.1
Nb/Zr-95	0.1 ± 0.5 ;0.5	-0.2 ± 0.8 ;0.8
I-131	-0.1 ± 0.5 ;0.5	0.1 ± 0.8 ;0.8
Cs-134	-0.2 ± 0.6 ; 0.6	-0.6 ± 1.0 ; 1.0
Cs-137	0.2 ± 0.6 ; 0.6	-0.1 ± 0.8 ; 0.8
Ba/La-140	-0.6 ± 0.7 ;0.7	-1.3 ± 1.1 ;1.1

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Table 6. Vegetation

Collection: Annually

ODCM-Required LLDs: I-131 = 0.06, Cs-134 = 0.06, Cs-137 = 0.08 pCi/g wet weight

Other LLDs: Mn-54 = 0.05; Fe-59 = 0.10; Co-58, Co-60, Zn-65 = 0.05; Zr/Nb-95 = 0.01; Ba/La-140 = 0.02 pCi/g wet weight

Units: 10^{-2} pCi/g wet weight

Sample Description and Concentration		
	L-Quad 4 Robert Eisers	
Date Collected	09-11-04	09-11-04
Lab Code	LVE-5123	LVE-5124
Type	Potatoes	Cabbage
Mn-54	0.5 ± 0.7 ; 0.7	0.3 ± 0.8 ; 0.8
Fe-59	-1.8 ± 1.4 ; 1.4	-1.0 ± 1.4 ; 1.4
Co-58	0.2 ± 0.5 ; 0.5	0.4 ± 0.7 ; 0.7
Co-60	-0.5 ± 0.6 ; 0.6	-0.4 ± 1.0 ; 1.0
Zn-65	0.1 ± 1.4 ;1.4	0.1 ± 1.8 ;1.8
Nb/Zr-95	-0.3 ± 0.7 ;0.7	-1.1 ± 0.8 ;0.8
I-131	0.1 ± 0.5 ;0.5	1.0 ± 0.7 ;0.7
Cs-134	-0.3 ± 0.7 ; 0.7	-0.5 ± 0.9 ; 0.9
Cs-137	-0.4 ± 0.7 ; 0.7	-0.4 ± 0.7 ; 0.7
Ba/La-140	0.6 ± 0.6 ;0.6	-0.9 ± 0.8 ;0.8

Table 7. Surface Water

Collection: Monthly composites of weekly collections

ODCM-Required LLDs: Gross Beta = 4, Mn-54 = 15, Fe-59 = 30, Co-58 = 15, Co-60 = 15, Zn-65 = 30, Zr-95 = 30, Nb-95 = 15, Cs-134 = 15, Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Units: pCi/L

Sample Description and Concentration

L-21 (C) Illinois River at Seneca

2004 Collection Period	January	February	March
Lab Code	LSW-394	LSW-817	LSW-1249,50
Gross Beta	5.7 ± 1.2 ; 1.5	5.4 ± 1.1 ; 1.4	5.0 ± 0.8 ; 1.0
Mn-54	1.2± 3.3 ; 3.3	0.3± 1.7 ; 1.7	1.0± 1.8 ; 1.8
Fe-59	-1.4± 5.2 ; 5.2	-2.9± 2.7 ; 2.7	-0.4± 3.6 ; 3.6
Co-58	0.7± 3.6 ; 3.6	1.8± 1.9 ; 1.9	0.7± 2.0 ; 2.0
Co-60	1.7± 4.1 ; 4.1	-0.4± 1.8 ; 1.8	-1.1± 2.2 ; 2.2
Zn-65	4.1± 7.5 ; 7.6	-0.2± 3.9 ; 3.9	-4.9± 4.2 ; 4.2
Zr-95	-0.6± 6.8 ; 6.8	-2.0± 4.1 ; 4.1	0.3± 3.7 ; 3.7
Nb-95	-0.1 ± 3.3 ; 3.3	0.1 ± 1.7 ; 1.7	1.3 ± 1.8 ; 1.8
Cs-134	2.4 ± 3.0 ; 3.1	1.5 ± 2.4 ; 2.4	-0.7 ± 2.5 ; 2.5
Cs-137	0.4 ± 3.9 ; 3.9	0.5 ± 2.1 ; 2.1	-1.2 ± 2.1 ; 2.1
Ba-140	1.7± 10.9 ; 10.9	-0.3 ± 7.8 ; 7.8	-4.8 ± 7.1 ; 7.2
La-140	-5.3 ± 5.4 ; 5.5	0.5 ± 1.9 ; 1.9	-2.4 ± 2.1 ; 2.1

2004 Collection Period	April	May	June
Lab Code	LSW-2132	LSW-2790	LSW-3461
Gross Beta	4.1 ± 1.1 ; 1.3	4.3 ± 1.1 ; 1.3	4.4 ± 1.2 ; 1.3
Mn-54	-0.6± 1.9 ; 1.9	-5.2± 3.3 ; 3.4	2.3± 3.1 ; 3.1
Fe-59	-3.1± 3.1 ; 3.2	-2.4± 5.4 ; 5.4	-2.9± 5.2 ; 5.3
Co-58	-0.7± 1.8 ; 1.8	0.2± 3.0 ; 3.0	2.6± 3.1 ; 3.2
Co-60	0.1± 0.8 ; 0.8	-0.5± 2.8 ; 2.8	1.0± 2.9 ; 2.9
Zn-65	-1.0± 3.7 ; 3.7	2.5± 6.0 ; 6.0	-0.7± 6.4 ; 6.4
Zr-95	-1.9± 4.3 ; 4.3	-1.6± 6.5 ; 6.5	1.8± 7.4 ; 7.4
Nb-95	-0.1 ± 2.2 ; 2.2	-2.8 ± 2.5 ; 2.5	2.8 ± 3.4 ; 3.4
Cs-134	2.7 ± 2.3 ; 2.3	0.2 ± 3.4 ; 3.4	2.3 ± 3.2 ; 3.3
Cs-137	-0.3 ± 1.9 ; 1.9	0.9 ± 3.1 ; 3.1	1.3 ± 3.3 ; 3.3
Ba-140	-6.3 ± 7.1 ; 7.2	-6.0 ± 9.6 ; 9.6	-23.5 ± 11.0 ; 11.5
La-140	1.1 ± 2.2 ; 2.2	-6.6 ± 4.1 ; 4.2	-8.3 ± 3.6 ; 3.8

Table 7. Surface Water

Collection: Monthly composites of weekly collections

ODCM-Required LLDs: Gross Beta = 4, Mn-54 = 15, Fe-59 = 30, Co-58 = 15, Co-60 = 15, Zn-65 = 30, Zr-95 = 30, Nb-95 = 15, Cs-134 = 15, Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Units: pCi/L

Sample Description and Concentration

L-21 (C) Illinois River at Seneca

2004 Collection Period	July	August	September
Lab Code	LSW-4446	LSW-5086	LSW-5906
Gross Beta	5.2 ± 1.1 ; 1.4	6.1 ± 1.2 ; 1.5	4.8 ± 1.2 ; 1.4
Mn-54	-2.7 ± 3.1 ; 3.2	2.4 ± 3.4 ; 3.4	0.1 ± 1.8 ; 1.8
Fe-59	4.3 ± 4.4 ; 4.5	-3.2 ± 6.1 ; 6.1	-3.6 ± 3.7 ; 3.8
Co-58	0.3 ± 3.3 ; 3.3	-0.5 ± 3.7 ; 3.7	-0.5 ± 1.8 ; 1.8
Co-60	-0.5 ± 3.2 ; 3.2	-0.6 ± 3.5 ; 3.5	-2.5 ± 2.0 ; 2.0
Zn-65	-2.0 ± 5.9 ; 5.9	3.2 ± 6.8 ; 6.8	-0.6 ± 4.4 ; 4.4
Zr-95	8.8 ± 6.5 ; 6.6	-4.0 ± 6.5 ; 6.6	-3.9 ± 4.2 ; 4.3
Nb-95	-0.4 ± 2.8 ; 2.8	0.2 ± 2.9 ; 2.9	-3.4 ± 2.1 ; 2.1
Cs-134	-0.9 ± 3.5 ; 3.5	-0.6 ± 4.1 ; 4.1	2.3 ± 2.1 ; 2.1
Cs-137	0.1 ± 3.0 ; 3.0	1.3 ± 3.6 ; 3.6	-1.7 ± 2.2 ; 2.2
Ba-140	-6.6 ± 10.5 ; 10.6	25.4 ± 11.1 ; 11.7	-10.0 ± 8.6 ; 8.7
La-140	1.1 ± 3.7 ; 3.7	-10.3 ± 4.4 ; 4.7	5.5 ± 1.9 ; 2.1

2004 Collection Period	October	November	December
Lab Code	LSW-6594	LSW-7198	LSW-7710
Gross Beta	5.5 ± 1.2 ; 1.5	5.7 ± 1.1 ; 1.4	5.6 ± 1.8 ; 2.0
Mn-54	0.1 ± 1.2 ; 1.2	0.5 ± 1.4 ; 1.4	0.4 ± 2.2 ; 2.2
Fe-59	-1.4 ± 2.6 ; 2.6	-0.2 ± 3.0 ; 3.0	-1.7 ± 3.4 ; 3.4
Co-58	0.6 ± 1.1 ; 1.1	-1.6 ± 1.4 ; 1.4	1.0 ± 1.7 ; 1.7
Co-60	1.1 ± 1.1 ; 1.2	0.4 ± 1.7 ; 1.7	0.0 ± 1.9 ; 1.9
Zn-65	-4.3 ± 2.9 ; 2.9	-0.7 ± 3.0 ; 3.0	-5.2 ± 4.8 ; 4.9
Zr-95	-1.0 ± 2.7 ; 2.7	-0.1 ± 2.9 ; 2.9	-3.8 ± 4.8 ; 4.8
Nb-95	-1.1 ± 1.2 ; 1.2	-0.5 ± 1.5 ; 1.5	0.7 ± 1.8 ; 1.8
Cs-134	-0.3 ± 1.3 ; 1.3	0.6 ± 1.7 ; 1.7	-3.7 ± 2.2 ; 2.2
Cs-137	-0.3 ± 1.3 ; 1.3	-0.1 ± 1.4 ; 1.4	-1.4 ± 2.2 ; 2.3
Ba-140	4.1 ± 5.0 ; 5.1	8.3 ± 4.6 ; 4.7	2.8 ± 8.4 ; 8.4
La-140	-1.8 ± 1.2 ; 1.2	1.5 ± 2.0 ; 2.0	-5.2 ± 1.7 ; 1.8

Table 7. Surface Water

Collection: Monthly composites of weekly collections

ODCM-Required LLDs: Gross Beta = 4, Mn-54 = 15, Fe-59 = 30, Co-58 = 15, Co-60 = 15, Zn-65 = 30, Zr-95 = 30, Nb-95 = 15, Cs-134 = 15, Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Units: pCi/L

Sample Description and Concentration

L-40 Illinois River Downstream

2004 Collection Period	January	February	March
Lab Code	LSW-395	LSW-818	LSW-1251
Gross Beta	3.8 ± 1.0 ; 1.2	5.4 ± 1.2 ; 1.4	4.9 ± 1.1 ; 1.3
Mn-54	-2.7± 2.0 ; 2.1	2.6± 3.2 ; 3.2	0.7± 2.9 ; 2.9
Fe-59	-4.9± 4.1 ; 4.2	5.8± 5.9 ; 5.9	-4.7± 5.4 ; 5.5
Co-58	-1.0± 1.8 ; 1.8	0.3± 3.6 ; 3.6	0.1± 3.0 ; 3.0
Co-60	1.2± 1.7 ; 1.7	2.4± 2.6 ; 2.6	-1.6± 2.3 ; 2.3
Zn-65	-5.0± 4.9 ; 4.9	-3.0± 7.6 ; 7.6	0.3± 5.0 ; 5.0
Zr-95	1.3± 4.9 ; 4.9	1.8± 7.0 ; 7.0	-11.1± 5.9 ; 6.1
Nb-95	-0.3 ± 2.2 ; 2.2	1.1 ± 2.6 ; 2.6	-0.3 ± 2.8 ; 2.8
Cs-134	0.9± 2.2 ; 2.2	-2.5± 4.1 ; 4.1	-0.6± 3.6 ; 3.6
Cs-137	-0.6± 2.4 ; 2.4	0.2± 3.3 ; 3.3	0.8± 2.9 ; 2.9
Ba-140	-1.6± 8.8 ; 8.8	5.0± 12.3 ; 12.3	0.9± 10.1 ; 10.1
La-140	-1.8± 2.4 ; 2.4	0.9± 3.1 ; 3.1	-1.9± 3.9 ; 3.9

2004 Collection Period	April	May	June
Lab Code	LSW-2133	LSW-2791	LSW-3462
Gross Beta	4.6 ± 1.1 ; 1.3	4.1 ± 1.1 ; 1.2	4.8 ± 1.1 ; 1.3
Mn-54	1.6± 3.5 ; 3.5	-0.2± 1.8 ; 1.8	1.7± 3.5 ; 3.5
Fe-59	-5.9± 7.6 ; 7.6	-1.2± 3.4 ; 3.4	-6.6± 6.8 ; 6.9
Co-58	0.9± 2.9 ; 2.9	1.3± 1.7 ; 1.7	-3.0± 3.2 ; 3.2
Co-60	0.4± 3.8 ; 3.8	0.3± 2.1 ; 2.1	0.2± 3.7 ; 3.7
Zn-65	1.9± 8.0 ; 8.0	-2.7± 3.9 ; 4.0	0.7± 7.5 ; 7.5
Zr-95	-7.2± 7.7 ; 7.8	2.6± 4.3 ; 4.3	1.6± 6.6 ; 6.6
Nb-95	-1.2 ± 3.5 ; 3.5	0.7± 1.7 ; 1.7	2.7± 2.8 ; 2.8
Cs-134	-3.9± 4.4 ; 4.4	-0.2± 2.1 ; 2.1	-2.4± 4.1 ; 4.1
Cs-137	-0.7± 3.7 ; 3.7	-1.0± 2.2 ; 2.2	-0.1± 3.6 ; 3.6
Ba-140	-23.5± 10.1 ; 10.7	3.9± 7.9 ; 8.0	16.4± 11.3 ; 11.6
La-140	0.7± 4.7 ; 4.7	-3.8± 2.4 ; 2.4	-3.1± 3.7 ; 3.8

Table 7. Surface Water

Collection: Monthly composites of weekly collections

ODCM-Required LLDs: Gross Beta = 4, Mn-54 = 15, Fe-59 = 30, Co-58 = 15, Co-60 = 15, Zn-65 = 30, Zr-95 = 30, Nb-95 = 15, Cs-134 = 15, Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Units: pCi/L

Sample Description and Concentration

L-40 Illinois River Downstream

2004 Collection Period	July	August	September
Lab Code	LSW-4447	LSW-5087	LSW-5907
Gross Beta	5.8 ± 1.2 ; 1.5	4.9 ± 1.1 ; 1.3	5.8 ± 1.1 ; 1.4
Mn-54	-0.9 ± 1.8 ; 1.8	-0.9 ± 2.0 ; 2.0	0.7 ± 1.8 ; 1.8
Fe-59	1.4 ± 3.5 ; 3.5	-4.8 ± 4.0 ; 4.0	-0.4 ± 2.9 ; 2.9
Co-58	-2.1 ± 1.7 ; 1.7	0.2 ± 1.8 ; 1.8	-0.7 ± 1.8 ; 1.8
Co-60	-1.8 ± 1.9 ; 1.9	-0.2 ± 1.9 ; 1.9	-1.2 ± 2.1 ; 2.1
Zn-65	-2.9 ± 3.5 ; 3.5	1.3 ± 4.2 ; 4.2	0.2 ± 3.7 ; 3.7
Zr-95	-3.8 ± 4.3 ; 4.3	0.5 ± 4.4 ; 4.4	-3.1 ± 3.7 ; 3.7
Nb-95	-0.8 ± 1.8 ; 1.8	-0.5 ± 2.0 ; 2.0	-1.6 ± 1.6 ; 1.6
Cs-134	-0.2 ± 1.8 ; 1.8	0.6 ± 1.9 ; 1.9	-0.8 ± 1.9 ; 1.9
Cs-137	0.7 ± 1.9 ; 1.9	-0.1 ± 2.1 ; 2.1	0.2 ± 2.0 ; 2.0
Ba-140	-1.0 ± 6.7 ; 6.7	11.3 ± 8.2 ; 8.4	-10.1 ± 6.2 ; 6.4
La-140	-3.6 ± 2.1 ; 2.1	-0.6 ± 2.3 ; 2.3	3.8 ± 1.8 ; 1.9

2004 Collection Period	October	November	December
Lab Code	LSW-6595	LSW-7199	LSW-7711
Gross Beta	5.8 ± 1.2 ; 1.5	5.3 ± 1.2 ; 1.5	5.2 ± 1.7 ; 1.9
Mn-54	1.3 ± 1.1 ; 1.1	0.7 ± 1.4 ; 1.4	1.4 ± 2.3 ; 2.3
Fe-59	-0.3 ± 1.8 ; 1.8	-0.6 ± 2.8 ; 2.8	-0.8 ± 4.6 ; 4.6
Co-58	0.0 ± 1.0 ; 1.0	-0.3 ± 1.5 ; 1.5	0.4 ± 2.2 ; 2.2
Co-60	0.3 ± 1.0 ; 1.0	0.0 ± 1.4 ; 1.4	-1.6 ± 3.1 ; 3.2
Zn-65	0.7 ± 2.1 ; 2.1	4.3 ± 3.0 ; 3.1	-1.8 ± 6.0 ; 6.0
Zr-95	-2.4 ± 2.4 ; 2.4	3.7 ± 3.1 ; 3.1	-1.1 ± 5.6 ; 5.6
Nb-95	0.4 ± 1.1 ; 1.1	-1.8 ± 1.4 ; 1.5	-5.2 ± 3.1 ; 3.2
Cs-134	-1.0 ± 1.3 ; 1.4	-0.6 ± 1.8 ; 1.8	1.1 ± 2.7 ; 2.7
Cs-137	-0.8 ± 1.2 ; 1.2	-0.3 ± 1.6 ; 1.6	1.3 ± 3.0 ; 3.0
Ba-140	-6.3 ± 4.5 ; 4.6	-9.0 ± 5.5 ; 5.7	-2.4 ± 9.3 ; 9.3
La-140	-2.7 ± 1.2 ; 1.3	5.1 ± 1.9 ; 2.0	-2.7 ± 3.6 ; 3.6

Table 7. Surface Water

Collection: Quarterly composites of weekly collections

Required LLD: H-3 = 200 pCi/L

Units: pCi/L

2004 Collection Period	Sample Description and Concentration Lab Code	Tritium
	L-21 (C) Illinois River at Seneca	
1st Quarter	LSW - 1258	489 ± 105 ; 125
2nd Quarter	LSW - 3543	110 ± 83 ; 85
3rd Quarter	LSW - 5595[a]	1,058 ± 122 ; 189
4th Quarter	LSW - 7677,8	426 ± 72 ; 98
	L-40 Illinois River Downstream	
1st Quarter	LSW - 1259	190 ± 94 ; 98
2nd Quarter	LSW - 3544	142 ± 85 ; 87
3rd Quarter	LSW - 5596[b]	874 ± 116 ; 166
4th Quarter	LSW - 7679	550 ± 107 ; 130

[a] Tritium repeated with a result of 986+/-120 pCi/L.

[b] Tritium repeated with a result of 904+/-118 pCi/L.

Table 8. Well Water

Collection: Quarterly

ODCM-Required LLDs: H-3 = 200, Mn-54 = 15, Fe-59 = 30, Co-58 = 15, Co-60 = 15, Zn-65 = 30, Zr-95 = 30, Nb-95 = 15, Cs-134 = 15, Cs-137 = 18, Ba-140 = 60, La-140 = 15 pCi/L

Units: pCi/L

Sample Description and Concentration

L-27 LSCS Onsite Well at Station

Date Collected	01-08-04	04-08-04	07-08-04	10-14-04
Lab Code	LWW-163	LWW-1568	LWW-3581	LWW-6137
H-3	-15 ± 78 ; 78	13 ± 77 ; 77	76 ± 80 ; 81	-4 ± 79 ; 79
Mn-54	2.6 ± 3.2 ; 3.2	1.3 ± 3.3 ; 3.3	0.6 ± 2.5 ; 2.5	-0.3 ± 2.8 ; 2.8
Fe-59	-4.9 ± 5.6 ; 5.6	-0.8 ± 5.6 ; 5.6	1.4 ± 6.3 ; 6.3	-0.8 ± 5.4 ; 5.4
Co-58	-2.0 ± 3.2 ; 3.0	0.5 ± 3.4 ; 2.7	0.2 ± 2.8 ; 2.6	-1.3 ± 3.7 ; 3.8
Co-60	1.1 ± 3.0 ; 3.2	3.6 ± 2.6 ; 3.4	0.9 ± 2.6 ; 2.8	-1.3 ± 3.8 ; 3.7
Zn-65	-0.4 ± 6.8 ; 6.8	-6.8 ± 6.8 ; 6.9	-0.7 ± 5.1 ; 5.1	-0.4 ± 8.4 ; 8.4
Zr-95	0.9 ± 7.5 ; 7.5	-1.2 ± 3.9 ; 3.9	-3.8 ± 6.3 ; 6.4	-0.3 ± 8.2 ; 8.2
Nb-95	-0.5 ± 2.5 ; 2.5	-0.5 ± 2.7 ; 2.7	0.1 ± 2.8 ; 2.8	-2.2 ± 3.8 ; 3.8
Cs-134	-0.5 ± 5.0 ; 5.0	2.1 ± 3.0 ; 3.0	2.5 ± 3.2 ; 3.2	1.0 ± 3.7 ; 3.7
Cs-137	3.0 ± 3.9 ; 4.0	-1.4 ± 3.4 ; 3.4	2.9 ± 3.3 ; 3.3	1.4 ± 3.1 ; 3.1
Ba-140	-8.2 ± 11.7 ; 11.8	2.7 ± 10.6 ; 10.6	-9.3 ± 8.3 ; 8.4	9.8 ± 12.1 ; 12.2
La-140	6.0 ± 4.3 ; 4.4	-0.4 ± 1.9 ; 1.9	-4.1 ± 3.7 ; 3.8	-0.4 ± 4.1 ; 4.1

L-28 Marseilles Well

Date Collected	01-08-04	04-08-04	07-08-04	10-14-04
Lab Code	LWW-164	LWW-1569	LWW-3582	LWW-6138,9
H-3	1 ± 79 ; 79	41 ± 78 ; 79	107 ± 82 ; 83	33 ± 57 ; 57
Mn-54	0.3 ± 1.9 ; 1.9	2.2 ± 2.9 ; 2.9	1.5 ± 2.7 ; 2.8	1.7 ± 1.0 ; 1.1
Fe-59	-0.7 ± 3.4 ; 3.4	-3.9 ± 5.3 ; 5.4	-0.7 ± 4.5 ; 4.5	-0.4 ± 2.1 ; 2.1
Co-58	-1.0 ± 1.7 ; 1.6	0.3 ± 3.2 ; 3.4	-2.3 ± 2.9 ; 3.4	-0.0 ± 1.2 ; 1.2
Co-60	1.0 ± 1.6 ; 1.7	-2.2 ± 3.4 ; 3.2	4.3 ± 3.4 ; 2.9	0.1 ± 1.2 ; 1.2
Zn-65	-3.4 ± 3.7 ; 3.8	-9.6 ± 6.2 ; 6.4	3.5 ± 4.3 ; 4.3	-8.0 ± 2.7 ; 2.9
Zr-95	-3.8 ± 4.1 ; 4.1	-6.1 ± 5.9 ; 6.0	-2.5 ± 6.7 ; 6.7	-2.7 ± 2.6 ; 2.7
Nb-95	0.6 ± 1.8 ; 1.8	1.3 ± 2.8 ; 2.8	0.1 ± 3.3 ; 3.3	-0.8 ± 1.3 ; 1.3
Cs-134	-0.9 ± 2.3 ; 2.3	-0.1 ± 3.2 ; 3.2	1.7 ± 3.1 ; 3.1	-0.3 ± 1.4 ; 1.4
Cs-137	-0.0 ± 2.3 ; 2.3	1.9 ± 3.6 ; 3.6	-1.1 ± 3.5 ; 3.5	-0.3 ± 1.3 ; 1.3
Ba-140	-10.9 ± 7.3 ; 7.4	-6.8 ± 8.9 ; 8.9	7.1 ± 11.8 ; 11.9	0.9 ± 4.6 ; 4.6
La-140	-1.4 ± 2.1 ; 2.1	-0.5 ± 3.5 ; 3.5	8.1 ± 3.3 ; 3.5	-0.5 ± 1.5 ; 1.5

5.0 MILCH ANIMALS, NEAREST LIVESTOCK, AND NEAREST RESIDENCES CENSUS

LASALLE

MILCH ANIMALS CENSUS, 2004

		Cows being milked
L-42	Vince Biros Farm	
	12.6 miles, Sector E	94
	25%pasture 25% ground grain 50% green chop	

Census conducted by A. Lewis on August 29, 2004

LASALLE

NEAREST LIVESTOCK CENSUS, 2004

Nearest livestock of the LaSalle Station within a 6.2 mile radius.

Sector	Direction	Distance	Livestock No.
A	N	4.0 miles	12 cattle
B	NNE	1.7 miles	20 cattle
C	NE	3.5 miles	25 cows - cattle
D	ENE	3.8 miles	17 cattle
E	E	None	None
F	ESE	None	None
G	SE	4.7 miles	21 cows - cattle
H	SSE	4.7 miles	16 cows - cattle
J	S	4.7 miles	8 cattle
K	SSW	None	None
L	SW	5.8 miles	15 cows
M	WSW	None	None
N	W	3.0 miles	9 cows - cattle
P	WNW	3.0 miles	12 cattle
Q	NW	4.0 miles	15 cows - cattle
R	NNW	4.6 miles	5 cows - cattle

Census conducted by A. Lewis on August 29, 2004

LASALLE

NEAREST RESIDENCE CENSUS, 2004

Nearest resident of the LaSalle Station within a 6.2 mile radius.

Sector	Direction	Distance
A	N	3.9 miles
B	NNE	1.6 miles
C	NE	2.1 miles
D	ENE	3.3 miles
E	E	3.2 miles
F	ESE	1.4 miles
G	SE	1.7 miles
H	SSE	1.8 miles
J	S	1.5 miles
K	SSW	0.7 miles
L	SW	1.0 miles
M	WSW	1.5 miles
N	W	0.8 miles
P	WNW	0.9 miles
Q	NW	1.8 miles
R	NNW	1.7 miles

Census conducted by A. Lewis on August 29, 2004

6.0 TLD DATA*

*TLD Data provided by Exelon Nuclear.

Exelon Nuclear
Environmental Site Report for LaSalle

Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 2004	Quarter 2 2004	Quarter 3 2004	Quarter 4 2004
I. INDICATOR LOCATIONS					
a. Air Samplers					
L-01-1	NEARSITE NO. 1	29.0	27.0	22.0	29.0
L-01-2	NEARSITE NO. 1	27.0	23.0	25.0	28.0
L-03-1	ONSITE NO. 3	30.0	23.0	23.0	29.0
L-03-2	ONSITE NO. 3	26.0	26.0	23.0	30.0
L-04-1	RTE. 170	27.0	25.0	22.0	26.0
L-04-2	RTE. 170	26.0	22.0	19.0	30.0
L-05-1	ONSITE NO. 5	28.0	23.0	21.0	28.0
L-05-2	ONSITE NO. 5	28.0	24.0	20.0	31.0
L-06-1	NEARSITE NO. 6	28.0	24.0	25.0	27.0
L-06-2	NEARSITE NO. 6	29.0	23.0	24.0	27.0
L-07-1	SENECA	27.0	25.0	21.0	30.0
L-07-2	SENECA	26.0	25.0	23.0	31.0
L-08-1	MARSEILLES	26.0	25.0	21.0	27.0
L-08-2	MARSEILLES	28.0	25.0	21.0	31.0
L-11-1	RANSOM	25.0	22.0	19.0	29.0
L-11-2	RANSOM	25.0	23.0	19.0	25.0
	Air Sampler Mean ± S. D.	27.2 ±1.5	24.1 ±1.4	21.8 ±2.0	28.6 ±1.9
	Annual Air Sampler Mean ± S.D.				25.4 ±3.2
b. Inner Ring (100 Series)					
L-101-1		28.0	26.0	25.0	28.0
L-101-2		26.0	25.0	22.0	28.0
L-102-1		29.0	28.0	24.0	34.0
L-102-2		31.0	27.0	23.0	29.0
L-103-1		27.0	26.0	25.0	32.0
L-103-2		28.0	27.0	25.0	27.0
L-104-1		28.0	22.0	22.0	27.0
L-104-2		24.0	22.0	22.0	30.0
L-105-1		32.0	24.0	26.0	30.0
L-105-2		30.0	28.0	26.0	35.0
L-106-1		25.0	23.0	21.0	31.0
L-106-2		26.0	25.0	25.0	30.0
L-107-1		28.0	26.0	25.0	32.0
L-107-2		25.0	24.0	21.0	31.0
L-108-1		27.0	26.0	23.0	28.0
L-108-2		25.0	21.0	18.0	28.0
L-109-1		28.0	27.0	23.0	32.0
L-109-2		28.0	24.0	24.0	31.0
L-110-1		27.0	24.0	26.0	32.0
L-110-2		28.0	27.0	24.0	29.0
L-111B-1		28.0	26.0	24.0	32.0
L-111B-2		29.0	25.0	26.0	29.0

Exelon Nuclear
Environmental Site Report for LaSalle

Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 2004	Quarter 2 2004	Quarter 3 2004	Quarter 4 2004
b. Inner Ring (100 Series)					
L-112-1		27.0	25.0	24.0	31.0
L-112-2		26.0	25.0	24.0	34.0
L-113A-1		31.0	26.0	24.0	33.0
L-113A-2		29.0	28.0	22.0	32.0
L-114-1		28.0	26.0	24.0	32.0
L-114-2		28.0	27.0	23.0	32.0
L-115-1		25.0	23.0	21.0	30.0
L-115-2		25.0	21.0	24.0	29.0
L-116-1		25.0	21.0	20.0	31.0
L-116-2		24.0	24.0	20.0	28.0
	Inner Ring Mean ± S.D.	27.3 ±2.0	25.0 ±2.1	23.3 ±2.0	30.5 ±2.1
	Annual Inner Ring Mean ± S.D.				26.5 ±3.4
c. Outer Ring (200 Series)					
L-201-3		24.0	22.0	17.0	27.0
L-201-4		28.0	25.0	24.0	30.0
L-202-3		25.0	24.0	20.0	26.0
L-202-4		25.0	23.0	20.0	30.0
L-203-1		27.0	25.0	23.0	29.0
L-203-2		28.0	24.0	21.0	30.0
L-204-1		28.0	25.0	27.0	35.0
L-204-2		27.0	27.0	26.0	33.0
L-205-1		27.0	26.0	25.0	30.0
L-205-2		29.0	27.0	22.0	29.0
L-205-3		29.0	28.0	25.0	33.0
L-205-4		25.0	27.0	21.0	33.0
L-206-1		28.0	26.0	25.0	33.0
L-206-2		28.0	27.0	23.0	32.0
L-207-1		29.0	26.0	24.0	29.0
L-207-2		28.0	32.0	21.0	32.0
L-208-1		28.0	26.0	22.0	32.0
L-208-2		30.0	26.0	22.0	33.0
L-209-1		29.0	24.0	26.0	33.0
L-209-2		28.0	26.0	25.0	29.0
L-210-1		26.0	28.0	23.0	33.0
L-210-2		30.0	25.0	26.0	31.0
L-211-1		29.0	27.0	25.0	32.0
L-211-2		29.0	26.0	25.0	33.0
L-212-1		30.0	27.0	26.0	31.0
L-212-2		29.0	24.0	26.0	33.0
L-213-3		24.0	22.0	21.0	28.0
L-213-4		28.0	25.0	28.0	28.0
L-214-3		27.0	24.0	24.0	32.0
L-214-4		28.0	23.0	22.0	28.0

Exelon Nuclear

Environmental Site Report for LaSalle

Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 2004	Quarter 2 2004	Quarter 3 2004	Quarter 4 2004
Outer Ring (200 Series)					
L-215-3		29.0	24.0	23.0	33.0
L-215-4		27.0	28.0	23.0	35.0
L-216-3		32.0	27.0	25.0	32.0
L-216-4		27.0	26.0	26.0	32.0
	Outer Ring Mean ± S.D.	27.8 ±1.8	25.6 ±2.0	23.6 ±2.4	31.1 ±2.2
	Annual Outer Ring Mean ± S.D.				27.0 ±3.5
	INDICATOR LOCATION MEAN ± S.D.	27.5 ±1.8	25.1 ±2.0	23.1 ±2.2	30.4 ±2.3
	Annual INDICATOR MEAN ± S.D.				26.5 ±3.4
II. CONTROL LOCATIONS					
L-10-1	STREATOR	22.0	22.0	20.0	25.0
L-10-2	STREATOR	25.0	22.0	19.0	25.0
	CONTROL LOCATION MEAN ± S.D.	23.5 ±2.1	22.0 ±0.0	19.5 ±0.7	25.0 ±0.0
	Annual CONTROL LOCATION MEAN ± S.D.				22.5 ±2.1

7.0 GRAPHS OF DATA TRENDS

Air Particulates - Gross Beta

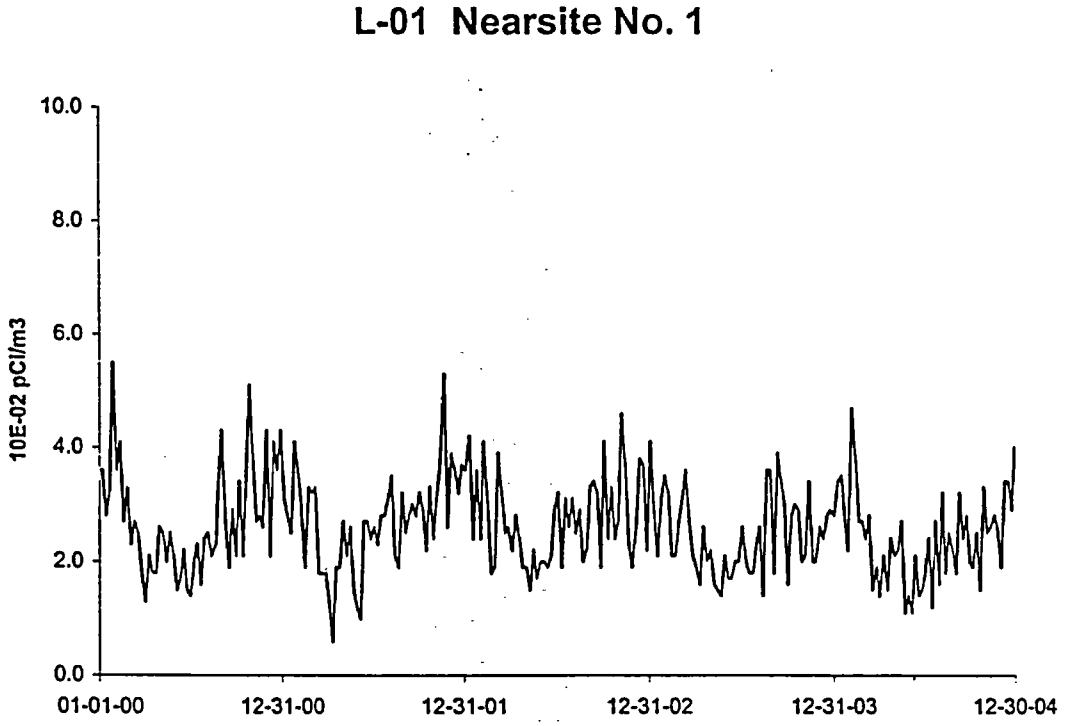

Figure 1. Continuous collection with weekly exchange of particulate filter.

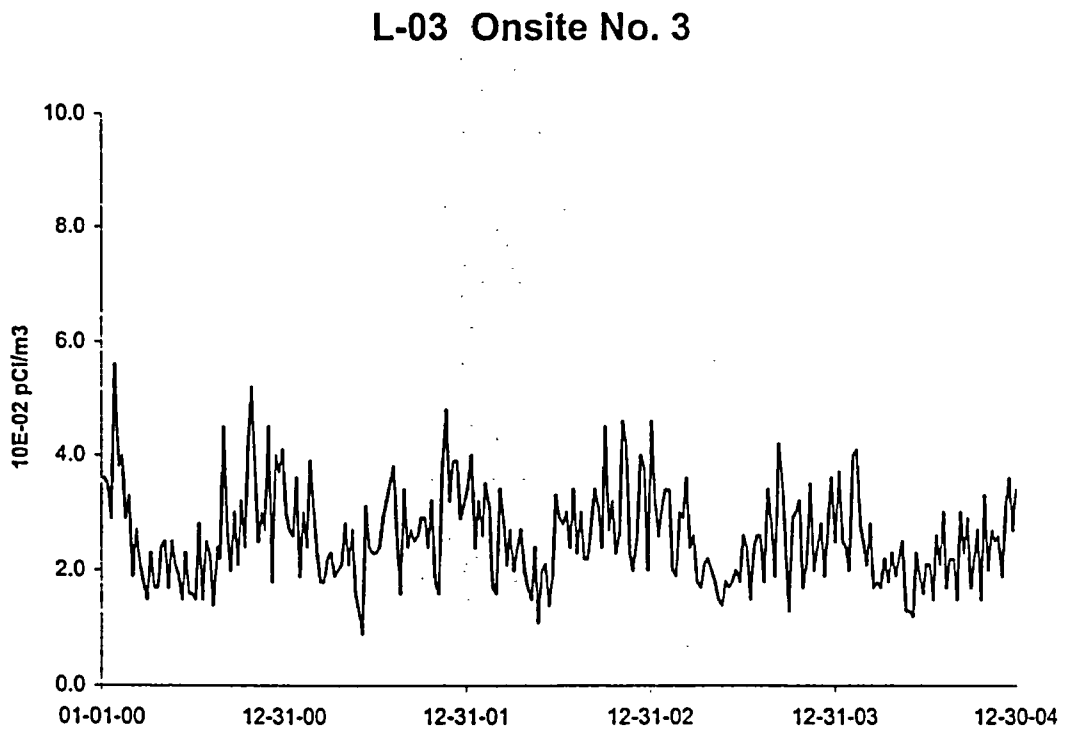

Figure 2. Continuous collection with weekly exchange of particulate filter.

Air Particulates - Gross Beta

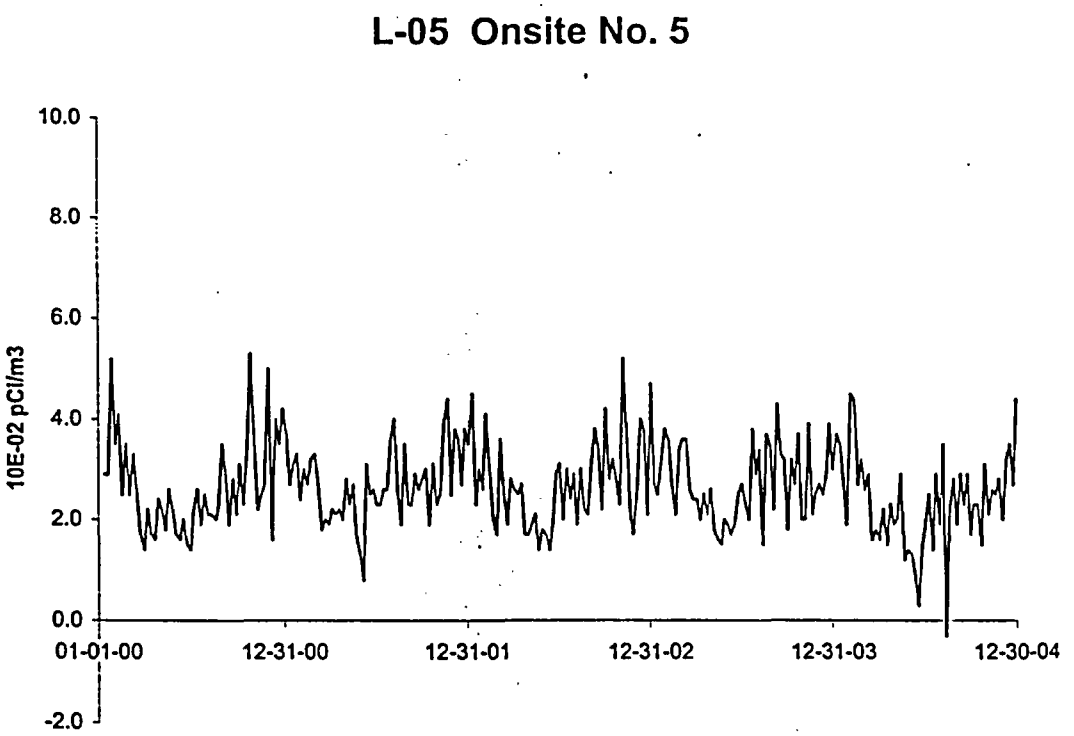

Figure 3. Continuous collection with weekly exchange of particulate filter.

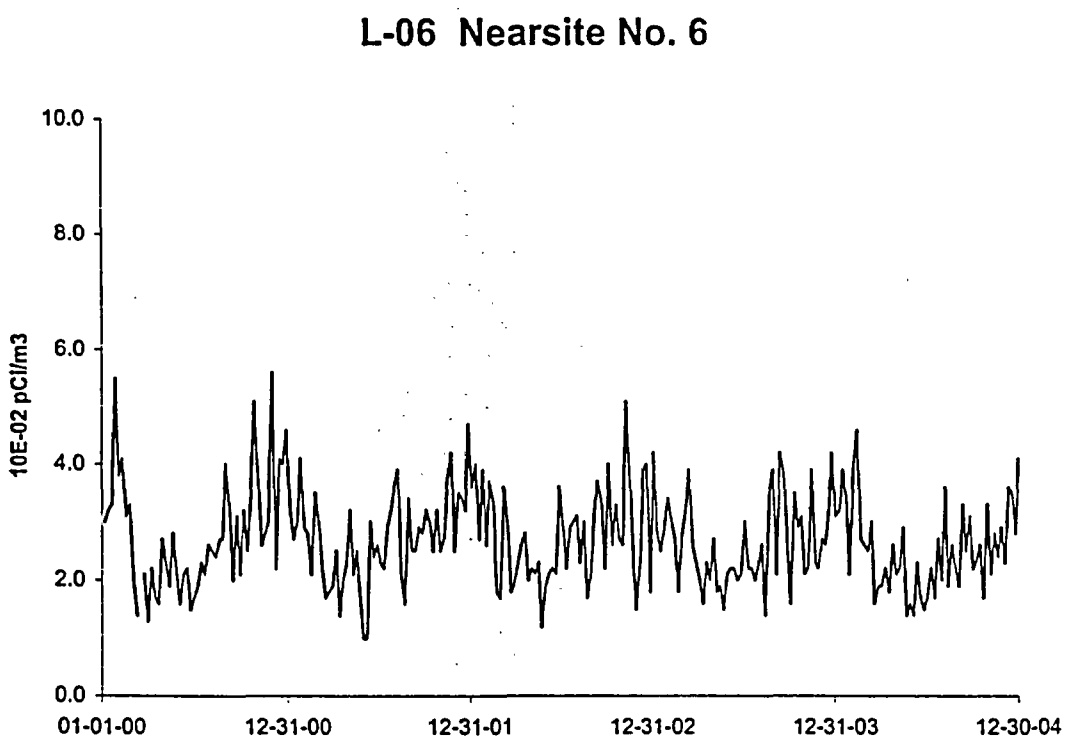

Figure 4. Continuous collection with weekly exchange of particulate filter.

Air Particulates - Gross Beta

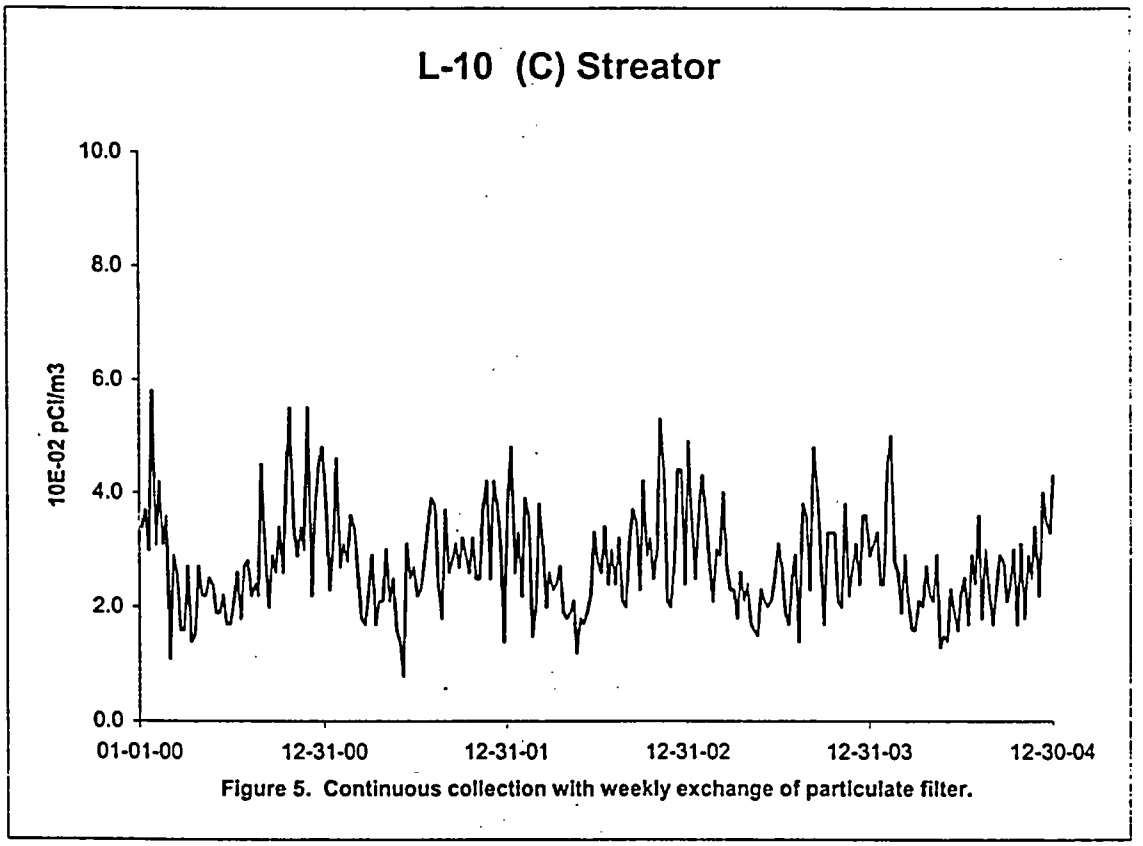

Figure 5. Continuous collection with weekly exchange of particulate filter.

Surface Water - Gross Beta

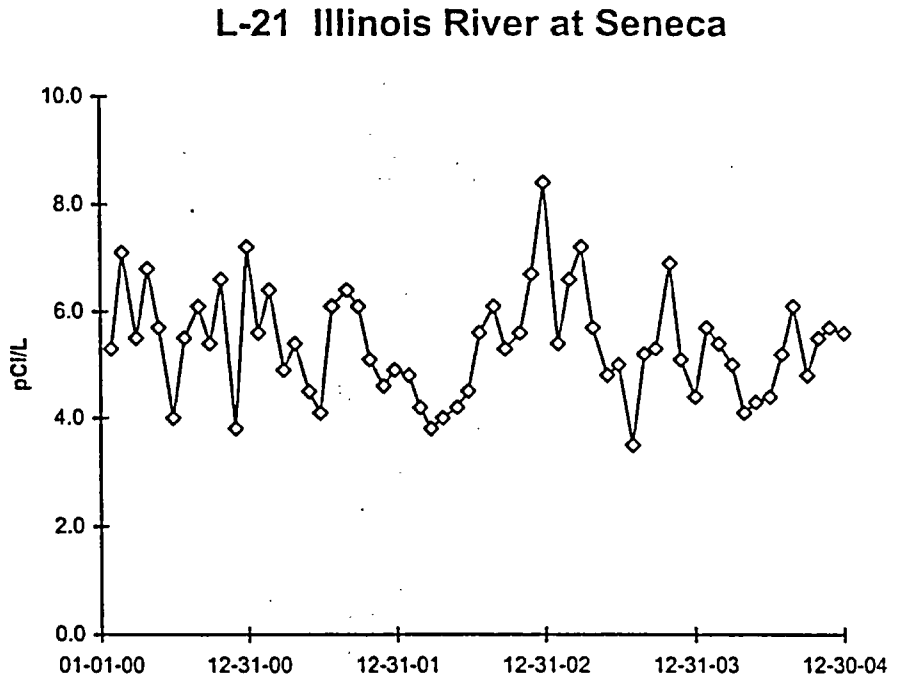

Figure 6. Monthly composites of weekly collections.

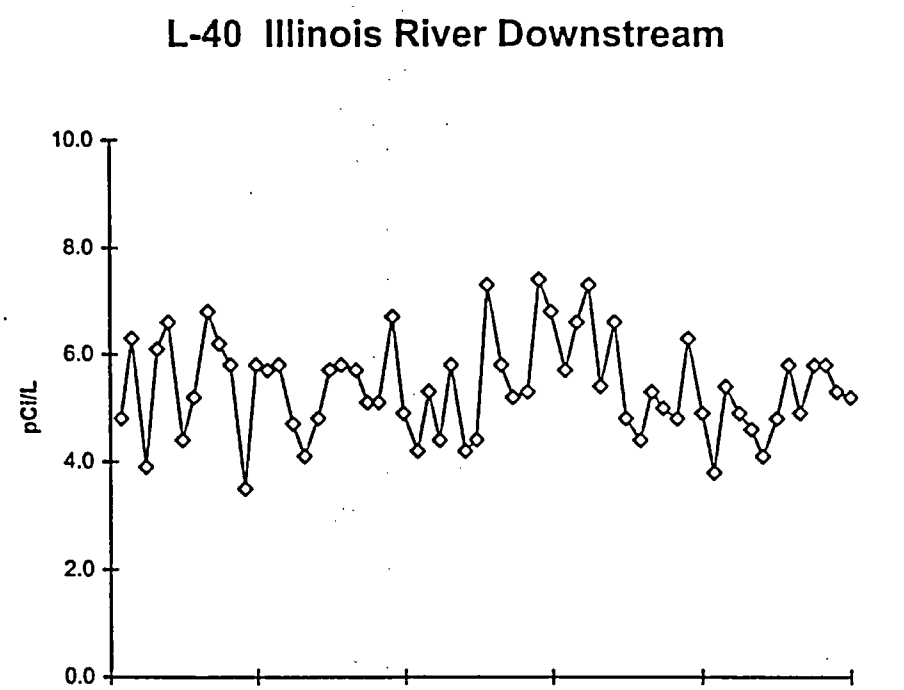

Figure 7. Monthly composites of weekly collections.

Surface Water-Tritium

L-21(C) Illinois River at Seneca

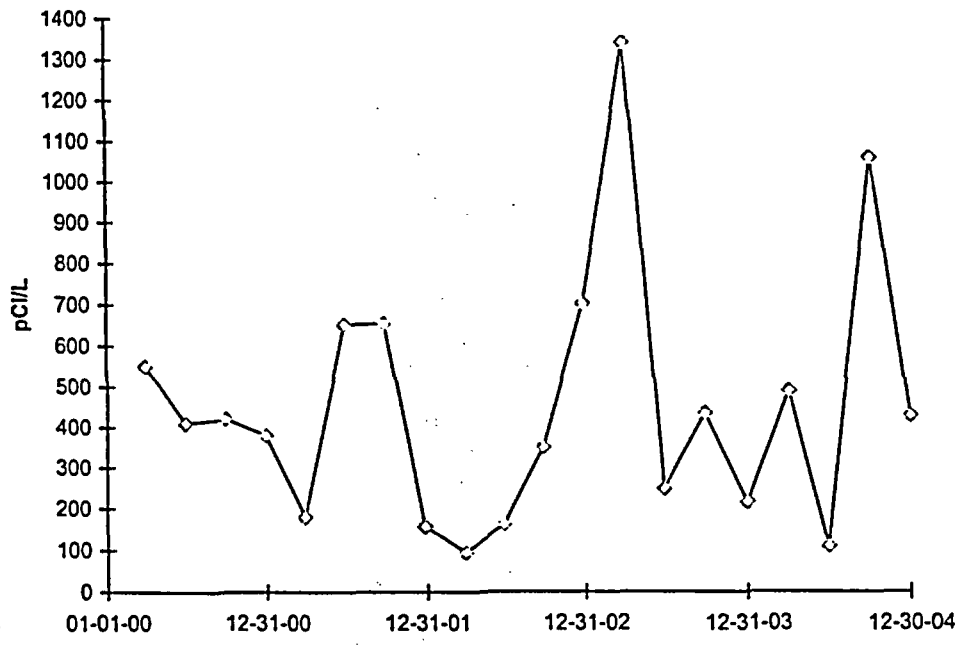

Figure 8. Quarterly composites of weekly collections.

L-40 Illinois River Downstream

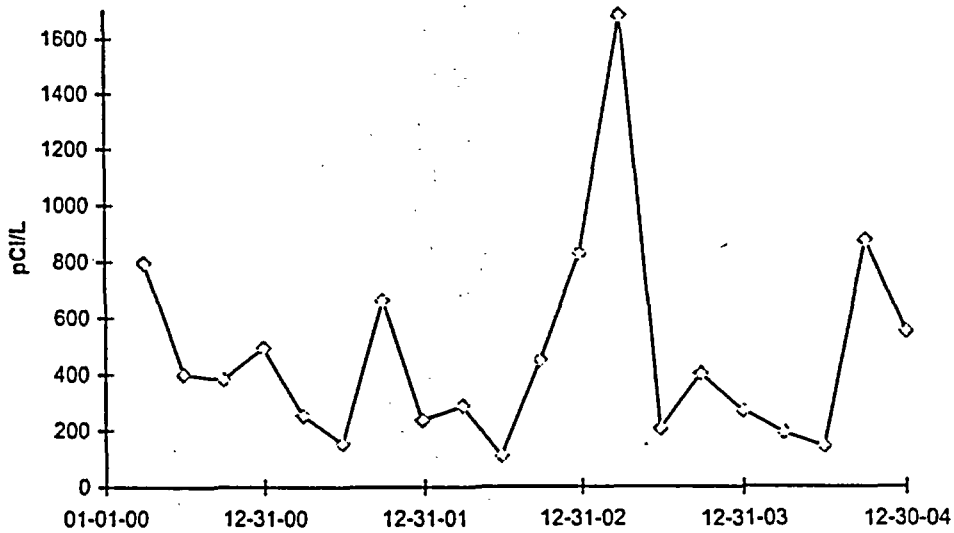

Figure 9. Quarterly composites of weekly collections.

APPENDIX IV

INTERLABORATORY COMPARISON PROGRAM RESULTS

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APPENDIX IV

INTERLABORATORY COMPARISON PROGRAM RESULTS

NOTE: Environmental Inc., Midwest Laboratory participates in intercomparison studies administered by Environmental Resources Associates, and serves as a replacement for studies conducted previously by the U.S. EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada. Results are reported in Appendix A. TLD Intercomparison results, in-house spikes, blanks, duplicates and mixed analyte performance evaluation program results are also reported. Appendix A is updated four times a year; the complete Appendix is included in March, June, September and December monthly progress reports only.

January through December, 2004

Appendix IV

Interlaboratory Comparison Program Results

Environmental, Inc., Midwest Laboratory, formerly Teledyne Brown Engineering Environmental Services Midwest Laboratory has participated in interlaboratory comparison (crosscheck) programs since the formulation of it's quality control program in December 1971. These programs are operated by agencies which supply environmental type samples containing concentrations of radionuclides known to the issuing agency but not to participant laboratories. The purpose of such a program is to provide an independent check on a laboratory's analytical procedures and to alert it of any possible problems.

Participant laboratories measure the concentration of specified radionuclides and report them to the issuing agency. Several months later, the agency reports the known values to the participant laboratories and specifies control limits. Results consistently higher or lower than the known values or outside the control limits indicate a need to check the instruments or procedures used.

Results in Table IV-1 were obtained through participation in the environmental sample crosscheck program administered by Environmental Resources Associates, serving as a replacement for studies conducted previously by the U.S. EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada.

The results in Table IV-2 list results for thermoluminescent dosimeters (TLDs), via International Intercomparison of Environmental Dosimeters, when available, and internal laboratory testing.

Table IV-3 lists results of the analyses on in-house "spiked" samples for the past twelve months. All samples are prepared using NIST traceable sources. Data for previous years available upon request.

Table IV-4 lists results of the analyses on in-house "blank" samples for the past twelve months. Data for previous years available upon request.

Table IV-5 list results of the in-house "duplicate" program for the past twelve months. Acceptance is based on the difference of the results being less than the sum of the errors. Data for previous years available upon request.

The results in Table IV-6 were obtained through participation in the Mixed Analyte Performance Evaluation Program.

The results in Table IV-7 were obtained through participation in the Environmental Measurement Laboratory Quality Assessment Program.

Attachment A lists acceptance criteria for "spiked" samples.

Out-of-limit results are explained directly below the result.

Attachment A

ACCEPTANCE CRITERIA FOR "SPIKED" SAMPLES

LABORATORY PRECISION: ONE STANDARD DEVIATION VALUES FOR VARIOUS ANALYSES[a]

Analysis	Level	One standard deviation for single determination
Gamma Emitters	5 to 100 pCi/liter or kg > 100 pCi/liter or kg	5.0 pCi/liter 5% of known value
Strontium-89[b]	5 to 50 pCi/liter or kg > 50 pCi/liter or kg	5.0 pCi/liter 10% of known value
Strontium-90[b]	2 to 30 pCi/liter or kg > 30 pCi/liter or kg	5.0 pCi/liter 10% of known value
Potassium-40	≥0.1 g/liter or kg	5% of known value
Gross alpha	≤20 pCi/liter > 20 pCi/liter	5.0 pCi/liter 25% of known value
Gross beta	≤100 pCi/liter > 100 pCi/liter	5.0 pCi/liter 5% of known value
Tritium	≤4,000 pCi/liter > 4,000 pCi/liter	$\pm 1\sigma$ = (pCi/liter) = 169.85 x (known)$^{0.0933}$ 10% of known value
Radium-226,-228	≥0.1 pCi/liter	15% of known value
Plutonium	≥0.1 pCi/liter, gram, or sample	10% of known value
Iodine-131, Iodine-129[b]	≤55 pCi/liter > 55 pCi/liter	6.0 pCi/liter 10% of known value
Uranium-238, Nickel-63[b] Technetium-99[b]	≤35 pCi/liter > 35 pCi/liter	6.0 pCi/liter 15% of known value
Iron-55[b]	50 to 100 pCi/liter > 100 pCi/liter	10 pCi/liter 10% of known value
Others[b]	—	20% of known value

[a] From EPA publication, "Environmental Radioactivity Laboratory Intercomparison Studies Program, Fiscal Year, 1981-1982, EPA-600/4-81-004.

[b] Laboratory limit.

TABLE IV-1. Interlaboratory Comparison Crosscheck program, Environmental Resource Associates (ERA)[a].

Lab Code	Date	Analysis	Concentration (pCi/L) Laboratory Result[b]	ERA Result[c]	Control Limits
STW-1005	02/17/04	Sr-89	36.5 ± 6.5	44.9 ± 4.5	36.2 - 53.6
STW-1005	02/17/04	Sr-90	13.4 ± 0.8	11.6 ± 1.2	2.9 - 20.3
STW-1006	02/17/04	Ba-133	60.9 ± 2.8	63.2 ± 6.3	52.3 - 74.1
STW-1006	02/17/04	Co-60	95.2 ± 1.5	96.4 ± 9.6	87.7 - 105.0
STW-1006	02/17/04	Cs-134	71.2 ± 5.4	75.8 ± 7.6	67.1 - 84.5
STW-1006	02/17/04	Cs-137	157.0 ± 6.5	155.0 ± 15.5	142.0 - 168.0
STW-1006	02/17/04	Zn-65	103.0 ± 1.1	102.0 ± 10.2	84.4 - 120.0
STW-1007	02/17/04	Gr. Alpha	15.6 ± 1.2	16.6 ± 1.7	7.9 - 25.3
STW-1007	02/17/04	Gr. Beta	46.3 ± 4.4	41.5 ± 4.2	32.8 - 50.2
STW-1008	02/17/04	Ra-226	8.7 ± 0.2	9.3 ± 0.0	6.9 - 11.7
STW-1008	02/17/04	Ra-228	16.6 ± 0.4	18.2 ± 1.8	10.3 - 26.1
STW-1008	02/17/04	Uranium	34.2 ± 0.8	33.0 ± 3.3	27.8 - 38.2
STW-1015	05/18/04	Sr-89	39.7 ± 3.3	45.9 ± 5.0	37.2 - 54.6
STW-1015	05/18/04	Sr-90	12.4 ± 0.9	11.6 ± 5.0	2.9 - 20.3
STW-1016	05/18/04	Ba-133	96.9 ± 2.4	101.0 ± 10.1	83.5 - 118.0
STW-1016	05/18/04	Co-60	39.9 ± 0.5	41.6 ± 5.0	32.9 - 50.3
STW-1016	05/18/04	Cs-134	48.8 ± 0.8	50.5 ± 5.0	41.8 - 59.2
STW-1016	05/18/04	Cs-137	82.6 ± 2.3	82.5 ± 5.0	73.8 - 91.2
STW-1016	05/18/04	Zn-65	77.5 ± 1.5	75.2 ± 7.5	62.2 - 88.2
STW-1017	05/18/04	Gr. Alpha	32.4 ± 2.1	38.8 ± 9.7	22.0 - 55.6
STW-1017	05/18/04	Gr. Beta	63.4 ± 3.5	59.6 ± 10.0	42.3 - 76.9
STW-1018	05/18/04	I-131	25.2 ± 0.4	25.1 ± 3.0	19.9 - 30.3
STW-1019	05/18/04	Ra-226	16.0 ± 1.1	17.3 ± 2.6	12.8 - 21.8
STW-1019	05/18/04	Ra-228	12.6 ± 0.9	10.3 ± 2.6	5.8 - 14.8
STW-1019	05/18/04	Uranium	13.0 ± 0.0	12.7 ± 3.0	7.5 - 17.9
STW-1020	05/18/04	H-3	32043 ± 166	30900 ± 3090	25600 - 36200
STW-1028	08/17/04	Sr-89	16.1 ± 1.9	20.0 ± 2.0	11.3 - 28.7
STW-1028	08/17/04	Sr-90	13.4 ± 0.1	13.6 ± 1.4	4.9 - 22.3
STW-1029	08/17/04	Ba-133	30.2 ± 3.9	32.1 ± 3.2	23.4 - 40.8
STW-1029	08/17/04	Co-60	24.9 ± 1.9	24.0 ± 2.4	15.3 - 32.7
STW-1029	08/17/04	Cs-134	21.4 ± 3.4	21.6 ± 2.2	12.9 - 30.3
STW-1029	08/17/04	Cs-137	205.6 ± 4.3	193.0 ± 19.3	176.0 - 210.0
STW-1029	08/17/04	Zn-65	145.5 ± 3.0	143.0 ± 14.3	118.0 - 168.0
STW-1030	08/17/04	Gr. Alpha	47.7 ± 9.1	57.0 ± 5.7	32.3 - 81.7
STW-1030	08/17/04	Gr. Beta	28.1 ± 2.5	20.0 ± 2.0	11.3 - 28.7
STW-1030	08/17/04	Gr. Beta	28.1 ± 2.5	20.0 ± 2.0	11.3 - 28.7
STW-1031	08/17/04	Ra-226	6.9 ± 0.5	6.3 ± 0.6	4.6 - 7.9
STW-1031	08/17/04	Ra-228	13.1 ± 1.4	14.7 ± 1.5	8.3 - 21.1
STW-1031	08/17/04	Uranium	6.0 ± 0.1	6.2 ± 0.6	1.0 - 11.4

TABLE IV-1. Interlaboratory Comparison Crosscheck program, Environmental Resource Associates (ERA)[a].

Lab Code	Date	Analysis	Concentration (pCi/L) Laboratory Result[b]	ERA Result[c]	Control Limits
STW-1037	11/15/04	Sr-89	42.2 ± 3.5	45.7 ± 5.0	37.0 - 51.5
STW-1037	11/15/04	Sr-90	37.3 ± 1.3	36.6 ± 5.0	27.9 - 45.3
STW-1038	11/15/04	Ba-133	75.5 ± 0.8	78.4 ± 7.8	64.8 - 92.0
STW-1038	11/15/04	Co-60	12.2 ± 0.7	11.7 ± 5.0	3.0 - 20.4
STW-1038	11/15/04	Cs-134	43.6 ± 0.5	42.9 ± 5.0	34.2 - 51.6
STW-1038	11/15/04	Cs-137	59.5 ± 2.9	60.1 ± 5.0	51.4 - 68.8
STW-1038	11/15/04	Zn-65	50.7 ± 3.2	50.9 ± 5.1	42.1 - 59.7
STW-1039	11/15/04	Gr. Alpha	23.9 ± 2.2	31.7 ± 7.9	18.0 - 45.4
STW-1039	11/15/04	Gr. Beta	35.8 ± 1.3	36.3 ± 5.0	27.6 - 45.0
STW-1040	11/15/04	I-131	22.4 ± 1.9	22.0 ± 5.0	16.9 - 27.3
STW-1041	11/15/04	Ra-226	9.8 ± 0.4	9.2 ± 1.4	6.8 - 11.6
STW-1041	11/15/04	Ra-228	8.6 ± 0.3	7.1 ± 1.8	7.0 - 10.2
STW-1041	11/15/04	Uranium	11.1 ± 0.3	11.4 ± 3.0	6.2 - 16.6
STW-1042	11/15/04	H-3	21218.0 ± 285.0	20700.0 ± 2070.0	17100.0 - 24300.0

[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.

TABLE IV-2. Crosscheck program results; Thermoluminescent Dosimetry, (TLDs).

Lab Code	TLD Type	Date	Description	mR Known Value	mR Lab Result ± 2 sigma	Control Limits
Environmental, Inc.						
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 120	4.69	4.74 ± 0.54	3.28 - 6.10
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 150	3.00	3.02 ± 0.20	2.10 - 3.90
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 180	2.08	1.89 ± 0.45	1.46 - 2.70
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 180	2.08	2.11 ± 0.22	1.46 - 2.70
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 30	75.00	84.40 ± 4.87	52.50 - 97.50
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 60	18.75	19.11 ± 1.86	13.13 - 24.38
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 60	18.75	22.82 ± 5.41	13.13 - 24.38
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 90	8.33	9.05 ± 1.17	5.83 - 10.83
2003-1	CaSO4: Dy Cards	8/8/2003	Reader 1, 90	8.33	7.60 ± 1.08	5.83 - 10.83
Environmental, Inc.						
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 30	61.96	73.50 ± 2.58	43.37 - 80.55
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 60	15.49	19.70 ± 0.51	10.84 - 20.14
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 60	15.49	16.93 ± 1.37	10.84 - 20.14
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 90	6.88	8.06 ± 0.60	4.82 - 8.94
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 90	6.88	6.64 ± 0.58	4.82 - 8.94
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 120	3.87	4.39 ± 0.17	2.71 - 5.03
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 150	2.48	2.34 ± 0.18	1.74 - 3.22
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 150	2.48	2.51 ± 0.16	1.74 - 3.22
2003-2	CaSO4: Dy Cards	1/12/2004	Reader 1, 180	1.72	2.01 ± 0.13	1.20 - 2.24
Environmental, Inc.						
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 30 cm	55.23	61.07 ± 4.38	38.66 - 71.80
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 30 cm	55.23	62.82 ± 1.75	38.66 - 71.80
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 60 cm	13.81	14.10 ± 0.56	9.67 - 17.95
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 60 cm	13.81	14.03 ± 0.48	9.67 - 17.95
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 90 cm	6.14	5.97 ± 0.21	4.30 - 7.98
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 90 cm	6.14	6.26 ± 0.14	4.30 - 7.98
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 120 cm	3.45	4.40 ± 0.63	2.42 - 4.49
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 150 cm	2.21	2.34 ± 0.12	1.55 - 2.87
2004-1	CaSO4: Dy Cards	7/12/2004	Reader 1, 180 cm	1.53	1.65 ± 0.02	1.07 - 1.99

TABLE IV-3. In-House "Spike" Samples

Lab Code	Sample Type	Date	Analysis	Concentration (pCi/L)[a] Laboratory results 2s, n=1[b]	Known Activity	Control Limits[c]
SPVE-707	Vegetation	2/20/2004	I-131(G)	5.68 ± 0.15	4.93	2.96 - 6.90
SPCH-711	Charcoal	2/20/2004	I-131(G)	6.35 ± 0.11	6.94	0.00 - 16.94
SPW-721	water	2/20/2004	Ni-63	161.00 ± 13.20	169.00	101.40 - 236.60
SPAP-733	Air Filter	2/25/2004	Gr. Beta	1.39 ± 0.02	1.48	0.00 - 11.48
SPW-735	water	2/25/2004	Cs-134	41.59 ± 7.02	39.10	29.10 - 49.10
SPW-735	water	2/25/2004	Cs-137	64.11 ± 7.39	64.56	54.56 - 74.56
SPW-735	water	2/25/2004	I-131	36.55 ± 0.48	40.08	28.08 - 52.08
SPW-735	water	2/25/2004	I-131	41.97 ± 8.93	40.08	28.08 - 52.08
SPMI-737	Milk	2/25/2004	Cs-134	37.40 ± 5.40	39.10	29.10 - 49.10
SPMI-737	Milk	2/25/2004	Cs-137	69.13 ± 9.58	64.56	54.56 - 74.56
SPMI-737	Milk	2/25/2004	I-131	45.03 ± 0.53	40.08	28.08 - 52.08
SPMI-737	Milk	2/25/2004	I-131	44.43 ± 9.22	40.08	28.08 - 52.08
SPW-1109	water	3/18/2004	Fe-55	39.98 ± 1.72	39.98	23.99 - 55.97
SPW-1496	water	4/7/2004	H-3	80006.60 ± 776.00	83896.00	67116.80 - 100675.20
SPMI-1683	Milk	4/16/2004	Sr-90	42.80 ± 1.81	43.43	34.74 - 52.12
SPW-1683	water	4/16/2004	I-131	54.47 ± 0.73	66.60	53.28 - 79.92
SPW-1683	water	4/16/2004	I-131(G)	65.82 ± 8.86	66.60	56.60 - 76.60
SPMI-1685	Milk	4/16/2004	Cs-134	33.60 ± 4.24	37.29	27.29 - 47.29
SPMI-1685	Milk	4/16/2004	Cs-137	61.77 ± 7.59	64.36	54.36 - 74.36
SPMI-1685	Milk	4/16/2004	I-131	65.85 ± 0.79	66.60	53.28 - 79.92
SPMI-1685	Milk	4/16/2004	I-131(G)	75.56 ± 11.86	66.60	56.60 - 76.60
SPMI-1685	Milk	4/16/2004	Sr-90	42.56 ± 1.66	43.43	34.74 - 52.12
SPW-1686	water	4/16/2004	Cs-134	39.31 ± 4.35	37.29	27.29 - 47.29
SPW-1686	water	4/16/2004	Cs-137	67.73 ± 7.92	64.36	54.36 - 74.36
SPVE-1862	Vegetation	4/26/2004	I-131(G)	1.32 ± 0.03	1.12	0.67 - 1.57
SPCH-1886	Charcoal	4/26/2004	I-131(G)	2.90 ± 0.07	2.80	1.68 - 3.92
SPAP-1888	Air Filter	4/27/2004	Gr. Beta	1.35 ± 0.02	1.48	0.00 - 11.48
SPF-1917	Fish	4/29/2004	Cs-134	1.44 ± 0.04	1.47	0.88 - 2.06
SPF-1917	Fish	4/29/2004	Cs-137	1.33 ± 0.06	1.29	0.77 - 1.81
SPW-3151	water	6/24/2004	Fe-55	33.85 ± 1.61	37.32	22.39 - 52.25
SPW-4232	water	8/4/2004	H-3	80225.00 ± 785.00	82380.00	65904.00 - 98856.00
SPAP-4234	Air Filter	8/4/2004	Gr. Beta	1.63 ± 0.02	1.46	0.00 - 11.46
SPW-5712	water	10/6/2004	Cs-134	61.04 ± 2.51	63.61	53.61 - 73.61
SPW-5712	water	10/6/2004	Cs-137	62.01 ± 2.76	63.66	53.66 - 73.66
SPW-5712	water	10/6/2004	Sr-90	48.40 ± 2.00	42.94	34.35 - 51.53
SPMI-5714	Milk	10/6/2004	Sr-90	41.61 ± 1.57	42.94	34.35 - 51.53

TABLE IV-3. In-House "Spike" Samples

Lab Code	Sample Type	Date	Analysis	Concentration (pCi/L) Laboratory results 2s, n=1[b]	Known Activity	Control Limits[c]
SPMI-7418	Milk	12/22/2004	Cs-134	59.09 ± 2.59	59.25	49.25 - 69.25
SPMI-7418	Milk	12/22/2004	Cs-137	65.45 ± 5.61	63.35	53.35 - 73.35
SPW-7420	water	12/22/2004	Cs-134	58.42 ± 1.99	59.25	49.25 - 69.25
SPW-7420	water	12/22/2004	Cs-137	64.26 ± 4.18	63.35	53.35 - 73.35
SPW-7420	water	12/22/2004	Sr-89	105.26 ± 4.21	103.47	82.78 - 124.16
SPW-7420	water	12/22/2004	Sr-90	48.24 ± 1.70	42.72	34.18 - 51.26
SPAP-7437	Air Filter	12/22/2004	Gr. Beta	1.65 ± 0.02	1.45	0.00 - 11.45
SPF-7524	Fish	12/29/2004	Cs-134	1.11 ± 0.03	1.27	0.76 - 1.78
SPF-7524	Fish	12/29/2004	Cs-137	1.21 ± 0.05	1.19	0.71 - 1.67
SPW-7526	water	12/29/2004	H-3	78615.70 ± 773.70	80543.00	64434.40 - 96651.60
SPW-7532	water	12/29/2004	Fe-55	30894.00 ± 1484.00	32752.00	26201.60 - 39302.40
SPW-7540	water	12/29/2004	Tc-99	30.28 ± 1.11	32.98	20.98 - 44.98

[a] Liquid sample results are reported in pCi/Liter, air filters (pCi/m3), charcoal (pCi/m^3), and solid samples (pCi/g).
[b] Results are based on single determinations.
[c] Control limits are based on Attachment A, Page A2 of this report.

NOTE: For fish, Jello is used for the Spike matrix. For Vegetation, cabbage is used for the Spike matrix.

TABLE IV-4. In-House "Blank" Samples

Lab Code	Sample Type	Date	Analysis	Concentration (pCi/L)[a]		
				Laboratory results (4.66σ)		Acceptance
				LLD	Activity[b]	Criteria (4.66 σ)
SPCH-712	Charcoal	2/20/2004	I-131(G)	2.24		9.6
SPW-722	Water	2/20/2004	Ni-63	2.64	-0.78 ± 1.58	20
SPAP-734	Air Filter	2/25/2004	Gr. Beta	0.96	-1.02 ± 0.42	3.2
SPW-736	Water	2/25/2004	Cs-134	2.47		10
SPW-736	Water	2/25/2004	Cs-137	1.91		10
SPW-736	Water	2/25/2004	I-131	0.15	-0.031 ± 0.10	0.5
SPW-736	Water	2/25/2004	I-131(G)	3.24		20
SPMI-738	Milk	2/25/2004	Cs-134	2.54		10
SPMI-738	Milk	2/25/2004	Cs-137	5.34		10
SPMI-738	Milk	2/25/2004	I-131	0.16	-0.071 ± 0.10	0.5
SPMI-738	Milk	2/25/2004	I-131(G)	5.36		20
SPW-1110	Water	3/18/2004	Fe-55	772.70	168.4 ± 480.90	1000
SPW-1497	Water	4/7/2004	H-3	152.30	81.4 ± 79.40	200
SPW-1684	Water	4/16/2004	Cs-134	2.43		10
SPW-1684	Water	4/16/2004	Cs-137	2.53		10
SPW-1684	Water	4/16/2004	I-131	0.50	0.21 ± 0.26	0.5
SPW-1684	Water	4/16/2004	I-131(G)	4.49		20
SPW-1684	Water	4/16/2004	Sr-89	0.64	0.19 ± 0.52	5
SPW-1684	Water	4/16/2004	Sr-90	0.64	0.13 ± 0.31	1
SPMI-1686	Milk	4/16/2004	Cs-134	5.00		10
SPMI-1686	Milk	4/16/2004	Cs-137	4.16		10
SPMI-1686	Milk	4/16/2004	I-131	0.45	0.13 ± 0.24	0.5
SPMI-1686	Milk	4/16/2004	I-131(G)	6.53		20
SPMI-1686	Milk	4/16/2004	Sr-89	0.71	0.11 ± 0.70	5
SPMI-1686	Milk	4/16/2004	Sr-90	0.71	0.66 ± 0.40	1
SPVE-1863	Vegetation	4/26/2004	I-131(G)	3.55		20
SPCH-1887	Charcoal	4/26/2004	I-131(G)	7.04		9.6
SPAP-1889	Air Filter	4/27/2004	Gr. Beta	0.74	-0.96 ± 0.35	3.2
SPF-1918	Fish	4/29/2004	Cs-134	7.13		100
SPF-1918	Fish	4/29/2004	Cs-137	6.59		100
SPW-3152	Water	6/24/2004	Fe-55	790.30	-70.0 ± 474.50	1000
SPW-4233	Water	8/4/2004	H-3	154.23	102.67 ± 81.38	200
SPAP-4235	Air Filter	8/4/2004	Gr. Beta	0.96	-0.99 ± 0.38	3.2
SPW-5711	Water	10/6/2004	Co-60	4.26		10
SPW-5711	Water	10/6/2004	Cs-134	6.02		10
SPW-5711	Water	10/6/2004	Cs-137	5.28		10
SPW-5711	Water	10/6/2004	Sr-90	0.61	-0.13 ± 0.27	1

TABLE IV-4. In-House "Blank" Samples

Lab Code	Sample Type	Date	Analysis	Concentration (pCi/L)[a] Laboratory results (4.66σ) LLD	Activity[b]	Acceptance Criteria (4.66 σ)
SPMI-5713	Milk	10/6/2004	Cs-134	4.60		10
SPMI-5713	Milk	10/6/2004	Cs-137	5.81		10
SPMI-5713	Milk	10/6/2004	I-131(G)	6.07		20
SPMI-5713	Milk	10/6/2004	Sr-90	0.68	1.4 ± 0.45	1
SPMI-7419	Milk	12/22/2004	Cs-134	8.66		10
SPMI-7419	Milk	12/22/2004	Cs-137	5.61		10
SPMI-7419	Milk	12/22/2004	Sr-90	0.82	1.67 ± 0.48	1
SPW-7421	Water	12/22/2004	Sr-89	1.21	0.58 ± 0.94	5
SPW-7421	Water	12/22/2004	Sr-90	0.82	0.26 ± 0.41	1
SPAP-7438	Air Filter	12/22/2004	Gr. Beta	0.93	-0.78 ± 0.40	3.2
SPF-7525	Fish	12/29/2004	Cs-134	8.27		100
SPF-7525	Fish	12/29/2004	Cs-137	10.60		100
SPW-7526	Water	12/29/2004	H-3	164.80	-47.0 ± 84.60	200
SPW-7533	Water	12/29/2004	Fe-55	753.00	118.6 ± 465.80	1000
SPW-7535	Water	12/29/2004	Ni-63	13.10	4.3 ± 8.10	20
SPW-7540	Water	12/29/2004	Tc-99	1.19	-0.036 ± 0.72	10

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/filter), charcoal (pCi/charcoal canister), and solid samples (pCi/kg).

[b] Activity reported is a net activity result. For gamma spectroscopic analysis, activity detected below the LLD value is not reportec

[c] I-131(G); Iodine-131 as analyzed by gamma spectroscopy.

[d] Low levels of Sr-90 are still detected in the environment. A concentration of (1-5 pCi/L) in milk is not unusual.

TABLE IV-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result
E-30, 31	1/5/2004	Gr. Beta	1.27 ± 0.06	1.26 ± 0.05	1.27 ± 0.04
E-30, 31	1/5/2004	K-40	1.33 ± 0.21	1.11 ± 0.20	1.22 ± 0.15
WW-58, 59	1/5/2004	Gr. Beta	4.20 ± 1.33	4.46 ± 1.34	4.33 ± 0.94
WW-58, 59	1/5/2004	K-40	2.30 ± 0.23	2.70 ± 0.27	2.50 ± 0.18
TD-7889, 7890	1/5/2004	H-3	16582.00 ± 366.00	16060.00 ± 360.00	16321.00 ± 256.69
MI-79, 80	1/7/2004	K-40	1451.50 ± 125.90	1383.60 ± 115.50	1417.55 ± 85.43
MI-79, 80	1/7/2004	Sr-90	0.90 ± 0.31	1.05 ± 0.34	0.97 ± 0.23
S-100, 101	1/13/2004	Cs-137	8.50 ± 0.23	8.52 ± 0.21	8.51 ± 0.16
SW-225, 226	1/13/2004	Gr. Alpha	2.62 ± 1.26	2.05 ± 1.16	2.34 ± 0.86
SW-225, 226	1/13/2004	Gr. Beta	6.37 ± 1.15	4.92 ± 1.06	5.65 ± 0.78
U-304, 305	1/16/2004	Gr. Beta	5.18 ± 1.38	7.04 ± 1.53	6.11 ± 1.03
SW-345, 346	1/27/2004	I-131	1.32 ± 0.24	1.56 ± 0.21	1.44 ± 0.16
SWT-423, 424	1/27/2004	Gr. Beta	2.34 ± 0.54	2.38 ± 0.52	2.36 ± 0.38
SWU-469, 470	1/27/2004	Gr. Beta	2.99 ± 0.57	3.09 ± 0.67	3.04 ± 0.44
TD-545, 546	2/2/2004	H-3	658.40 ± 104.60	712.30 ± 106.60	685.35 ± 74.67
MI-524, 525	2/4/2004	K-40	1240.00 ± 147.90	1265.60 ± 166.30	1252.80 ± 111.28
MI-567, 568	2/9/2004	K-40	1322.90 ± 105.50	1340.80 ± 112.80	1331.85 ± 77.22
MI-567, 568	2/9/2004	Sr-90	0.98 ± 0.48	0.79 ± 0.42	0.89 ± 0.32
MI-588, 589	2/11/2004	K-40	1185.70 ± 157.80	1337.70 ± 160.00	1261.70 ± 112.36
SWU-778, 779	2/24/2004	Gr. Beta	2.55 ± 0.54	2.53 ± 0.56	2.54 ± 0.39
LW-1014, 1015	3/1/2004	Gr. Beta	1.78 ± 0.56	2.06 ± 0.57	1.92 ± 0.40
SW-966, 967	3/9/2004	Gr. Alpha	2.70 ± 1.43	2.96 ± 1.63	2.83 ± 1.08
SW-966, 967	3/9/2004	Gr. Beta	8.06 ± 1.20	7.33 ± 1.21	7.69 ± 0.85
SW-966, 967	3/9/2004	H-3	182.04 ± 86.24	198.87 ± 86.97	190.45 ± 61.24
SW-1249, 1250	3/31/2004	Gr. Beta	4.71 ± 1.11	5.25 ± 1.10	4.98 ± 0.78
LW-1464, 1465	3/31/2004	Gr. Beta	2.13 ± 0.52	2.39 ± 0.53	2.26 ± 0.37
AP-1633, 1634	3/31/2004	Be-7	0.05 ± 0.02	0.05 ± 0.02	0.05 ± 0.01
AP-1714, 1715	3/31/2004	Be-7	0.04 ± 0.01	0.05 ± 0.01	0.05 ± 0.01
TD-1489, 1490	4/1/2004	H-3	681.00 ± 110.00	709.00 ± 111.00	695.00 ± 78.14
SWT-1299, 1300	4/2/2004	Gr. Beta	3.13 ± 0.57	3.64 ± 0.60	3.39 ± 0.41
DW-1420, 1421	4/2/2004	Gr. Beta	1.29 ± 0.83	1.62 ± 0.87	1.46 ± 0.60
DW-1510, 1511	4/2/2004	I-131	0.68 ± 0.27	0.62 ± 0.36	0.65 ± 0.23
BS-1537, 1538	4/6/2004	Gr. Beta	6.81 ± 1.20	6.76 ± 1.23	6.78 ± 0.86
WW-1654, 1655	4/13/2004	Gr. Beta	6.83 ± 1.17	5.60 ± 1.12	6.21 ± 0.81
LW-1680, 1681	4/13/2004	Gr. Beta	2.45 ± 0.64	2.93 ± 0.62	2.69 ± 0.45
MI-1735, 1736	4/14/2004	K-40	1384.90 ± 182.00	1408.20 ± 187.90	1396.55 ± 130.80
MI-1802, 1803	4/19/2004	K-40	1327.50 ± 109.10	1206.30 ± 113.30	1266.90 ± 78.64
MI-1802, 1803	4/19/2004	Sr-90	0.72 ± 0.40	0.77 ± 0.41	0.74 ± 0.28
U-1781, 1782	4/21/2004	Gr. Alpha	0.20 ± 1.90	-0.30 ± 2.40	-0.05 ± 1.53
SWT-1933, 1934	4/27/2004	Gr. Beta	2.60 ± 0.55	2.33 ± 0.52	2.46 ± 0.38
F-1912, 1913	4/29/2004	H-3	8875.00 ± 250.00	9119.00 ± 253.00	8997.00 ± 177.84
F-1912, 1913	4/29/2004	K-40	3406.90 ± 533.30	3550.60 ± 581.40	3478.75 ± 394.47
LW-1960, 1961	4/29/2004	Gr. Beta	2.23 ± 0.55	2.38 ± 0.57	2.31 ± 0.40

TABLE IV-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result
BS-2083, 2084	5/3/2004	Be-7	1.10 ± 0.44	1.17 ± 0.20	1.14 ± 0.24
BS-2083, 2084	5/3/2004	Gr. Beta	28.44 ± 2.27	25.56 ± 2.04	27.00 ± 1.53
BS-2083, 2084	5/3/2004	K-40	6.75 ± 0.89	6.35 ± 0.53	6.55 ± 0.52
BS-2083, 2084	5/3/2004	Sr-90	0.12 ± 0.04	0.17 ± 0.05	0.15 ± 0.03
MI-2225, 2226	5/11/2004	K-40	1396.30 ± 124.20	1227.60 ± 125.40	1311.95 ± 88.25
SW-2267, 2268	5/11/2004	Gr. Alpha	2.95 ± 1.44	2.41 ± 1.37	2.68 ± 0.99
SW-2267, 2268	5/11/2004	Gr. Beta	6.80 ± 1.18	7.25 ± 1.21	7.03 ± 0.84
MI-2437, 2438	5/17/2004	K-40	1549.00 ± 123.40	1566.20 ± 118.60	1557.60 ± 85.58
MI-2437, 2438	5/17/2004	Sr-90	1.83 ± 0.44	1.99 ± 0.42	1.91 ± 0.30
F-2413, 2414	5/20/2004	K-40	2844.60 ± 550.40	2963.00 ± 532.30	2903.80 ± 382.85
SO-2578, 2579	5/26/2004	Cs-137	0.16 ± 0.02	0.21 ± 0.05	0.18 ± 0.03
SO-2578, 2579	5/26/2004	Gr. Beta	28.07 ± 3.24	28.73 ± 3.00	28.40 ± 2.21
SO-2578, 2579	5/26/2004	K-40	19.41 ± 0.78	18.93 ± 1.04	19.17 ± 0.65
SS-2603, 2604	5/26/2004	Cs-137	0.06 ± 0.02	0.06 ± 0.02	0.06 ± 0.02
SS-2603, 2604	5/26/2004	K-40	10.18 ± 0.63	10.43 ± 0.56	10.30 ± 0.42
G-2677, 2678	6/1/2004	Be-7	1.31 ± 0.25	1.25 ± 0.23	1.28 ± 0.17
G-2677, 2678	6/1/2004	Gr. Beta	5.73 ± 0.12	5.86 ± 0.12	5.79 ± 0.09
G-2677, 2678	6/1/2004	K-40	5.56 ± 0.49	5.78 ± 0.50	5.67 ± 0.35
G-2677, 2678	6/1/2004	Sr-90	0.01 ± 0.00	0.01 ± 0.01	0.01 ± 0.00
DW-2700, 2701	6/1/2004	Gr. Beta	1.82 ± 1.01	2.66 ± 0.94	2.24 ± 0.69
TD-2876, 2877	6/1/2004	H-3	13116.00 ± 324.00	12746.00 ± 320.00	12931.00 ± 227.69
MI-2724, 2725	6/3/2004	K-40	1509.00 ± 116.10	1489.20 ± 126.10	1499.10 ± 85.70
MI-2724, 2725	6/3/2004	Sr-90	1.64 ± 0.46	1.81 ± 0.44	1.73 ± 0.32
BS-2921, 2922	6/3/2004	K-40	8.32 ± 0.63	8.55 ± 0.62	8.44 ± 0.44
TD-2876, 2877	6/4/2004	H-3	13116.00 ± 324.00	12746.00 ± 320.00	12931.00 ± 227.69
BS-2897, 2898	6/4/2004	Gr. Beta	9.31 ± 1.43	8.82 ± 1.39	9.06 ± 1.00
SWU-3092, 3093	6/9/2004	Gr. Beta	1.95 ± 0.71	2.55 ± 0.76	2.25 ± 0.52
CF-2986, 2987	6/14/2004	Be-7	0.69 ± 0.12	0.84 ± 0.19	0.76 ± 0.11
CF-2986, 2987	6/14/2004	K-40	4.50 ± 0.32	3.82 ± 0.48	4.16 ± 0.29
MI-2977, 2978	6/15/2004	K-40	1486.70 ± 120.10	1291.60 ± 167.40	1389.15 ± 103.01
MI-3007, 3008	6/15/2004	K-40	1333.90 ± 121.30	1355.80 ± 176.50	1344.85 ± 107.08
W-3031, 3032	6/18/2004	H-3	642.00 ± 108.00	562.00 ± 105.00	602.00 ± 75.31
W-3071, 3072	6/21/2004	H-3	273.00 ± 94.00	203.00 ± 92.00	238.00 ± 65.76
SW-3145, 3146[b]	6/22/2004	I-131	0.97 ± 0.20	1.43 ± 0.20	1.20 ± 0.14
DW-3278, 3279	6/25/2004	I-131	0.67 ± 0.26	0.48 ± 0.25	0.57 ± 0.18
AP-3922, 3923	6/28/2004	Be-7	0.08 ± 0.01	0.07 ± 0.01	0.07 ± 0.01
AP-3637, 3638	6/29/2004	Be-7	0.08 ± 0.01	0.07 ± 0.01	0.07 ± 0.01
LW-3589, 3590	6/30/2004	Gr. Alpha	0.28 ± 0.55	1.29 ± 0.89	0.79 ± 0.53
LW-3589, 3590	6/30/2004	Gr. Beta	1.91 ± 0.64	2.86 ± 0.70	2.39 ± 0.48
LW-3589, 3590	6/30/2004	H-3	8369.20 ± 262.57	8226.01 ± 260.51	8297.61 ± 184.94
AP-3943, 3944	6/30/2004	Be-7	0.08 ± 0.02	0.09 ± 0.02	0.08 ± 0.01

TABLE IV-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result
E-3327, 3328	7/1/2004	Gr. Beta	1.21 ± 0.06	1.35 ± 0.07	1.28 ± 0.05
E-3327, 3328	7/1/2004	K-40	1.08 ± 0.20	1.30 ± 0.22	1.19 ± 0.15
G-3377, 3378	7/1/2004	Be-7	1.10 ± 0.13	1.16 ± 0.16	1.13 ± 0.10
G-3377, 3378	7/1/2004	Gr. Beta	6.42 ± 0.19	6.28 ± 0.19	6.35 ± 0.13
G-3377, 3378	7/1/2004	K-40	5.26 ± 0.31	5.36 ± 0.28	5.31 ± 0.21
VE-3681, 3682	7/13/2004	K-40	2.65 ± 0.45	2.90 ± 0.61	2.77 ± 0.38
CF-3707, 3708	7/13/2004	Be-7	1.97 ± 0.44	2.11 ± 0.25	2.04 ± 0.25
CF-3707, 3708	7/13/2004	K-40	5.39 ± 0.44	4.98 ± 0.42	5.19 ± 0.30
SW-3773, 3774	7/14/2004	H-3	10697.20 ± 295.70	10689.60 ± 295.70	10693.40 ± 209.09
LW-3849, 3850	7/14/2004	Gr. Beta	2.21 ± 0.54	2.32 ± 0.65	2.27 ± 0.42
SWU-4307, 4308	7/14/2004	Gr. Beta	3.49 ± 0.57	3.68 ± 0.61	3.59 ± 0.42
MI-4051, 4052	7/28/2004	K-40	1190.70 ± 204.60	1357.00 ± 145.90	1273.85 ± 125.65
VE-4079, 4080	7/28/2004	K-40	4.90 ± 0.51	4.62 ± 0.61	4.76 ± 0.40
MI-4163, 4164	7/28/2004	K-40	1422.40 ± 186.50	1330.80 ± 181.00	1376.60 ± 129.95
MI-4163, 4164	7/28/2004	Sr-90	0.87 ± 0.32	1.00 ± 0.35	0.93 ± 0.24
WW-4387, 4388	8/3/2004	Gr. Beta	5.94 ± 0.76	6.28 ± 0.76	6.11 ± 0.54
MI-4286, 4287	8/4/2004	K-40	1435.20 ± 76.90	1404.70 ± 80.54	1419.95 ± 55.68
MI-4286, 4287	8/4/2004	Sr-90	1.88 ± 0.40	1.31 ± 0.35	1.59 ± 0.26
VE-4370, 4371	8/4/2004	H-3	0.54 ± 0.08	0.62 ± 0.08	0.58 ± 0.06
VE-4408, 4409	8/5/2004	K-40	2.03 ± 0.39	2.12 ± 0.32	2.08 ± 0.25
VE-4467, 4468	8/9/2004	K-40	6.28 ± 0.76	6.11 ± 0.75	6.20 ± 0.53
MI-4492, 4493	8/10/2004	K-40	1478.70 ± 116.70	1472.50 ± 105.10	1475.60 ± 78.53
MI-4492, 4493	8/10/2004	Sr-90	1.35 ± 0.40	1.08 ± 0.42	1.22 ± 0.29
MI-4518, 4519	8/11/2004	K-40	1197.30 ± 158.50	1350.20 ± 202.30	1273.75 ± 128.50
VE-4748, 4749	8/25/2004	Gr. Beta	2.31 ± 0.05	2.32 ± 0.05	2.31 ± 0.04
VE-4748, 4749	8/25/2004	K-40	1.70 ± 0.25	1.94 ± 0.31	1.82 ± 0.20
LW-4769, 4770	8/26/2004	Gr. Beta	2.00 ± 0.58	2.07 ± 0.58	2.04 ± 0.41
ME-4905, 4906	9/1/2004	Gr. Beta	3.06 ± 0.10	2.93 ± 0.10	3.00 ± 0.07
ME-4905, 4906	9/1/2004	K-40	2.33 ± 0.67	3.26 ± 0.58	2.80 ± 0.44
MI-4926, 4927	9/1/2004	K-40	1316.20 ± 115.40	1285.80 ± 117.30	1301.00 ± 82.27
MI-4926, 4927	9/1/2004	Sr-90	3.62 ± 0.52	2.07 ± 0.43	2.84 ± 0.34
VE-5027, 5028	9/2/2004	Gr. Beta	2.43 ± 0.07	2.39 ± 0.06	2.41 ± 0.05
VE-5027, 5028	9/2/2004	K-40	1.77 ± 0.20	1.94 ± 0.31	1.86 ± 0.18
SW-5003, 5004	9/7/2004	I-131	1.69 ± 0.23	1.50 ± 0.25	1.59 ± 0.17
MI-5050, 5051	9/7/2004	K-40	1559.40 ± 131.80	1560.70 ± 121.20	1560.05 ± 89.53
MI-5050, 5051	9/7/2004	Sr-90	2.26 ± 0.52	1.61 ± 0.47	1.94 ± 0.35
WW-5072, 5073	9/7/2004	Gr. Beta	4.31 ± 0.70	4.11 ± 0.69	4.21 ± 0.49
SW-5216, 5217	9/14/2004	Gr. Alpha	4.34 ± 1.71	4.30 ± 1.77	4.32 ± 1.23
SW-5216, 5217	9/14/2004	Gr. Beta	7.97 ± 1.24	8.58 ± 1.29	8.27 ± 0.89

TABLE IV-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result
G-5237, 5238	9/15/2004	Be-7	1.18 ± 0.23	1.28 ± 0.24	1.23 ± 0.17
G-5237, 5238	9/15/2004	K-40	7.16 ± 0.58	7.56 ± 0.55	7.36 ± 0.40
LW-5316, 5317	9/16/2004	Gr. Beta	2.76 ± 0.58	2.64 ± 0.54	2.70 ± 0.40
SS-5450, 5451	9/24/2004	K-40	10.33 ± 0.66	10.10 ± 0.74	10.22 ± 0.50
AP-6308, 6309	9/27/2004	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01
SWU-5495, 5496	9/28/2004	Gr. Beta	3.38 ± 1.78	4.41 ± 1.94	3.90 ± 1.32
AP-6070, 6071	9/28/2004	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01
G-5516, 5517	9/29/2004	Be-7	1.81 ± 0.29	1.74 ± 0.30	1.77 ± 0.21
G-5516, 5517	9/29/2004	K-40	7.35 ± 0.70	7.43 ± 0.62	7.39 ± 0.47
AP-6258, 6259	9/29/2004	Be-7	0.07 ± 0.01	0.07 ± 0.01	0.07 ± 0.01
F-7211, 7212	9/29/2004	Cs-137	0.04 ± 0.01	0.05 ± 0.02	0.05 ± 0.01
F-7211, 7212	9/29/2004	K-40	2.76 ± 0.27	3.07 ± 0.26	2.92 ± 0.19
BS-5902, 5903	10/1/2004	Co-60	0.25 ± 0.05	0.26 ± 0.03	0.25 ± 0.03
BS-5902, 5903	10/1/2004	Co-60	2.53 ± 0.11	2.52 ± 0.06	2.52 ± 0.06
E-5654, 5655	10/4/2004	Gr. Beta	1.40 ± 0.06	1.32 ± 0.06	1.36 ± 0.04
E-5654, 5655	10/4/2004	K-40	1.32 ± 0.26	1.22 ± 0.24	1.27 ± 0.18
MI-5676, 5677	10/4/2004	K-40	1311.00 ± 122.00	1398.00 ± 125.00	1354.50 ± 87.33
SO-5756, 5757	10/4/2004	Gr. Alpha	7.12 ± 3.09	6.69 ± 2.92	6.91 ± 2.13
SO-5756, 5757	10/4/2004	Gr. Beta	19.66 ± 2.63	22.32 ± 2.65	20.99 ± 1.87
SO-5756, 5757	10/4/2004	K-40	16.45 ± 0.86	17.52 ± 0.78	16.99 ± 0.58
VE-6483, 6484	10/6/2004	K-40	9.35 ± 0.55	9.88 ± 0.23	9.61 ± 0.30
MI-5923, 5924	10/12/2004	K-40	1333.60 ± 183.50	1552.40 ± 179.20	1443.00 ± 128.24
SS-6046, 6047	10/13/2004	Cs-137	0.02 ± 0.01	0.02 ± 0.01	0.02 ± 0.01
SS-6046, 6047	10/13/2004	Gr. Beta	7.93 ± 1.72	9.57 ± 1.88	8.75 ± 1.27
SS-6046, 6047	10/13/2004	K-40	5.77 ± 0.42	5.77 ± 0.40	5.77 ± 0.29
DW-6208, 6209	10/15/2004	I-131	0.89 ± 0.26	0.65 ± 0.27	0.77 ± 0.19
BS-6694, 6695	10/19/2004	K-40	11.84 ± 0.67	12.75 ± 0.79	12.29 ± 0.52
VE-6354, 6355	10/25/2004	Gr. Beta	4.82 ± 0.14	4.76 ± 0.14	4.79 ± 0.10
VE-6354, 6355	10/25/2004	K-40	4.71 ± 0.54	4.82 ± 0.61	4.77 ± 0.41
DW-6462, 6463	10/27/2004	Gr. Beta	8.46 ± 1.27	8.22 ± 1.24	8.34 ± 0.89
LW-6377, 6378	10/28/2004	Gr. Beta	2.18 ± 0.54	2.33 ± 0.53	2.25 ± 0.38
SS-6504, 6505	10/29/2004	K-40	9.28 ± 0.61	8.51 ± 0.78	8.89 ± 0.50
LW-6762, 6763	10/31/2004	Gr. Beta	1.85 ± 0.66	1.69 ± 0.64	1.77 ± 0.46
BS-6576, 6577	11/1/2004	Gr. Beta	11.02 ± 1.54	13.77 ± 1.77	12.40 ± 1.17
BS-6576, 6577	11/1/2004	K-40	9.43 ± 0.71	8.84 ± 0.68	9.14 ± 0.49
SO-6715, 6716	11/2/2004	Cs-137	0.29 ± 0.04	0.33 ± 0.06	0.31 ± 0.04
SO-6715, 6716	11/2/2004	Gr. Alpha	10.94 ± 3.95	14.72 ± 4.16	12.83 ± 2.87
SO-6715, 6716	11/2/2004	Gr. Beta	21.33 ± 3.10	24.82 ± 3.10	23.07 ± 2.19
SO-6715, 6716	11/2/2004	K-40	10.42 ± 0.71	12.16 ± 1.06	11.29 ± 0.64
VE-6673, 6674	11/8/2004	Gr. Alpha	0.07 ± 0.04	0.14 ± 0.05	0.11 ± 0.03
VE-6673, 6674	11/8/2004	Gr. Beta	4.50 ± 0.12	4.48 ± 0.12	4.49 ± 0.09
VE-6673, 6674	11/8/2004	K-40	4.05 ± 0.49	4.65 ± 0.55	4.35 ± 0.37

TABLE IV-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result
SO-6820, 6821	11/10/2004	K-40	14.41 ± 1.03	15.01 ± 1.09	14.71 ± 0.75
SO-6820, 6821	11/10/2004	Sr-90	0.04 ± 0.02	0.07 ± 0.02	0.06 ± 0.02
SWU-7160, 7161	11/30/2004	Gr. Beta	4.39 ± 1.98	3.09 ± 1.77	3.74 ± 1.33
MI-7062, 7063	12/1/2004	K-40	1456.00 ± 124.80	1640.50 ± 131.40	1548.25 ± 90.61
MI-7062, 7063	12/1/2004	Sr-90	1.13 ± 0.41	0.98 ± 0.43	1.06 ± 0.30
S-7281, 7282	12/5/2004	Cs-137	0.82 ± 0.15	1.16 ± 0.20	0.99 ± 0.12
VE-7343, 7344	12/13/2004	Gr. Beta	5.25 ± 0.14	5.08 ± 0.14	5.16 ± 0.10
VE-7343, 7344	12/13/2004	K-40	4.23 ± 0.71	4.33 ± 0.69	4.28 ± 0.49
MI-7317, 7318	12/14/2004	K-40	1702.80 ± 129.70	1536.80 ± 115.10	1619.80 ± 86.70
WW-7375, 7376	12/14/2004	Gr. Beta	14.13 ± 1.03	15.22 ± 1.06	14.68 ± 0.74
SWU-7507, 7508	12/14/2004	Gr. Beta	4.48 ± 0.66	5.31 ± 0.69	4.89 ± 0.48
DW-7563, 7564	12/27/2004	Gr. Beta	1.88 ± 0.51	2.34 ± 0.52	2.11 ± 0.37
P-7698, 7699	12/27/2004	H-3	246.01 ± 95.00	259.06 ± 95.51	252.53 ± 67.35
AP-7741, 7742	12/28/2004	Be-7	0.06 ± 0.02	0.05 ± 0.02	0.05 ± 0.01

Note: Duplicate analyses are performed on every twentieth sample received in-house. Results are not listed for those analyses with activities that measure below the LLD.

[a] Results are reported in units of pCi/L, except for air filters (pCi/Filter), food products, vegetation, soil, sediment (pCi/g).

[b] 600 minute count time or longer, resulting in lower error.

TABLE IV-6. Department of Energy's Mixed Analyte Performance Evaluation Program (MAPEP)[a].

Lab Code	Type	Date	Analysis	Concentration[b] Laboratory result	Known Activity	Control Limits[c]
STSO-1022	soil	05/01/04	Am-241	65.90 ± 4.50	66.97 ± 6.70	46.88 - 87.06
STSO-1022	soil	05/01/04	Co-57	388.90 ± 4.00	399.60 ± 40.00	279.72 - 519.48
STSO-1022	soil	05/01/04	Co-60	524.80 ± 7.10	518.00 ± 51.80	362.60 - 673.40
STSO-1022	soil	05/01/04	Cs-134	403.40 ± 4.60	414.40 ± 41.40	290.08 - 538.72
STSO-1022	soil	05/01/04	Cs-137	829.10 ± 7.60	836.20 ± 83.62	585.34 - 1088.00
STSO-1022	soil	05/01/04	K-40	620.60 ± 29.50	604.00 ± 60.40	422.80 - 785.20
STSO-1022	soil	05/01/04	Ni-63	254.80 ± 8.40	357.05 ± 35.70	249.94 - 464.17
STSO-1022 [d, e]	soil	05/01/04	Tc-99	59.00 ± 6.00	117.66 ± 11.78	82.36 - 152.96
STSO-1022 [d, f]	soil	05/01/04	U-233/4	24.70 ± 3.60	37.00 ± 3.70	25.90 - 48.40
STSO-1022 [d, f]	soil	05/01/04	U-238	24.20 ± 3.50	38.85 ± 3.90	27.20 - 50.51
STSO-1022	soil	05/01/04	Zn-65	743.00 ± 13.10	699.30 ± 69.90	489.51 - 909.09
STAP-1023	Air Filter	05/01/04	Gr. Alpha	0.06 ± 0.02	0.40 ± 0.04	0.00 - 0.80
STAP-1023	Air Filter	05/01/04	Gr. Beta	1.37 ± 0.08	1.20 ± 0.12	0.60 - 1.80
STAP-1024	Air Filter	05/01/04	Am-241	0.08 ± 0.03	0.10 ± 0.01	0.07 - 0.13
STAP-1024	Air Filter	05/01/04	Co-57	2.07 ± 0.06	2.40 ± 0.24	1.68 - 3.12
STAP-1024	Air Filter	05/01/04	Co-60	2.11 ± 0.08	2.30 ± 0.23	1.61 - 2.99
STAP-1024 [g]	Air Filter	05/01/04	Cs-134	1.78 ± 0.08	2.90 ± 0.29	2.03 - 3.77
STAP-1024	Air Filter	05/01/04	Cs-137	1.76 ± 0.08	2.00 ± 0.20	1.40 - 2.60
STAP-1024	Air Filter	05/01/04	Mn-54	2.84 ± 0.11	3.00 ± 0.30	2.10 - 3.90
STAP-1024	Air Filter	05/01/04	Pu-238	0.12 ± 0.01	0.13 ± 0.01	0.09 - 0.17
STAP-1024	Air Filter	05/01/04	Pu-239/40	0.08 ± 0.01	0.09 ± 0.01	0.06 - 0.12
STAP-1024	Air Filter	05/01/04	Sr-90	0.66 ± 0.19	0.80 ± 0.08	0.56 - 1.04
STAP-1024	Air Filter	05/01/04	U-233/4	0.23 ± 0.03	0.21 ± 0.02	0.15 - 0.27
STAP-1024	Air Filter	05/01/04	U-238	0.23 ± 0.03	0.22 ± 0.02	0.15 - 0.29
STAP-1024	Air Filter	05/01/04	Zn-65	3.90 ± 0.22	4.00 ± 0.40	2.80 - 5.20
STW-1026	water	05/01/04	Am-241	0.56 ± 0.07	0.60 ± 0.06	0.42 - 0.78
STW-1026	water	05/01/04	Co-57	184.10 ± 13.50	185.00 ± 18.50	129.50 - 240.50
STW-1026	water	05/01/04	Co-60	164.40 ± 11.70	163.00 ± 16.30	114.10 - 211.90
STW-1026	water	05/01/04	Cs-134	201.10 ± 14.00	208.00 ± 20.80	145.60 - 270.40
STW-1026	water	05/01/04	Cs-137	245.50 ± 15.80	250.00 ± 25.00	175.00 - 325.00
STW-1026	water	05/01/04	Fe-55	37.60 ± 25.30	33.00 ± 3.30	23.10 - 42.90
STW-1026	water	05/01/04	H-3	76.50 ± 5.40	83.00 ± 8.30	58.10 - 107.90
STW-1026	water	05/01/04	Mn-54	272.10 ± 17.50	267.00 ± 26.70	186.90 - 347.10
STW-1026	water	05/01/04	Ni-63	94.40 ± 3.20	100.00 ± 10.00	70.00 - 130.00
STW-1026	water	05/01/04	Pu-238	1.11 ± 0.09	1.20 ± 0.12	0.84 - 1.56
STW-1026	water	05/01/04	Pu-239/40	0.01 ± 0.01	0.00 ± 0.00	0.00 - 0.10
STW-1026	water	05/01/04	Sr-90	6.20 ± 1.10	7.00 ± 0.70	4.90 - 9.10
STW-1026	water	05/01/04	Tc-99	10.70 ± 1.00	10.00 ± 1.00	7.00 - 13.00

TABLE IV-6. Department of Energy's Mixed Analyte Performance Evaluation Program (MAPEP)[a].

			Concentration[b]			
Lab Code	Type	Date	Analysis	Laboratory result	Known Activity	Control Limits[c]
STW-1026	water	05/01/04	U-233/4	0.14 ± 0.02	0.12 ± 0.01	0.08 - 0.16
STW-1026	water	05/01/04	U-238	0.94 ± 0.05	0.90 ± 0.09	0.63 - 1.17
STW-1026	water	05/01/04	Zn-65	219.60 ± 27.90	208.00 ± 20.80	145.60 - 270.40
STW-1027	water	05/01/04	Gr. Alpha	1.20 ± 0.10	1.20 ± 0.12	0.00 - 2.40
STW-1027	water	05/01/04	Gr. Beta	4.30 ± 0.10	4.10 ± 0.41	2.05 - 6.15

[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] All results are in Bq/kg or Bq/L as requested by the Department of Energy.

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

[d] The cause of the deviation seems to be incomplete dissolution of the sample.

[e] A spiked soil sample was prepared. Known activity; 32.98 pCi/g; laboratory result 33.47 pCi/g.

[f] The sample was reanalyzed with the same results. Investigation is in progress.

[g] Based on the results of gamma emitting isotopes (Cs-137 and Co-60), the filter geometry appears to be biased by -10%. Addition of the summation peak at 1400 KeV results in a recalculation of 2.12 ± 0.15 Bq/sample.

TABLE IV-7. Environmental Measurements Laboratory Quality Assessment Program (EML)

Lab Code	Type	Date	Concentration[a] Analysis	Laboratory results	EML Result[b]	Control Limits[c]
STW-1009	water	03/01/04	Am-241	1.21 ± 0.02	1.31	0.66 - 1.56
STW-1009	water	03/01/04	Co-60	152.30 ± 0.30	163.20	0.87 - 1.17
STW-1009	water	03/01/04	Cs-137	50.40 ± 0.90	51.95	0.90 - 1.25
STW-1009	water	03/01/04	H-3	263.50 ± 10.00	186.60	0.69 - 1.91
STW-1009	water	03/01/04	Pu-238	1.03 ± 0.04	1.10	0.68 - 1.33
STW-1009	water	03/01/04	Pu-239/40	2.90 ± 0.10	3.08	0.62 - 1.38
STW-1009	water	03/01/04	Sr-90	5.20 ± 0.30	4.76	0.73 - 1.65
STW-1009	water	03/01/04	Uranium	4.35 ± 0.21	4.62	0.40 - 1.45
STW-1010	water	03/01/04	Gr. Alpha	208.00 ± 20.70	326.00	0.55 - 1.31
STW-1010	water	03/01/04	Gr. Beta	1063.00 ± 27.00	1170.00	0.75 - 1.65
STSO-1011	Soil	03/01/04	Am-241	14.10 ± 4.30	13.00	0.52 - 2.41
STSO-1011	Soil	03/01/04	Cs-137	1292.00 ± 13.00	1323.00	0.74 - 1.40
STSO-1011	Soil	03/01/04	K-40	563.00 ± 83.00	539.00	0.70 - 1.59
STSO-1011	Soil	03/01/04	Pu-239/40	20.70 ± 1.10	22.82	0.62 - 1.99
STSO-1011	Soil	03/01/04	Sr-90	72.10 ± 5.80	51.00	0.58 - 2.96
STSO-1011	Soil	03/01/04	Uranium	139.10 ± 10.20	180.22	0.27 - 1.48
STVE-1012	Vegetation	03/01/04	Am-241	4.50 ± 0.20	4.93	0.58 - 2.86
STVE-1012	Vegetation	03/01/04	Co-60	14.10 ± 0.40	14.47	0.64 - 1.49
STVE-1012	Vegetation	03/01/04	Cs-137	573.90 ± 6.00	584.67	0.75 - 1.48
STVE-1012	Vegetation	03/01/04	K-40	709.00 ± 19.30	720.00	0.45 - 1.51
STVE-1012	Vegetation	03/01/04	Pu-239/40	6.60 ± 0.50	6.81	0.60 - 1.98
STVE-1012	Vegetation	03/01/04	Sr-90	766.50 ± 51.30	734.00	0.50 - 1.37
STAP-1013	Air Filter	03/01/04	Am-241	0.11 ± 0.01	0.10	0.62 - 1.93
STAP-1013	Air Filter	03/01/04	Co-60	30.90 ± 1.08	35.40	0.74 - 1.25
STAP-1013[d]	Air Filter	03/01/04	Cs-134	12.30 ± 1.30	18.20	0.70 - 1.21
STAP-1013	Air Filter	03/01/04	Cs-137	24.90 ± 0.60	26.40	0.72 - 1.32
STAP-1013	Air Filter	03/01/04	Pu-238	0.04 ± 0.01	0.04	0.61 - 1.55
STAP-1013	Air Filter	03/01/04	Pu-239/40	0.17 ± 0.02	0.16	0.67 - 1.58
STAP-1013	Air Filter	03/01/04	Sr-90	1.80 ± 0.20	1.76	0.62 - 2.26
STAP-1013	Air Filter	03/01/04	Uranium	0.17 ± 0.01	0.17	0.79 - 2.88
STAP-1014	Air Filter	03/01/04	Gr. Alpha	1.09 ± 0.06	1.20	0.82 - 1.58
STAP-1014	Air Filter	03/01/04	Gr. Beta	2.68 ± 0.05	2.85	0.75 - 1.94

[a] Results are reported in Bq/L with the following exceptions: Air Filters (Bq/Filter), Soil and Vegetation (Bq/kg).

[b] The EML result listed is the mean of replicate determinations for each nuclide ± the standard error of the mean.

[c] Control limits are reported by EML as the ratio of Reported Value / EML value.

[d] Probable effect of summation peaks and slight difference in filter geometry.