Environmental, Inc.
Midwest Laboratory
an Allegheny Technologies Co.

700 Landwehr Road • Northbrook, IL 60062-2310
(847) 564-0700 fax (847) 564-4517

MONTHLY PROGRESS REPORT

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (REMP) FOR THE DAVIS-BESSE NUCLEAR POWER STATION OAK HARBOR, OHIO

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B. Grob, M.S.
Laboratory Manager

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TABLE OF CONTENTS

Section		Page
	List of Tables	ii
1.0	INTRODUCTION	v
2.0	LISTING OF MISSED SAMPLES	vi
3.0	DATA TABULATIONS	viii

Appendices

A	Interlaboratory Comparison Program Results	A-1
B	Data Reporting Conventions	B-1
C	Program Deviations	C-1

LIST OF TABLES

No.	Title	Page
1	Airborne particulates and iodine collected at Location T-1, analyses for gross beta and iodine-131	1-1
2	Airborne particulates and iodine collected at Location T-2, analyses for gross beta and iodine-131	2-1
3	Airborne particulates and iodine collected at Location T-3, analyses for gross beta and iodine-131	3-1
4	Airborne particulates and iodine collected at Location T-4, analyses for gross beta and iodine-131	4-1
5	Airborne particulates and iodine collected at Location T-7, analyses for gross beta and iodine-131	5-1
6	Airborne particulates and iodine collected at Location T-8, analyses for gross beta and iodine-131	6-1
7	Airborne particulates and iodine collected at Location T-9, analyses for gross beta and iodine-131	7-1
8	Airborne particulates and iodine collected at Location T-11, analyses for gross beta and iodine-131	8-1
9	Airborne particulates and iodine collected at Location T-12, analyses for gross beta and iodine-131	9-1
10	Airborne particulates and iodine collected at Location T-27, analyses for gross beta and iodine-131	10-1
11	Airborne particulate data, gross beta analysis, monthly averages, minima and maxima	11-1
12	Airborne particulate samples, quarterly composites by location, analyses for strontium-89, strontium-90 and gamma-emitting isotopes	12-1
13	Area monitors (TLD), quarterly	13-1
14	Area monitors (TLD), annual	14-1
15	Milk, analyses for strontium-89, strontium-90, iodine-131, gamma-emitting isotopes, calcium, stable potassium, and ratios of strontium-90 (pCi) per gram of calcium and cesium-137 (pCi) per gram of potassium	15-1

LIST OF TABLES (continued)

No.	Title	Page
16	Ground water, analyses for gross beta, tritium, strontium-89 and strontium-90 and gamma-emitting isotopes, quarterly collections,	16-1
17	Domestic meat, analysis for gamma-emitting isotopes	17-1
18	Wild meat, analysis for gamma-emitting isotopes	18-1
19	Green leafy vegetable, analyses for strontium-89, strontium-90, iodine-131 and gamma-emitting isotopes	19-1
20	Fruit, analyses for strontium-89, strontium-90, iodine-131 and gamma-emitting isotopes	20-1
21	Animal-wildlife feed, analysis for gamma-emitting isotopes	21-1
22	Soil, analysis for gamma-emitting isotopes	22-1
23	Treated surface water, monthly composites of weekly grab samples, analysis for gross beta	23-1
24	Treated surface water, quarterly composites of weekly grab samples, analyses for tritium, strontium-89, strontium-90 and gamma-emitting isotopes	24-1
25	Untreated surface water, monthly composites of weekly grab samples, analyses for gross beta, tritium and gamma-emitting isotopes	25-1
26	Untreated surface water, quarterly composites of weekly grab samples, analyses for strontium-89 and strontium-90	26-1
27	Untreated lakewater, monthly collection, analyses for gross beta, tritium and gamma-emitting isotopes	27-1
28	Fish, analyses for gross beta and gamma-emitting isotopes	28-1
29	Shoreline sediment, analysis for gamma-emitting isotopes	29-1
30	Eggs, analysis for gamma-emitting isotopes	30-1

LIST OF TABLES (continued)

The following tables are in the Appendices:

Appendix A

Attachment A: Acceptance criteria for spiked samples A-2

A-1 Interlaboratory Comparison Program Results A1-1

A-2 Interlaboratory Comparison Program Results, thermoluminescent dosimeters (TLD's) A2-1

A-3 Results of the analyses on in-house spiked samples A3-1

A-4 Results of the analyses on in-house "blank" samples A4-1

A-5 Results of the analyses on in-house "duplicate" samples A5-1

A-6 Mixed Analyte Performance Evaluation Program (MAPEP) A6-1

A-7 Environmental Measurement Laboratory Quality Assessment Program A7-1

Appendix B

B-1 Data Reporting Conventions B-2

Appendix C

C-1 Program Deviations C-2

1.0 INTRODUCTION

The following constitutes the current 2005 Monthly Progress Report for the Radiological Environmental Monitoring Program conducted at the Davis-Besse Nuclear Power Station in Oak Harbor, Ohio. Results of completed analyses are presented in the attached tables. Missing entries indicate analyses that are not yet completed.

All activities, except gross alpha and gross beta, are decay corrected to the time of collection.

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

2.0 LISTING OF MISSED SAMPLES

Sample Type	Location	Expected Collection Date	Reason
WW	T-225	01-07-05	Sample not available.
TLD	T-207	2nd Qtr.	TLD lost in the field. Returned in third quarter.
AP	T-01	07-26-05	Sampler pump failure.
TLD	T-41	3rd Qtr.	TLD lost in the field.
TLD	T-83	3rd Qtr.	TLD lost in the field.
TLD	T-41	Annual	TLD lost in the field.
TLD	T-81	Annual	TLD lost in the field.
TLD	T-83	Annual	TLD lost in the field.

3.0 DATA TABULATIONS

Table 1. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-1
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	314	0.027 ± 0.003	07-05-05	277	0.022 ± 0.004
01-11-05	313	0.019 ± 0.003	07-12-05	279	0.024 ± 0.004
01-18-05	313	0.021 ± 0.003	07-19-05	276	0.023 ± 0.004
01-25-05	313	0.021 ± 0.004	07-26-05		ND[b]
02-01-05	318	0.027 ± 0.003	08-02-05	277	0.019 ± 0.004
02-08-05	313	0.033 ± 0.004	08-09-05	284	0.053 ± 0.005
02-15-05	313	0.020 ± 0.003	08-16-05	278	0.027 ± 0.004
02-22-05	277	0.028 ± 0.004	08-23-05	289	0.025 ± 0.004
03-01-05	278	0.023 ± 0.004	08-30-05	293	0.035 ± 0.004
03-08-05	279	0.021 ± 0.004	09-06-05	279	0.020 ± 0.004
03-15-05	275	0.017 ± 0.004	09-13-05	241	0.037 ± 0.005
03-22-05	278	0.017 ± 0.003	09-20-05	291	0.042 ± 0.005
03-29-05	277	0.017 ± 0.003	09-27-05	282	0.036 ± 0.004
1st Quarter Mean ± s.d.		0.022 ± 0.005	3rd Quarter Mean ± s.d.		0.030 ± 0.010
04-05-05	280	0.016 ± 0.004	10-04-05	79	0.018 ± 0.010 [c]
04-12-05	282	0.020 ± 0.003	10-11-05	269	0.022 ± 0.004
04-19-05	277	0.027 ± 0.004	10-18-05	276	0.020 ± 0.004
04-26-05	276	0.017 ± 0.003	10-25-05	266	0.015 ± 0.003
05-03-05	280	0.018 ± 0.003	11-01-05	298	0.019 ± 0.004
05-10-05	262	0.031 ± 0.004	11-08-05	274	0.033 ± 0.004
05-17-05	264	0.014 ± 0.003	11-15-05	275	0.032 ± 0.004
05-24-05	273	0.021 ± 0.004	11-22-05	296	0.027 ± 0.004
05-31-05	279	0.015 ± 0.003	11-29-05	274	0.025 ± 0.004
06-07-05	269	0.019 ± 0.004	12-06-05	276	0.020 ± 0.004
06-14-05	264	0.023 ± 0.004	12-13-05	276	0.043 ± 0.005
06-21-05	282	0.008 ± 0.002	12-20-05	276	0.030 ± 0.004
06-28-05	282	0.030 ± 0.004	12-27-05	275	0.058 ± 0.005
			01-03-06	276	0.025 ± 0.004
2nd Quarter Mean ± s.d.		0.020 ± 0.007	4th Quarter Mean ± s.d.		0.028 ± 0.011
			Cumulative Average		0.025
			Previous Annual Average		0.022

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.
[b] ND = No data, air sampler pump failed.
[c] Low volume due to sampler pump failure, open fuse. Refer to Appendix C.

Table 2. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-2
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	288	0.028 ± 0.004	07-05-05	283	0.018 ± 0.004
01-11-05	292	0.017 ± 0.003	07-12-05	284	0.025 ± 0.004
01-18-05	292	0.022 ± 0.004	07-19-05	281	0.025 ± 0.004
01-25-05	290	0.017 ± 0.003	07-26-05	284	0.028 ± 0.004
02-01-05	294	0.025 ± 0.003	08-02-05	277	0.020 ± 0.004
02-08-05	285	0.031 ± 0.004	08-09-05	284	0.037 ± 0.004
02-15-05	292	0.023 ± 0.003	08-16-05	282	0.027 ± 0.004
02-22-05	292	0.022 ± 0.004	08-23-05	284	0.025 ± 0.004
03-01-05	293	0.019 ± 0.004	08-30-05	282	0.027 ± 0.004
03-08-05	291	0.020 ± 0.004	09-06-05	284	0.027 ± 0.004
03-15-05	292	0.017 ± 0.004	09-13-05	283	0.040 ± 0.005
03-22-05	285	0.017 ± 0.003	09-20-05	284	0.035 ± 0.004
03-29-05	299	0.014 ± 0.003	09-27-05	282	0.036 ± 0.004
1st Quarter Mean ± s.d.		0.021 ± 0.005	3rd Quarter Mean ± s.d.		0.028 ± 0.007
04-05-05	291	0.015 ± 0.004	10-04-05	282	0.035 ± 0.004
04-12-05	292	0.019 ± 0.003	10-11-05	276	0.023 ± 0.004
04-19-05	292	0.024 ± 0.003	10-18-05	282	0.021 ± 0.004
04-26-05	288	0.013 ± 0.003	10-25-05	272	0.011 ± 0.003
05-03-05	291	0.014 ± 0.003	11-01-05	282	0.020 ± 0.004
05-10-05	288	0.030 ± 0.004	11-08-05	280	0.033 ± 0.004
05-17-05	291	0.017 ± 0.003	11-15-05	282	0.032 ± 0.004
05-24-05	291	0.018 ± 0.003	11-22-05	276	0.029 ± 0.004
05-31-05	279	0.016 ± 0.003	11-29-05	282	0.023 ± 0.004
06-07-05	276	0.016 ± 0.004	12-06-05	282	0.017 ± 0.004
06-14-05	281	0.021 ± 0.003	12-13-05	282	0.042 ± 0.005
06-21-05	282	0.008 ± 0.002	12-20-05	282	0.032 ± 0.004
06-28-05	282	0.030 ± 0.004	12-27-05	278	0.058 ± 0.005
			01-03-06	282	0.022 ± 0.004
2nd Quarter Mean ± s.d.		0.019 ± 0.006	4th Quarter Mean ± s.d.		0.028 ± 0.012
			Cumulative Average		0.024
			Previous Annual Average		0.022

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 3. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-3
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	272	0.030 ± 0.004	07-05-05	281	0.021 ± 0.004
01-11-05	271	0.019 ± 0.003	07-12-05	286	0.029 ± 0.004
01-18-05	277	0.023 ± 0.004	07-19-05	282	0.021 ± 0.004
01-25-05	271	0.024 ± 0.004	07-26-05	286	0.030 ± 0.004
02-01-05	273	0.024 ± 0.003	08-02-05	278	0.021 ± 0.004
02-08-05	269	0.036 ± 0.004	08-09-05	285	0.039 ± 0.004
02-15-05	271	0.020 ± 0.003	08-16-05	284	0.031 ± 0.004
02-22-05	271	0.025 ± 0.004	08-23-05	286	0.022 ± 0.004
03-01-05	272	0.022 ± 0.004	08-30-05	284	0.027 ± 0.004
03-08-05	270	0.020 ± 0.004	09-06-05	285	0.014 ± 0.003
03-15-05	281	0.020 ± 0.004	09-13-05	285	0.040 ± 0.005
03-22-05	277	0.015 ± 0.003	09-20-05	286	0.030 ± 0.004
03-29-05	277	0.015 ± 0.003	09-27-05	284	0.038 ± 0.004
1st Quarter Mean ± s.d.		0.023 ± 0.006	3rd Quarter Mean ± s.d.		0.028 ± 0.008
04-05-05	277	0.017 ± 0.004	10-04-05	290	0.035 ± 0.004
04-12-05	277	0.017 ± 0.003	10-11-05	284	0.022 ± 0.004
04-19-05	276	0.028 ± 0.004	10-18-05	286	0.020 ± 0.004
04-26-05	276	0.015 ± 0.003	10-25-05	275	0.014 ± 0.004
05-03-05	276	0.017 ± 0.003	11-01-05	288	0.020 ± 0.004
05-10-05	273	0.032 ± 0.004	11-08-05	284	0.032 ± 0.004
05-17-05	276	0.013 ± 0.003	11-15-05	285	0.033 ± 0.004
05-24-05	275	0.021 ± 0.004	11-22-05	284	0.033 ± 0.004
05-31-05	286	0.016 ± 0.003	11-29-05	286	0.022 ± 0.004
06-07-05	282	0.019 ± 0.004	12-06-05	290	0.018 ± 0.004
06-14-05	283	0.023 ± 0.003	12-13-05	286	0.039 ± 0.005
06-21-05	287	0.010 ± 0.003	12-20-05	286	0.027 ± 0.004
06-28-05	283	0.036 ± 0.004	12-27-05	285	0.050 ± 0.005
			01-03-06	286	0.022 ± 0.004
2nd Quarter Mean ± s.d.		0.020 ± 0.008	4th Quarter Mean ± s.d.		0.028 ± 0.010
			Cumulative Average		0.025
			Previous Annual Average		0.022

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 4. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-4
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	294	0.031 ± 0.004	07-05-05	281	0.022 ± 0.004
01-11-05	289	0.018 ± 0.003	07-12-05	279	0.027 ± 0.004
01-18-05	282	0.026 ± 0.004	07-19-05	279	0.024 ± 0.004
01-25-05	276	0.026 ± 0.004	07-26-05	281	0.030 ± 0.004
02-01-05	285	0.022 ± 0.003	08-02-05	285	0.021 ± 0.004
02-08-05	276	0.038 ± 0.004	08-09-05	280	0.036 ± 0.004
02-15-05	276	0.023 ± 0.003	08-16-05	280	0.031 ± 0.004
02-22-05	276	0.025 ± 0.004	08-23-05	281	0.023 ± 0.004
03-01-05	277	0.022 ± 0.004	08-30-05	280	0.024 ± 0.004
03-08-05	278	0.021 ± 0.004	09-06-05	281	0.023 ± 0.004
03-15-05	276	0.018 ± 0.004	09-13-05	279	0.037 ± 0.005
03-22-05	276	0.014 ± 0.003	09-20-05	281	0.031 ± 0.004
03-29-05	276	0.015 ± 0.003	09-27-05	280	0.038 ± 0.004
1st Quarter Mean ± s.d.		0.023 ± 0.007	3rd Quarter Mean ± s.d.		0.028 ± 0.006
04-05-05	275	0.014 ± 0.004	10-04-05	280	0.036 ± 0.004
04-12-05	276	0.017 ± 0.003	10-11-05	280	0.022 ± 0.004
04-19-05	275	0.023 ± 0.004	10-18-05	280	0.021 ± 0.004
04-26-05	276	0.013 ± 0.003	10-25-05	280	0.012 ± 0.003
05-03-05	277	0.019 ± 0.003	11-01-05	282	0.018 ± 0.004
05-10-05	276	0.029 ± 0.004	11-08-05	280	0.032 ± 0.004
05-17-05	277	0.018 ± 0.003	11-15-05	280	0.028 ± 0.004
05-24-05	275	0.019 ± 0.004	11-22-05	280	0.030 ± 0.004
05-31-05	280	0.015 ± 0.003	11-29-05	280	0.025 ± 0.004
06-07-05	281	0.020 ± 0.004	12-06-05	284	0.024 ± 0.004
06-14-05	280	0.023 ± 0.003	12-13-05	284	0.051 ± 0.005
06-21-05	276	0.008 ± 0.002	12-20-05	284	0.027 ± 0.004
06-28-05	280	0.034 ± 0.004	12-27-05	284	0.052 ± 0.005
			01-03-06	280	0.020 ± 0.004
2nd Quarter Mean ± s.d.		0.019 ± 0.007	4th Quarter Mean ± s.d.		0.028 ± 0.011
			Cumulative Average		0.025
			Previous Annual Average		0.023

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 5. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-7
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	286	0.034 ± 0.004	07-05-05	287	0.017 ± 0.004
01-11-05	286	0.022 ± 0.003	07-12-05	288	0.025 ± 0.004
01-18-05	286	0.025 ± 0.004	07-19-05	286	0.025 ± 0.004
01-25-05	281	0.022 ± 0.004	07-26-05	287	0.025 ± 0.004
02-01-05	290	0.024 ± 0.003	08-02-05	287	0.021 ± 0.004
02-08-05	286	0.037 ± 0.004	08-09-05	282	0.042 ± 0.005
02-15-05	286	0.019 ± 0.003	08-16-05	282	0.027 ± 0.004
02-22-05	276	0.021 ± 0.004	08-23-05	279	0.030 ± 0.004
03-01-05	276	0.021 ± 0.004	08-30-05	277	0.031 ± 0.004
03-08-05	275	0.016 ± 0.004	09-06-05	282	0.022 ± 0.004
03-15-05	276	0.015 ± 0.004	09-13-05	281	0.040 ± 0.005
03-22-05	274	0.018 ± 0.003	09-20-05	282	0.037 ± 0.004
03-29-05	273	0.016 ± 0.003	09-27-05	282	0.037 ± 0.004
1st Quarter Mean ± s.d.		0.022 ± 0.007	3rd Quarter Mean ± s.d.		0.029 ± 0.008
04-05-05	274	0.015 ± 0.004	10-04-05	282	0.032 ± 0.004
04-12-05	274	0.015 ± 0.003	10-11-05	281	0.023 ± 0.004
04-19-05	275	0.024 ± 0.004	10-18-05	284	0.021 ± 0.004
04-26-05	276	0.016 ± 0.003	10-25-05	292	0.016 ± 0.003
05-03-05	276	0.013 ± 0.003	11-01-05	281	0.013 ± 0.003
05-10-05	281	0.027 ± 0.004	11-08-05	282	0.035 ± 0.004
05-17-05	276	0.014 ± 0.003	11-15-05	282	0.030 ± 0.004
05-24-05	275	0.019 ± 0.004	11-22-05	282	0.027 ± 0.004
05-31-05	278	0.016 ± 0.003	11-29-05	282	0.019 ± 0.004
06-07-05	287	0.024 ± 0.004	12-06-05	287	0.019 ± 0.004
06-14-05	287	0.022 ± 0.003	12-13-05	282	0.044 ± 0.005
06-21-05	292	0.009 ± 0.002	12-20-05	282	0.027 ± 0.004
06-28-05	287	0.032 ± 0.004	12-27-05	281	0.051 ± 0.005
			01-03-06	280	0.020 ± 0.004
2nd Quarter Mean ± s.d.		0.019 ± 0.006	4th Quarter Mean ± s.d.		0.027 ± 0.011
			Cumulative Average		0.024
			Previous Annual Average		0.023

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 6. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-8
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	278	0.032 ± 0.004	07-05-05	276	0.023 ± 0.004
01-11-05	278	0.020 ± 0.003	07-12-05	280	0.026 ± 0.004
01-18-05	274	0.023 ± 0.004	07-19-05	279	0.023 ± 0.004
01-25-05	254	0.025 ± 0.004	07-26-05	280	0.030 ± 0.004
02-01-05	261	0.024 ± 0.003	08-02-05	279	0.019 ± 0.004
02-08-05	256	0.040 ± 0.004	08-09-05	281	0.038 ± 0.004
02-15-05	256	0.024 ± 0.004	08-16-05	281	0.033 ± 0.004
02-22-05	261	0.023 ± 0.004	08-23-05	280	0.028 ± 0.004
03-01-05	257	0.022 ± 0.004	08-30-05	279	0.031 ± 0.004
03-08-05	265	0.022 ± 0.004	09-06-05	281	0.020 ± 0.004
03-15-05	276	0.015 ± 0.004	09-13-05	283	0.046 ± 0.005
03-22-05	253	0.015 ± 0.003	09-20-05	280	0.035 ± 0.004
03-29-05	256	0.019 ± 0.003	09-27-05	280	0.036 ± 0.004
1st Quarter Mean ± s.d.		0.023 ± 0.007	3rd Quarter Mean ± s.d.		0.030 ± 0.008
04-05-05	255	0.015 ± 0.004	10-04-05	280	0.038 ± 0.004
04-12-05	256	0.019 ± 0.003	10-11-05	280	0.017 ± 0.004
04-19-05	251	0.025 ± 0.004	10-18-05	281	0.023 ± 0.004
04-26-05	256	0.019 ± 0.003	10-25-05	278	0.014 ± 0.003
05-03-05	260	0.016 ± 0.003	11-01-05	283	0.019 ± 0.004
05-10-05	257	0.030 ± 0.004	11-08-05	279	0.035 ± 0.004
05-17-05	257	0.018 ± 0.003	11-15-05	281	0.028 ± 0.004
05-24-05	256	0.017 ± 0.004	11-22-05	280	0.027 ± 0.004
05-31-05	276	0.016 ± 0.003	11-29-05	280	0.024 ± 0.004
06-07-05	275	0.021 ± 0.004	12-06-05	281	0.019 ± 0.004
06-14-05	281	0.023 ± 0.003	12-13-05	280	0.039 ± 0.005
06-21-05	279	0.009 ± 0.003	12-20-05	298	0.031 ± 0.004
06-28-05	276	0.037 ± 0.005	12-27-05	300	0.050 ± 0.005
			01-03-06	293	0.015 ± 0.003
2nd Quarter Mean ± s.d.		0.020 ± 0.007	4th Quarter Mean ± s.d.		0.027 ± 0.011
			Cumulative Average		0.025
			Previous Annual Average		0.024

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 7. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-9 (C)
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	277	0.025 ± 0.004	07-05-05	292	0.023 ± 0.004
01-11-05	273	0.019 ± 0.003	07-12-05	291	0.032 ± 0.004
01-18-05	275	0.023 ± 0.004	07-19-05	291	0.027 ± 0.004
01-25-05	288	0.026 ± 0.004	07-26-05	290	0.031 ± 0.004
02-01-05	279	0.026 ± 0.003	08-02-05	290	0.025 ± 0.004
02-08-05	272	0.034 ± 0.004	08-09-05	291	0.042 ± 0.005
02-15-05	272	0.026 ± 0.004	08-16-05	291	0.027 ± 0.004
02-22-05	277	0.027 ± 0.004	08-23-05	287	0.028 ± 0.004
03-01-05	273	0.023 ± 0.004	08-30-05	281	0.025 ± 0.004
03-08-05	277	0.020 ± 0.004	09-06-05	284	0.023 ± 0.004
03-15-05	271	0.018 ± 0.004	09-13-05	284	0.044 ± 0.005
03-22-05	274	0.016 ± 0.003	09-20-05	285	0.035 ± 0.004
03-29-05	267	0.017 ± 0.003	09-27-05	283	0.036 ± 0.004
1st Quarter Mean ± s.d.		0.023 ± 0.005	3rd Quarter Mean ± s.d.		0.031 ± 0.007
04-05-05	272	0.016 ± 0.004	10-04-05	282	0.037 ± 0.004
04-12-05	273	0.019 ± 0.003	10-11-05	285	0.020 ± 0.004
04-19-05	272	0.026 ± 0.004	10-18-05	284	0.022 ± 0.004
04-26-05	272	0.015 ± 0.003	10-25-05	281	0.018 ± 0.004
05-03-05	273	0.019 ± 0.003	11-01-05	285	0.021 ± 0.004
05-10-05	286	0.029 ± 0.004	11-08-05	284	0.036 ± 0.004
05-17-05	274	0.016 ± 0.003	11-15-05	284	0.028 ± 0.004
05-24-05	272	0.022 ± 0.004	11-22-05	283	0.031 ± 0.004
05-31-05	286	0.012 ± 0.003	11-29-05	283	0.023 ± 0.004
06-07-05	291	0.017 ± 0.003	12-06-05	284	0.021 ± 0.004
06-14-05	291	0.022 ± 0.003	12-13-05	279	0.038 ± 0.005
06-21-05	278	0.011 ± 0.003	12-20-05	274	0.030 ± 0.004
06-28-05	291	0.037 ± 0.004	12-27-05	275	0.049 ± 0.005
			01-03-06	274	0.018 ± 0.004
2nd Quarter Mean ± s.d.		0.020 ± 0.007	4th Quarter Mean ± s.d.		0.028 ± 0.009
			Cumulative Average		0.025
			Previous Annual Average		0.022

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 8. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-11 (C)
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	337	0.029 ± 0.003	07-05-05	284	0.022 ± 0.004
01-11-05	337	0.018 ± 0.003	07-12-05	285	0.026 ± 0.004
01-18-05	346	0.019 ± 0.003	07-19-05	283	0.024 ± 0.004
01-25-05	337	0.021 ± 0.003	07-26-05	284	0.028 ± 0.004
02-01-05	343	0.020 ± 0.003	08-02-05	284	0.024 ± 0.004
02-08-05	328	0.027 ± 0.003	08-09-05	284	0.042 ± 0.005
02-15-05	337	0.019 ± 0.003	08-16-05	284	0.029 ± 0.004
02-22-05	337	0.022 ± 0.003	08-23-05	288	0.028 ± 0.004
03-01-05	337	0.021 ± 0.003	08-30-05	289	0.029 ± 0.004
03-08-05	336	0.017 ± 0.003	09-06-05	280	0.021 ± 0.004
03-15-05	337	0.015 ± 0.003	09-13-05	277	0.040 ± 0.005
03-22-05	337	0.015 ± 0.003	09-20-05	284	0.034 ± 0.004
03-29-05	336	0.013 ± 0.002	09-27-05	284	0.034 ± 0.004
1st Quarter Mean ± s.d.		0.020 ± 0.005	3rd Quarter Mean ± s.d.		0.029 ± 0.007
04-05-05	335	0.012 ± 0.003	10-04-05	284	0.036 ± 0.004
04-12-05	337	0.013 ± 0.002	10-11-05	284	0.021 ± 0.004
04-19-05	334	0.021 ± 0.003	10-18-05	284	0.025 ± 0.004
04-26-05	337	0.013 ± 0.003	10-25-05	285	0.015 ± 0.003
05-03-05	337	0.013 ± 0.003	11-01-05	285	0.024 ± 0.004
05-10-05	337	0.021 ± 0.003	11-08-05	284	0.033 ± 0.004
05-17-05	337	0.012 ± 0.003	11-15-05	284	0.026 ± 0.004
05-24-05	334	0.014 ± 0.003	11-22-05	284	0.027 ± 0.004
05-31-05	283	0.015 ± 0.003	11-29-05	283	0.019 ± 0.004
06-07-05	284	0.022 ± 0.004	12-06-05	283	0.018 ± 0.004
06-14-05	284	0.021 ± 0.003	12-13-05	284	0.044 ± 0.005
06-21-05	284	0.007 ± 0.002	12-20-05	288	0.030 ± 0.004
06-28-05	284	0.034 ± 0.004	12-27-05	283	0.056 ± 0.005
			01-03-06	284	0.023 ± 0.004
2nd Quarter Mean ± s.d.		0.017 ± 0.007	4th Quarter Mean ± s.d.		0.028 ± 0.011
			Cumulative Average		0.024
			Previous Annual Average		0.021

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 9. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-12 (C)
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	277	0.030 ± 0.004	07-05-05	287	0.022 ± 0.004
01-11-05	277	0.020 ± 0.003	07-12-05	288	0.025 ± 0.004
01-18-05	279	0.019 ± 0.004	07-19-05	286	0.023 ± 0.004
01-25-05	270	0.021 ± 0.004	07-26-05	288	0.029 ± 0.004
02-01-05	282	0.026 ± 0.003	08-02-05	291	0.021 ± 0.004
02-08-05	268	0.038 ± 0.004	08-09-05	283	0.037 ± 0.004
02-15-05	277	0.022 ± 0.003	08-16-05	287	0.027 ± 0.004
02-22-05	277	0.028 ± 0.004	08-23-05	284	0.027 ± 0.004
03-01-05	277	0.023 ± 0.004	08-30-05	286	0.027 ± 0.004
03-08-05	277	0.021 ± 0.004	09-06-05	288	0.020 ± 0.004
03-15-05	277	0.019 ± 0.004	09-13-05	289	0.039 ± 0.005
03-22-05	277	0.015 ± 0.003	09-20-05	288	0.032 ± 0.004
03-29-05	276	0.015 ± 0.003	09-27-05	286	0.034 ± 0.004
1st Quarter Mean ± s.d.		0.023 ± 0.006	3rd Quarter Mean ± s.d.		0.028 ± 0.006
04-05-05	278	0.013 ± 0.004	10-04-05	288	0.034 ± 0.004
04-12-05	277	0.018 ± 0.003	10-11-05	288	0.020 ± 0.004
04-19-05	272	0.022 ± 0.003	10-18-05	286	0.019 ± 0.004
04-26-05	276	0.014 ± 0.003	10-25-05	286	0.013 ± 0.003
05-03-05	277	0.014 ± 0.003	11-01-05	290	0.018 ± 0.004
05-10-05	277	0.030 ± 0.004	11-08-05	286	0.033 ± 0.004
05-17-05	278	0.013 ± 0.003	11-15-05	288	0.025 ± 0.004
05-24-05	277	0.017 ± 0.003	11-22-05	283	0.039 ± 0.005
05-31-05	284	0.012 ± 0.003	11-29-05	285	0.031 ± 0.004
06-07-05	287	0.016 ± 0.004	12-06-05	293	0.026 ± 0.004
06-14-05	288	0.021 ± 0.003	12-13-05	284	0.044 ± 0.005
06-21-05	288	0.009 ± 0.002	12-20-05	284	0.037 ± 0.004
06-28-05	287	0.029 ± 0.004	12-27-05	274	0.051 ± 0.005
			01-03-06	294	0.033 ± 0.004
2nd Quarter Mean ± s.d.		0.018 ± 0.006	4th Quarter Mean ± s.d.		0.030 ± 0.011
			Cumulative Average		0.025
			Previous Annual Average		0.021

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise.

Table 10. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131[a].
Location: T-27 (C)
Units: pCi/m^3
Collection: Continuous, weekly exchange.

Date Collected	Volume (m^3)	Gross Beta	Date Collected	Volume (m^3)	Gross Beta
Required LLD		0.010			0.010
01-04-05	276	0.034 ± 0.004	07-05-05	293	0.017 ± 0.004
01-11-05	276	0.019 ± 0.003	07-12-05	283	0.028 ± 0.004
01-18-05	278	0.019 ± 0.004	07-19-05	278	0.029 ± 0.004
01-25-05	288	0.027 ± 0.004	07-26-05	284	0.030 ± 0.004
02-01-05	334	0.026 ± 0.003	08-02-05	283	0.021 ± 0.004
02-08-05	315	0.039 ± 0.004	08-09-05	283	0.045 ± 0.005
02-15-05	302	0.019 ± 0.003	08-16-05	284	0.029 ± 0.004
02-22-05	307	0.025 ± 0.004	08-23-05	287	0.029 ± 0.004
03-01-05	303	0.023 ± 0.004	08-30-05	282	0.027 ± 0.004
03-08-05	311	0.020 ± 0.003	09-06-05	284	0.020 ± 0.004
03-15-05	311	0.018 ± 0.003	09-13-05	282	0.042 ± 0.005
03-22-05	303	0.016 ± 0.003	09-20-05	283	0.036 ± 0.004
03-29-05	293	0.018 ± 0.003	09-27-05	283	0.044 ± 0.005
1st Quarter Mean ± s.d.		0.023 ± 0.007	3rd Quarter Mean ± s.d.		0.031 ± 0.009
04-05-05	319	0.017 ± 0.003	10-04-05	284	0.039 ± 0.005
04-12-05	307	0.021 ± 0.003	10-11-05	284	0.023 ± 0.004
04-19-05	309	0.023 ± 0.003	10-18-05	283	0.019 ± 0.004
04-26-05	309	0.017 ± 0.003	10-25-05	283	0.015 ± 0.003
05-03-05	307	0.015 ± 0.003	11-01-05	286	0.018 ± 0.004
05-10-05	307	0.029 ± 0.003	11-08-05	283	0.034 ± 0.004
05-17-05	312	0.013 ± 0.003	11-15-05	284	0.027 ± 0.004
05-24-05	307	0.017 ± 0.003	11-22-05	283	0.028 ± 0.004
05-31-05	315	0.014 ± 0.003	11-29-05	284	0.022 ± 0.004
06-07-05	293	0.022 ± 0.004	12-06-05	284	0.023 ± 0.004
06-14-05	293	0.024 ± 0.003	12-13-05	286	0.039 ± 0.005
06-21-05	293	0.009 ± 0.002	12-20-05	286	0.034 ± 0.004
06-28-05	293	0.042 ± 0.005	12-27-05	281	0.052 ± 0.005
			01-03-06	286	0.022 ± 0.004
2nd Quarter Mean ± s.d.		0.020 ± 0.008	4th Quarter Mean ± s.d.		0.028 ± 0.010
			Cumulative Average		0.026
			Previous Annual Average		0.024

[a] Iodine-131 concentrations are < 0.07 pCi/m^3 unless noted otherwise in Appendix C.

Table 11-1. Airborne particulate data,gross beta analyses, monthly averages, minima and maxima.

January			
Location	Average	Minima	Maxima
T-9	0.024	0.019	0.026
T-11	0.021	0.018	0.029
T-12	0.023	0.019	0.030
T-27	0.025	0.019	0.034
Controls	0.023	0.018	0.034
T-1	0.023	0.019	0.027
T-2	0.021	0.017	0.028
T-3	0.024	0.019	0.030
T-4	0.025	0.018	0.031
T-7	0.025	0.022	0.034
T-8	0.025	0.020	0.032
Indicators	0.024	0.017	0.034

April			
Location	Average	Minima	Maxima
T-9	0.019	0.015	0.026
T-11	0.014	0.012	0.021
T-12	0.016	0.013	0.022
T-27	0.019	0.015	0.023
Controls	0.017	0.012	0.026
T-1	0.020	0.016	0.027
T-2	0.017	0.013	0.024
T-3	0.019	0.015	0.028
T-4	0.017	0.013	0.023
T-7	0.017	0.013	0.024
T-8	0.019	0.015	0.025
Indicators	0.018	0.013	0.028

February			
Location	Average	Minima	Maxima
T-9	0.028	0.023	0.034
T-11	0.022	0.019	0.027
T-12	0.028	0.022	0.038
T-27	0.027	0.019	0.039
Controls	0.026	0.019	0.039
T-1	0.026	0.020	0.033
T-2	0.024	0.019	0.031
T-3	0.026	0.020	0.036
T-4	0.027	0.022	0.038
T-7	0.025	0.019	0.037
T-8	0.027	0.022	0.040
Indicators	0.026	0.019	0.040

May			
Location	Average	Minima	Maxima
T-9	0.020	0.012	0.029
T-11	0.016	0.012	0.021
T-12	0.018	0.012	0.030
T-27	0.018	0.013	0.029
Controls	0.018	0.012	0.030
T-1	0.020	0.014	0.031
T-2	0.020	0.016	0.030
T-3	0.021	0.013	0.032
T-4	0.020	0.015	0.029
T-7	0.019	0.014	0.027
T-8	0.020	0.016	0.030
Indicators	0.020	0.013	0.032

March			
Location	Average	Minima	Maxima
T-9	0.018	0.016	0.020
T-11	0.015	0.013	0.017
T-12	0.018	0.015	0.021
T-27	0.018	0.016	0.020
Controls	0.017	0.013	0.021
T-1	0.018	0.017	0.021
T-2	0.017	0.014	0.020
T-3	0.018	0.015	0.020
T-4	0.017	0.014	0.021
T-7	0.016	0.015	0.018
T-8	0.018	0.015	0.022
Indicators	0.017	0.014	0.022

June			
Location	Average	Minima	Maxima
T-9	0.022	0.011	0.037
T-11	0.021	0.007	0.034
T-12	0.019	0.009	0.029
T-27	0.024	0.009	0.042
Controls	0.021	0.007	0.042
T-1	0.020	0.008	0.030
T-2	0.019	0.008	0.030
T-3	0.022	0.010	0.036
T-4	0.021	0.008	0.034
T-7	0.022	0.009	0.032
T-8	0.023	0.009	0.037
Indicators	0.021	0.008	0.037

Note: Unless otherwise specified, samples collected on the first, second or third day of the month are grouped with data of the previous month.

Table 11-1. Airborne particulate data,gross beta analyses, monthly averages, minima and maxima.

July			
Location	Average	Minima	Maxima
T-9	0.028	0.023	0.032
T-11	0.025	0.022	0.028
T-12	0.024	0.021	0.029
T-27	0.025	0.017	0.030
Controls	0.025	0.017	0.032
T-1	0.022	0.019	0.024
T-2	0.023	0.018	0.028
T-3	0.024	0.021	0.030
T-4	0.025	0.021	0.030
T-7	0.023	0.017	0.025
T-8	0.024	0.019	0.030
Indicators	0.024	0.017	0.030

October			
Location	Average	Minima	Maxima
T-9	0.024	0.018	0.037
T-11	0.024	0.015	0.036
T-12	0.021	0.013	0.034
T-27	0.023	0.015	0.039
Controls	0.023	0.013	0.039
T-1	0.019	0.015	0.022
T-2	0.022	0.011	0.035
T-3	0.022	0.014	0.035
T-4	0.022	0.012	0.036
T-7	0.021	0.013	0.032
T-8	0.022	0.014	0.038
Indicators	0.021	0.011	0.038

August			
Location	Average	Minima	Maxima
T-9	0.031	0.025	0.042
T-11	0.032	0.028	0.042
T-12	0.030	0.027	0.037
T-27	0.033	0.027	0.045
Controls	0.031	0.025	0.045
T-1	0.035	0.025	0.053
T-2	0.029	0.025	0.037
T-3	0.030	0.022	0.039
T-4	0.029	0.023	0.036
T-7	0.033	0.027	0.042
T-8	0.033	0.028	0.038
Indicators	0.031	0.022	0.053

November			
Location	Average	Minima	Maxima
T-9	0.030	0.023	0.036
T-11	0.026	0.019	0.033
T-12	0.032	0.025	0.039
T-27	0.028	0.022	0.034
Controls	0.029	0.019	0.039
T-1	0.029	0.025	0.033
T-2	0.029	0.023	0.033
T-3	0.030	0.022	0.033
T-4	0.029	0.025	0.032
T-7	0.028	0.019	0.035
T-8	0.029	0.024	0.035
Indicators	0.029	0.019	0.035

September			
Location	Average	Minima	Maxima
T-9	0.035	0.023	0.044
T-11	0.032	0.021	0.040
T-12	0.031	0.020	0.039
T-27	0.036	0.020	0.044
Controls	0.033	0.020	0.044
T-1	0.033	0.020	0.042
T-2	0.035	0.027	0.040
T-3	0.031	0.014	0.040
T-4	0.032	0.023	0.038
T-7	0.034	0.022	0.040
T-8	0.034	0.020	0.046
Indicators	0.033	0.014	0.046

December			
Location	Average	Minima	Maxima
T-9	0.031	0.018	0.049
T-11	0.034	0.018	0.056
T-12	0.038	0.026	0.051
T-27	0.034	0.022	0.052
Controls	0.034	0.018	0.056
T-1	0.035	0.020	0.058
T-2	0.034	0.017	0.058
T-3	0.031	0.018	0.050
T-4	0.035	0.020	0.052
T-7	0.032	0.019	0.051
T-8	0.031	0.015	0.050
Indicators	0.033	0.015	0.058

Note: Unless otherwise specified, samples collected on the first, second or third day of the month are grouped with data of the previous month.

Table 12. Airborne particulates, analyses for strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m^3

Location	T-1			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1884	TAP-3905	TAP-5766	TAP-7465
Volume (m^3)	3861	3570	3346	3686
Sr-89	< 0.0005	< 0.0005	< 0.0008	< 0.0005
Sr-90	< 0.0004	< 0.0005	< 0.0005	< 0.0005
Be-7	0.069 ± 0.012	0.082 ± 0.017	0.087 ± 0.015	0.047 ± 0.014
K-40	< 0.023	0.023 ± 0.014	< 0.027	< 0.022
Nb-95	< 0.0005	< 0.0006	< 0.0007	< 0.0007
Zr-95	< 0.0013	< 0.0009	< 0.0013	< 0.0006
Ru-103	< 0.0006	< 0.0012	< 0.0010	< 0.0006
Ru-106	< 0.0055	< 0.0060	< 0.0050	< 0.0047
Cs-134	< 0.0009	< 0.0006	< 0.0006	< 0.0009
Cs-137	< 0.0009	< 0.0007	< 0.0010	< 0.0006
Ce-141	< 0.0011	< 0.0009	< 0.0015	< 0.0015
Ce-144	< 0.0045	< 0.0045	< 0.0046	< 0.0047

Location	T-2			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1885	TAP-3906	TAP-5767	TAP-7466, 7
Volume (m^3)	3785	3724	3674	3920
Sr-89	< 0.0006	< 0.0005	< 0.0011	< 0.0009
Sr-90	< 0.0004	< 0.0004	< 0.0006	< 0.0008
Be-7	0.065 ± 0.014	0.077 ± 0.015	0.078 ± 0.014	0.055 ± 0.009
K-40	< 0.023	< 0.024	< 0.024	< 0.019
Nb-95	< 0.0007	< 0.0007	< 0.0009	< 0.0004
Zr-95	< 0.0011	< 0.0011	< 0.0008	< 0.0007
Ru-103	< 0.0009	< 0.0012	< 0.0008	< 0.0008
Ru-106	< 0.0069	< 0.0053	< 0.0038	< 0.0048
Cs-134	< 0.0009	< 0.0007	< 0.0007	< 0.0006
Cs-137	< 0.0005	< 0.0008	< 0.0006	< 0.0004
Ce-141	< 0.0012	< 0.0015	< 0.0009	< 0.0008
Ce-144	< 0.0036	< 0.0052	< 0.0052	< 0.0020

Table 12. Airborne particulates, analyses for strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m^3

Location	T-3			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1886	TAP-3907	TAP-5768	TAP-7468
Volume (m^3)	3552	3627	3692	3995
Sr-89	< 0.0005	< 0.0005	< 0.0006	< 0.0005
Sr-90	< 0.0004	< 0.0004	< 0.0004	< 0.0004
Be-7	0.077 ± 0.016	0.083 ± 0.015	0.077 ± 0.012	0.048 ± 0.010
K-40	< 0.026	< 0.024	< 0.024	< 0.025
Nb-95	< 0.0005	< 0.0006	< 0.0007	< 0.0003
Zr-95	< 0.0007	< 0.0009	< 0.0009	< 0.0013
Ru-103	< 0.0009	< 0.0008	< 0.0005	< 0.0009
Ru-106	< 0.0049	< 0.0051	< 0.0072	< 0.0049
Cs-134	< 0.0009	< 0.0009	< 0.0006	< 0.0007
Cs-137	< 0.0005	< 0.0005	< 0.0006	< 0.0006
Ce-141	< 0.0017	< 0.0013	< 0.0008	< 0.0015
Ce-144	< 0.0053	< 0.0044	< 0.0045	< 0.0021

Location	T-4			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1887	TAP-3908	TAP-5769, 70	TAP-7469
Volume (m^3)	3637	3604	3647	3938
Sr-89	< 0.0005	< 0.0005	< 0.0014	< 0.0005
Sr-90	< 0.0004	< 0.0004	< 0.0007	< 0.0004
Be-7	0.056 ± 0.013	0.087 ± 0.020	0.081 ± 0.010	0.062 ± 0.013
K-40	< 0.024	< 0.024	< 0.025	< 0.021
Nb-95	< 0.0007	< 0.0008	< 0.0006	< 0.0007
Zr-95	< 0.0020	< 0.0006	< 0.0014	< 0.0006
Ru-103	< 0.0008	< 0.0009	< 0.0009	< 0.0006
Ru-106	< 0.0064	< 0.0054	< 0.0058	< 0.0054
Cs-134	< 0.0009	< 0.0005	< 0.0007	< 0.0007
Cs-137	< 0.0007	< 0.0006	< 0.0006	< 0.0005
Ce-141	< 0.0016	< 0.0008	< 0.0008	< 0.0009
Ce-144	< 0.0023	< 0.0049	< 0.0034	< 0.0037

Table 12. Airborne particulates, analyses for strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m^3

Location	T-7			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1888	TAP-3909	TAP-5771	TAP-7470
Volume (m^3)	3651	3638	3682	3960
Sr-89	< 0.0005	< 0.0004	< 0.0010	< 0.0004
Sr-90	< 0.0003	< 0.0004	< 0.0005	< 0.0004
Be-7	0.065 ± 0.012	0.092 ± 0.017	0.080 ± 0.014	0.060 ± 0.014
K-40	< 0.024	< 0.024	< 0.024	< 0.021
Nb-95	< 0.0005	< 0.0008	< 0.0007	< 0.0004
Zr-95	< 0.0009	< 0.0012	< 0.0009	< 0.0007
Ru-103	< 0.0008	< 0.0009	< 0.0006	< 0.0009
Ru-106	< 0.0052	< 0.0062	< 0.0036	< 0.0075
Cs-134	< 0.0009	< 0.0008	< 0.0006	< 0.0009
Cs-137	< 0.0006	< 0.0005	< 0.0005	< 0.0009
Ce-141	< 0.0019	< 0.0013	< 0.0016	< 0.0014
Ce-144	< 0.0041	< 0.0050	< 0.0039	< 0.0044

Location	T-8			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1889	TAP-3910	TAP-5772	TAP-7471
Volume (m^3)	3425	3435	3639	3974
Sr-89	< 0.0005	< 0.0006	< 0.0008	< 0.0005
Sr-90	< 0.0005	< 0.0006	< 0.0005	< 0.0005
Be-7	0.063 ± 0.013	0.094 ± 0.016	0.076 ± 0.014	0.046 ± 0.011
K-40	< 0.026	< 0.025	< 0.026	< 0.021
Nb-95	< 0.0008	< 0.0005	< 0.0007	< 0.0004
Zr-95	< 0.0012	< 0.0017	< 0.0012	< 0.0009
Ru-103	< 0.0010	< 0.0009	< 0.0005	< 0.0007
Ru-106	< 0.0088	< 0.0056	< 0.0038	< 0.0054
Cs-134	< 0.0010	< 0.0007	< 0.0007	< 0.0008
Cs-137	< 0.0006	< 0.0003	< 0.0006	< 0.0006
Ce-141	< 0.0019	< 0.0010	< 0.0013	< 0.0008
Ce-144	< 0.0051	< 0.0059	< 0.0056	< 0.0038

Table 12. Airborne particulates, analyses for strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m^3

Location	T-9 (C)			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1890,1	TAP-3911	TAP-5773	TAP-7472
Volume (m^3)	3575	3631	3740	3937
Sr-89	< 0.0011	< 0.0009	< 0.0008	< 0.0006
Sr-90	< 0.0008	< 0.0007	< 0.0004	< 0.0005
Be-7	0.065 ± 0.009	0.087 ± 0.014	0.039 ± 0.008	0.053 ± 0.015
K-40	< 0.025	< 0.024	< 0.025	< 0.022
Nb-95	< 0.0006	< 0.0004	< 0.0006	< 0.0007
Zr-95	< 0.0010	< 0.0006	< 0.0004	< 0.0011
Ru-103	< 0.0007	< 0.0006	< 0.0003	< 0.0008
Ru-106	< 0.0053	< 0.0060	< 0.0026	< 0.0053
Cs-134	< 0.0009	< 0.0007	< 0.0008	< 0.0009
Cs-137	< 0.0007	< 0.0004	< 0.0006	< 0.0005
Ce-141	< 0.0018	< 0.0014	< 0.0009	< 0.0006
Ce-144	< 0.0042	< 0.0050	< 0.0028	< 0.0026

Location	T-11 (C)			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1892	TAP-3912	TAP-5774	TAP-7473
Volume (m^3)	4385	4107	3690	3979
Sr-89	< 0.0004	< 0.0005	< 0.0008	< 0.0005
Sr-90	< 0.0003	< 0.0005	< 0.0004	< 0.0005
Be-7	0.045 ± 0.010	0.068 ± 0.016	0.092 ± 0.015	0.056 ± 0.015
K-40	< 0.020	< 0.021	< 0.024	< 0.021
Nb-95	< 0.0008	< 0.0006	< 0.0008	< 0.0007
Zr-95	< 0.0010	< 0.0006	< 0.0012	< 0.0010
Ru-103	< 0.0010	< 0.0006	< 0.0004	< 0.0006
Ru-106	< 0.0048	< 0.0056	< 0.0028	< 0.0050
Cs-134	< 0.0010	< 0.0005	< 0.0008	< 0.0008
Cs-137	< 0.0005	< 0.0006	< 0.0007	< 0.0004
Ce-141	< 0.0012	< 0.0016	< 0.0015	< 0.0007
Ce-144	< 0.0037	< 0.0043	< 0.0053	< 0.0034

Table 12. Airborne particulates, analyses for strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m^3

Location	T-12 (C)			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1893	TAP-3913	TAP-5775	TAP-7474
Volume (m^3)	3591	3646	3731	4009
Sr-89	< 0.0005	< 0.0005	< 0.0006	< 0.0005
Sr-90	< 0.0005	< 0.0004	< 0.0004	< 0.0004
Be-7	0.076 ± 0.017	0.083 ± 0.019	0.070 ± 0.014	0.070 ± 0.013
K-40	< 0.025	< 0.024	< 0.024	< 0.022
Nb-95	< 0.0012	< 0.0006	< 0.0004	< 0.0007
Zr-95	< 0.0010	< 0.0011	< 0.0013	< 0.0007
Ru-103	< 0.0012	< 0.0007	< 0.0007	< 0.0007
Ru-106	< 0.0079	< 0.0061	< 0.0061	< 0.0053
Cs-134	< 0.0009	< 0.0005	< 0.0007	< 0.0010
Cs-137	< 0.0005	< 0.0008	< 0.0009	< 0.0005
Ce-141	< 0.0017	< 0.0015	< 0.0018	< 0.0010
Ce-144	< 0.0034	< 0.0064	< 0.0044	< 0.0031

Location	T-27 (C)			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	TAP-1894	TAP-3914	TAP-5776	TAP-7475
Volume (m^3)	3897	3964	3689	3977
Sr-89	< 0.0005	< 0.0006	< 0.0007	< 0.0004
Sr-90	< 0.0004	< 0.0005	< 0.0004	< 0.0003
Be-7	0.051 ± 0.011	0.061 ± 0.015	0.082 ± 0.014	0.048 ± 0.012
K-40	< 0.023	< 0.022	< 0.025	< 0.021
Nb-95	< 0.0007	< 0.0005	< 0.0006	< 0.0007
Zr-95	< 0.0012	< 0.0010	< 0.0018	< 0.0006
Ru-103	< 0.0006	< 0.0005	< 0.0005	< 0.0006
Ru-106	< 0.0055	< 0.0073	< 0.0041	< 0.0049
Cs-134	< 0.0008	< 0.0006	< 0.0006	< 0.0008
Cs-137	< 0.0005	< 0.0008	< 0.0008	< 0.0005
Ce-141	< 0.0009	< 0.0016	< 0.0017	< 0.0011
Ce-144	< 0.0045	< 0.0026	< 0.0050	< 0.0037

Table 13. Area monitors (TLD), Quarterly.
Units: mR/91 days

Indicator	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
T-1	10.2 ± 1.1	11.0 ± 1.2	10.9 ± 0.5	10.0 ± 0.5
T-2	11.9 ± 1.0	12.8 ± 0.6	12.9 ± 0.3	11.9 ± 0.5
T-3	12.1 ± 1.0	12.3 ± 0.6	13.1 ± 0.7	11.8 ± 0.7
T-4	11.3 ± 0.9	11.3 ± 0.5	12.3 ± 0.4	10.9 ± 0.5
T-5	13.1 ± 1.0	14.2 ± 1.2	14.2 ± 0.6	13.0 ± 0.7
T-6	10.9 ± 1.0	11.3 ± 0.5	12.2 ± 0.6	11.0 ± 0.5
T-7	15.8 ± 0.9	16.3 ± 0.5	18.1 ± 0.7	14.8 ± 0.6
T-8	19.6 ± 1.4	19.0 ± 0.5	24.4 ± 1.2	18.2 ± 0.5
T-10	13.6 ± 0.9	15.0 ± 0.5	15.5 ± 0.5	13.3 ± 0.5
T-38	10.2 ± 0.9	12.1 ± 0.9	11.5 ± 0.4	12.0 ± 1.0
T-39	10.9 ± 1.0	12.0 ± 0.4	12.3 ± 0.6	11.8 ± 0.5
T-40	13.5 ± 0.9	14.7 ± 0.5	14.8 ± 0.3	14.6 ± 0.6
T-41	12.7 ± 0.9	13.8 ± 0.9	ND [a]	12.9 ± 0.5
T-42	11.3 ± 1.0	11.6 ± 0.8	12.6 ± 0.8	11.8 ± 0.9
T-43	14.2 ± 1.0	15.5 ± 0.5	16.8 ± 0.5	14.9 ± 0.6
T-44	16.2 ± 1.2	18.1 ± 0.6	19.1 ± 0.9	17.0 ± 0.8
T-45	18.5 ± 0.9	21.4 ± 0.5	21.5 ± 0.4	19.9 ± 0.7
T-46	11.9 ± 1.1	12.6 ± 0.6	13.3 ± 0.8	12.6 ± 0.9
T-47	9.7 ± 1.1	8.3 ± 0.4	11.1 ± 0.7	8.8 ± 0.5
T-48	10.9 ± 0.9	11.3 ± 0.5	12.6 ± 0.3	11.1 ± 0.5
T-49	11.2 ± 1.0	11.6 ± 0.5	13.1 ± 0.4	11.4 ± 0.5
T-50	11.4 ± 1.0	16.0 ± 1.0	13.2 ± 0.6	14.4 ± 1.0
T-51	14.5 ± 1.2	17.7 ± 1.4	17.0 ± 0.9	15.7 ± 1.3
T-52	15.2 ± 1.2	18.1 ± 0.7	18.2 ± 1.0	15.8 ± 0.8
T-53	13.8 ± 0.9	18.1 ± 0.7	16.8 ± 0.3	16.1 ± 0.7
T-54	15.3 ± 0.9	17.0 ± 0.8	19.8 ± 0.6	17.2 ± 0.9
T-55	12.4 ± 1.1	14.2 ± 0.5	15.6 ± 0.8	14.5 ± 0.5
T-60	10.6 ± 0.7	11.0 ± 1.2	10.1 ± 0.4	11.7 ± 1.2
T-62	10.8 ± 0.3	11.0 ± 0.5	10.4 ± 0.7	11.2 ± 0.7
T-65	16.4 ± 0.4	17.1 ± 0.5	15.2 ± 0.4	16.4 ± 0.7
T-66	16.2 ± 0.4	16.9 ± 0.7	16.9 ± 0.9	18.5 ± 1.2
T-67	17.8 ± 0.6	18.8 ± 0.6	19.5 ± 0.3	18.3 ± 0.7
T-68	16.2 ± 0.3	17.5 ± 0.7	15.8 ± 0.2	18.0 ± 1.7
T-69	15.7 ± 0.5	17.4 ± 0.4	15.2 ± 0.4	16.1 ± 0.7
T-71	14.1 ± 0.4	15.8 ± 0.8	14.1 ± 0.2	15.7 ± 0.9
T-73	13.4 ± 1.1	13.5 ± 0.8	12.8 ± 0.9	13.2 ± 0.9
T-74	14.5 ± 0.4	15.2 ± 0.8	13.6 ± 0.3	15.0 ± 1.0
T-75	14.2 ± 0.4	14.6 ± 0.5	13.7 ± 0.4	13.9 ± 0.6
T-76	11.2 ± 0.3	11.1 ± 0.5	10.5 ± 0.3	10.6 ± 0.7
T-91	17.0 ± 0.7	17.6 ± 0.9	17.6 ± 0.9	16.0 ± 0.8
T-92	12.9 ± 0.5	12.9 ± 0.5	14.0 ± 0.4	13.0 ± 0.7

[a] TLD lost in the field.

Table 13. Area monitors (TLD), Quarterly.
Units: mR/91 days

Indicator	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
T-93	13.9 ± 0.4	13.4 ± 0.6	15.2 ± 0.4	13.6 ± 0.7
T-94	15.3 ± 0.7	14.9 ± 0.8	18.5 ± 0.7	15.4 ± 1.0
T-112	13.4 ± 0.4	14.0 ± 0.8	13.6 ± 0.2	13.8 ± 0.9
T-121	16.3 ± 0.9	16.8 ± 0.9	18.4 ± 1.1	16.9 ± 0.9
T-122	13.9 ± 1.1	13.4 ± 0.6	15.0 ± 1.1	13.9 ± 0.8
T-123	15.8 ± 0.7	16.0 ± 0.4	17.3 ± 0.9	16.4 ± 0.7
T-125	15.7 ± 1.0	14.9 ± 0.4	16.9 ± 0.6	15.1 ± 0.8
T-126	15.9 ± 0.5	15.8 ± 0.6	15.4 ± 0.4	14.7 ± 0.7
T-127	18.3 ± 0.6	19.3 ± 0.7	18.1 ± 0.4	16.6 ± 1.0
T-128	18.2 ± 1.4	18.2 ± 0.6	17.5 ± 1.3	16.9 ± 0.6
T-142	11.8 ± 0.4	10.7 ± 0.5	11.6 ± 0.4	11.2 ± 0.6
T-150	12.8 ± 0.9	12.1 ± 0.7	13.2 ± 0.8	12.5 ± 0.9
T-151	15.9 ± 0.6	15.6 ± 0.5	17.9 ± 0.7	16.2 ± 0.7
T-153	16.4 ± 0.5	15.1 ± 0.4	16.5 ± 0.4	13.5 ± 0.6
T-154	13.8 ± 0.7	14.2 ± 0.6	14.3 ± 0.6	12.7 ± 0.6
T-201	12.8 ± 0.7	12.6 ± 0.6	13.5 ± 0.6	12.6 ± 0.5
T-202	12.8 ± 0.9	12.7 ± 0.6	13.4 ± 0.7	12.9 ± 0.7
T-203	12.7 ± 0.7	13.6 ± 1.2	13.5 ± 0.6	13.6 ± 1.2
T-204	11.5 ± 0.7	11.5 ± 0.5	12.3 ± 0.6	11.8 ± 0.7
T-205	10.9 ± 0.7	10.7 ± 0.4	10.4 ± 0.6	9.8 ± 0.6
T-206	9.2 ± 0.7	10.0 ± 0.4	9.7 ± 0.6	10.1 ± 0.5
T-207	8.8 ± 0.8	8.2 ± 0.2 [a, b]	9.3 ± 0.7	7.2 ± 0.5
T-208	9.6 ± 1.1	10.0 ± 0.3	10.3 ± 1.1	9.9 ± 0.5
T-211	10.1 ± 0.4	8.7 ± 0.4	10.9 ± 0.3	9.1 ± 0.4
T-212	9.7 ± 0.4	10.2 ± 0.6	10.3 ± 0.3	10.5 ± 0.7
T-213	15.9 ± 1.1	15.6 ± 0.5	16.8 ± 0.6	15.2 ± 0.4
T-214	15.7 ± 1.2	16.1 ± 0.4	16.0 ± 0.5	14.9 ± 0.6
T-215	15.8 ± 0.5	15.2 ± 0.4	17.4 ± 0.7	14.1 ± 0.7
T-216	15.2 ± 0.8	15.6 ± 0.8	16.4 ± 0.6	15.1 ± 1.0
T-217	16.6 ± 0.7	16.6 ± 1.1	19.0 ± 0.8	16.8 ± 1.3
T-218	17.1 ± 0.7	16.5 ± 0.6	19.9 ± 0.9	16.9 ± 0.8
T-219	13.8 ± 0.7	14.2 ± 1.0	15.7 ± 0.5	15.3 ± 0.5
T-220	16.6 ± 0.9	17.1 ± 1.3	21.1 ± 1.0	16.4 ± 1.5
T-222	10.4 ± 0.5	9.9 ± 0.4	12.0 ± 0.4	10.9 ± 0.5
T-223	10.9 ± 0.4	13.1 ± 0.5	11.8 ± 0.3	12.5 ± 0.5
T-224	14.9 ± 0.4	14.3 ± 0.4	15.4 ± 0.7	13.2 ± 0.5
Mean ± s.d.	13.7 ± 2.6	14.2 ± 2.9	14.8 ± 3.2	13.8 ± 2.6

[a] TLD lost in the field.

[b] TLD returned in third quarter, exposure for 210 days in the field.

Table 13. Area monitors (TLD), Quarterly.
Units: mR/91 days

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Control				
T-9	11.8 ± 0.9	12.0 ± 0.5	13.5 ± 0.5	11.9 ± 0.6
T-11	11.8 ± 0.9	11.6 ± 0.5	13.0 ± 0.4	11.2 ± 0.5
T-12	17.2 ± 1.1	17.5 ± 0.7	20.4 ± 0.9	16.9 ± 0.8
T-24	15.8 ± 1.0	15.8 ± 0.4	19.3 ± 0.8	14.5 ± 0.5
T-27	16.2 ± 1.1	17.6 ± 0.6	19.7 ± 0.9	16.8 ± 0.6
Mean ± s.d.	14.6 ± 2.6	14.9 ± 2.9	17.2 ± 3.6	14.3 ± 2.7
T-95	15.4 ± 0.8	15.0 ± 0.4	18.6 ± 0.6	15.4 ± 0.6
T-100	13.9 ± 1.1	15.8 ± 0.8	15.3 ± 1.0	14.1 ± 0.9
T-111	14.0 ± 1.3	15.1 ± 0.5	17.1 ± 1.4	15.7 ± 0.7
T-124	15.5 ± 0.7	14.0 ± 1.2	14.9 ± 0.7	13.2 ± 1.4
T-155	12.4 ± 0.6	11.9 ± 0.6	12.8 ± 0.6	11.4 ± 0.8
T-221	13.3 ± 0.6	15.0 ± 0.9	16.2 ± 0.7	14.7 ± 0.8
Mean ± s.d.	14.1 ± 1.2	14.5 ± 1.4	15.8 ± 2.0	14.1 ± 1.6
QC				
T-80	9.2 ± 0.5	9.4 ± 0.4	9.2 ± 0.4	9.2 ± 0.6
T-81	13.9 ± 0.5	14.4 ± 0.4	12.0 ± 0.4	15.7 ± 0.7
T-82	9.2 ± 0.4	9.5 ± 0.5	10.1 ± 0.8	9.3 ± 0.8
T-83	10.4 ± 0.5	11.3 ± 0.8	ND [a]	10.5 ± 0.9
T-84	10.1 ± 0.6	10.7 ± 0.4	10.9 ± 0.6	9.9 ± 0.7
T-85	11.9 ± 0.6	12.9 ± 0.8	12.7 ± 0.6	12.9 ± 1.0
T-86	18.0 ± 0.9	19.9 ± 0.8	19.7 ± 1.0	18.8 ± 0.8
T-88	12.8 ± 0.6	16.5 ± 0.7	12.8 ± 0.5	15.1 ± 0.9
T-89	14.6 ± 0.4	18.2 ± 0.7	15.6 ± 0.4	16.2 ± 0.8
T-113	13.4 ± 0.4	14.9 ± 0.5	14.7 ± 0.3	13.9 ± 0.8
T-114	12.8 ± 0.5	13.1 ± 0.6	13.4 ± 0.5	12.3 ± 0.7
T-115	12.0 ± 0.5	14.2 ± 0.3	12.2 ± 0.6	14.1 ± 1.2
T-116	13.1 ± 0.4	14.3 ± 0.4	15.7 ± 0.3	15.0 ± 0.8
T-117	12.5 ± 1.0	11.7 ± 0.9	14.3 ± 1.0	13.9 ± 1.5
T-118	14.2 ± 0.4	14.4 ± 0.7	16.7 ± 0.4	15.5 ± 1.0
T-119	12.3 ± 0.6	11.1 ± 0.6	13.8 ± 0.6	12.0 ± 0.6
T-120	12.1 ± 0.5	10.9 ± 0.5	11.5 ± 0.4	10.6 ± 0.7
T-200	11.3 ± 0.7	12.2 ± 0.7	11.9 ± 0.6	12.5 ± 0.9
Mean ± s.d.	12.4 ± 2.1	13.3 ± 2.9	13.4 ± 2.6	13.2 ± 2.7
Shield				
T-87	6.7 ± 0.5	7.3 ± 0.5	6.9 ± 0.4	8.0 ± 1.1

[a] TLD lost in the field.

Table 14. Area monitors (TLD), Annual.
Units: mR/365 days

Indicator	2005
T-1	34.0 ± 1.1
T-2	43.4 ± 1.2
T-3	42.5 ± 1.9
T-4	36.8 ± 1.2
T-5	46.9 ± 1.6
T-6	39.0 ± 0.9
T-7	56.3 ± 3.8
T-8	76.4 ± 1.6
T-10	54.8 ± 3.7
T-38	42.2 ± 1.0
T-39	41.5 ± 1.3
T-40	56.1 ± 1.9
T-41	ND[a]
T-42	45.3 ± 3.2
T-43	62.2 ± 2.9
T-44	69.3 ± 3.1
T-45	80.9 ± 4.0
T-46	50.5 ± 3.8
T-47	32.2 ± 1.0
T-48	41.6 ± 1.7
T-49	42.1 ± 1.2
T-50	58.9 ± 2.2
T-51	63.7 ± 2.3
T-52	64.2 ± 2.4
T-53	67.2 ± 2.2
T-54	70.2 ± 2.2
T-55	55.8 ± 4.6
T-60	48.1 ± 3.2
T-62	42.6 ± 3.0
T-65	71.8 ± 5.1
T-66	65.1 ± 2.5
T-67	75.0 ± 1.9
T-68	67.0 ± 1.3
T-69	67.3 ± 1.8
T-71	60.6 ± 1.2
T-73	53.9 ± 1.2
T-74	61.7 ± 2.1
T-75	59.9 ± 3.2
T-76	46.8 ± 1.9
T-91	70.5 ± 1.4
T-92	47.2 ± 1.7

[a] "ND" = No data; TLD missing in field.

Table 14. Area monitors (TLD), Annual.
Units: mR/365 days

Indicator	2005
T-93	55.5 ± 1.2
T-94	69.6 ± 2.0
T-112	51.2 ± 1.8
T-121	73.8 ± 2.6
T-122	58.6 ± 2.1
T-123	68.3 ± 2.4
T-125	61.8 ± 1.8
T-126	58.0 ± 1.3
T-127	70.0 ± 2.6
T-128	72.1 ± 6.1
T-142	39.8 ± 1.3
T-150	53.1 ± 4.1
T-151	69.4 ± 1.7
T-153	69.6 ± 2.5
T-154	56.9 ± 1.7
T-201	49.3 ± 2.7
T-202	48.1 ± 2.8
T-203	50.4 ± 2.8
T-204	40.6 ± 2.8
T-205	39.6 ± 2.8
T-206	36.9 ± 2.7
T-207	36.1 ± 2.8
T-208	38.7 ± 2.8
T-211	32.9 ± 1.9
T-212	34.4 ± 1.2
T-213	58.9 ± 2.3
T-214	57.6 ± 1.9
T-215	60.4 ± 1.8
T-216	57.9 ± 2.5
T-217	66.0 ± 1.9
T-218	67.7 ± 1.8
T-219	54.3 ± 2.1
T-220	66.6 ± 2.1
T-222	41.8 ± 1.4
T-223	44.0 ± 1.4
T-224	53.8 ± 2.1
Mean ± s.d.	54.9 ± 12.4

[a] "ND" = No data; TLD missing in field.

Table 14. Area monitors (TLD), Annual.

Units: mR/365 days

Control	2005
T-9	44.1 ± 0.8
T-11	38.2 ± 0.8
T-12	66.8 ± 2.9
T-24	62.3 ± 2.2
T-27	74.1 ± 2.5
Mean ± s.d.	57.1 ± 15.3
T-95	68.1 ± 2.2
T-100	57.8 ± 1.9
T-111	57.4 ± 1.9
T-124	55.3 ± 3.8
T-155	48.6 ± 2.4
T-221	58.7 ± 1.9
Mean ± s.d.	57.7 ± 6.3
QC	
T-80	42.3 ± 1.5
T-81	ND[a]
T-82	41.4 ± 1.2
T-83	ND[a]
T-84	47.5 ± 2.3
T-85	51.3 ± 3.1
T-86	77.4 ± 4.9
T-88	61.5 ± 2.2
T-89	39.9 ± 1.7
T-113	56.0 ± 2.1
T-114	50.3 ± 1.7
T-115	58.2 ± 1.9
T-116	61.2 ± 1.7
T-117	55.1 ± 1.7
T-118	66.0 ± 2.4
T-119	50.9 ± 2.0
T-120	45.2 ± 1.3
T-200	43.4 ± 3.0
Mean ± s.d.	53.0 ± 10.2
Shield	
T-87	25.2 ± 1.1

[a] "ND" = No data; TLD missing in field.

Table 15. Milk, analyses for strontium-89, strontium-90, iodine-131, gamma emitting isotopes, calcium and stable potassium.
Monthly collections, location T-24 Units: pCi/L

Date Collected	01-25-05	02-23-05	03-30-05	04-27-05
Lab Code	TMI-405	TMI-882	TMI-1346, 7	TMI-2134
I-131	< 0.3	< 0.4	< 0.3	< 0.2
Sr-89	< 0.6	< 0.6	< 0.5	< 0.6
Sr-90	1.4 ± 0.4	0.8 ± 0.4	< 0.6	0.7 ± 0.4
K-40	1287 ± 110	1391 ± 129	1293 ± 80	1343 ± 120
Cs-134	< 4.4	< 6.0	< 4.1	< 3.0
Cs-137	< 5.4	< 3.6	< 2.3	< 3.6
Ba-La-140	< 3.2	< 4.1	< 1.8	< 2.6
Ca (g/L)	1.04	0.96	0.99	1.03
Sr-90/g Ca	1.35	0.83	< 0.61	0.68
K (g/L)	1.49 ± 0.13	1.61 ± 0.15	1.49 ± 0.09	1.55 ± 0.14
Cs-137/g K	< 3.63	< 2.24	< 1.54	< 2.32

Date Collected	06-01-05	06-29-05	07-27-05	08-31-05
Lab Code	TMI-3009	TMI-3490	TMI-4297	TMI-4945, 6
I-131	< 0.3	< 0.3	< 0.2	< 0.4
Sr-89	< 0.6	< 0.7	< 0.6	< 0.6
Sr-90	0.9 ± 0.4	0.7 ± 0.3	< 0.6	0.7 ± 0.3
K-40	1245 ± 178	1191 ± 108	1330 ± 171	1348 ± 115
Cs-134	< 3.8	< 5.6	< 5.6	< 5.8
Cs-137	< 3.5	< 3.4	< 6.3	< 3.4
Ba-La-140	< 4.9	< 3.3	< 5.6	< 5.1
Ca (g/L)	0.95	0.95	0.98	0.95
Sr-90/g Ca	0.95	0.74	< 0.61	0.74
K (g/L)	1.44 ± 0.21	1.38 ± 0.12	1.54 ± 0.20	1.56 ± 0.13
Cs-137/g K	< 2.43	< 2.47	< 4.10	< 2.18

Date Collected	09-28-05	10-26-05	11-30-05	12-28-05
Lab Code	TMI-5424	TMI-6097	TMI-6694	TMI-7277
I-131	< 0.3	< 0.2	< 0.2	< 0.4
Sr-89	< 0.6	< 0.7	< 0.5	< 0.6
Sr-90	< 0.7	0.8 ± 0.3	0.8 ± 0.4	1.3 ± 0.4
K-40	1295 ± 176	1202 ± 171	1215 ± 121	1296 ± 109
Cs-134	< 4.8	< 4.6	< 2.5	< 1.7
Cs-137	< 4.5	< 5.8	< 3.2	< 2.1
Ba-La-140	< 3.1	< 2.9	< 1.5	< 1.9
Ca (g/L)	0.86	0.95	1.15	1.09
Sr-90/g Ca	< 0.81	0.84	0.70	1.19
K (g/L)	1.50 ± 0.20	1.39 ± 0.20	1.40 ± 0.14	1.50 ± 0.13
Cs-137/g K	< 3.01	< 4.17	< 2.28	< 1.40

Table 16. Ground water samples, analyses for gross beta, tritium, strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly
Units: pCi/L

Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Location			T-27 (C)		
Lab Code	TWW-166	TWW-1655	TWW-3707	TWW-5999	Req. LLD
Date Collected	01-07-05	04-07-05	06-27-05	10-17-05	
Gross beta	< 3.5	< 1.6	< 1.0	4.5 ± 1.8	4.0
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.9	< 0.6	< 0.7	< 0.6	
Sr-90	1.2 ± 0.4	0.8 ± 0.3	< 0.7	< 0.5	
Mn-54	< 3.4	< 3.7	< 6.0	< 5.4	15
Fe-59	< 7.6	< 12.0	< 7.8	< 6.6	30
Co-58	< 2.5	< 1.5	< 4.5	< 3.8	15
Co-60	< 2.7	< 3.5	< 3.1	< 3.1	15
Zn-65	< 3.4	< 3.5	< 4.2	< 5.9	30
Zr-Nb-95	< 4.7	< 5.4	< 8.3	< 3.1	15
Cs-134	< 4.1	< 7.3	< 6.1	< 4.9	15
Cs-137	< 3.7	< 4.2	< 2.9	< 3.9	18
Ba-La-140	< 5.4	< 5.3	< 8.6	< 3.5	15
Location			T-225 (I)		
Lab Code	NS[a]	TWW-1657[b]	TWW-3709	TWW-6001	Req. LLD
Date Collected		04-07-05	06-27-05	10-17-05	
Gross beta	-	5.5 ± 2.0	< 0.8	5.6 ± 1.2	4.0
H-3	-	< 330	< 330	< 330	330
Sr-89	-	< 0.7	< 0.6	< 0.7	
Sr-90	-	< 0.7	< 0.5	0.5 ± 0.3	
Mn-54	-	< 1.9	< 4.5	< 3.7	15
Fe-59	-	< 6.6	< 10.2	< 5.9	30
Co-58	-	< 3.8	< 3.5	< 2.1	15
Co-60	-	< 2.5	< 3.5	< 2.9	15
Zn-65	-	< 2.5	< 3.9	< 6.9	30
Zr-Nb-95	-	< 5.2	< 2.8	< 5.4	15
Cs-134	-	< 3.1	< 4.3	< 3.1	15
Cs-137	-	< 3.8	< 3.8	< 3.6	18
Ba-La-140	-	< 2.6	< 8.8	< 8.6	15

[a] "NS" = No sample; see Table 2.0, Listing of Missed Samples.
[b] Sample taken from alternate location, T-226.

Table 16. Ground water samples, analyses for gross beta, tritium, strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly
Units: pCi/L

Period	1st Qtr.	2nd Qtr.			
Location			T-141 (QC)		
Lab Code	TWW-167	TWW-1656	TWW-3708	TWW-6000	Req. LLD
Date Collected	01-07-05	04-07-05	06-27-05	10-17-05	
Gross beta	< 1.3	< 2.8	1.0 ± 0.6	2.3 ± 1.5	4.0
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.6	< 0.7	< 0.6	< 0.7	
Sr-90	< 0.6	< 0.7	< 0.6	< 0.5	
Mn-54	< 3.0	< 4.1	< 4.5	< 5.6	15
Fe-59	< 6.0	< 8.4	< 10.2	< 13.3	30
Co-58	< 3.4	< 2.3	< 3.5	< 2.9	15
Co-60	< 3.8	< 3.4	< 3.5	< 2.5	15
Zn-65	< 4.8	< 5.8	< 3.9	< 3.7	30
Zr-Nb-95	< 4.0	< 6.6	< 2.8	< 4.4	15
Cs-134	< 3.9	< 4.9	< 4.3	< 4.0	15
Cs-137	< 3.5	< 4.2	< 3.8	< 5.5	18
Ba-La-140	< 6.2	< 4.6	< 8.8	< 7.1	15

Table 17. Domestic meat, analyses for gamma-emitting isotopes.
Collection: Annually
Units: pCi/g wet

Location	T-34 (C)	T-197 (I)
Lab Code		
Date Collected		
Sample Type		
Be-7		
K-40		
Nb-95		
Zr-95		
Ru-103		
Ru-106		
Cs-134		
Cs-137		
Ce-141		
Ce-144		

Table 18. Wild meat, analyses for gamma-emitting isotopes.
Collection: Annually
Units: pCi/g wet

Location	T-31(I)	T-210 (C)
Lab Code	TWL-7278	TWL-7279
Date Collected	11/1/2005	12/27/2005
Sample Type	Muskrat	Muskrat
Be-7	< 0.39	< 0.10
K-40	2.84 ± 0.35	2.34 ± 0.17
Nb-95	< 0.071	< 0.013
Zr-95	< 0.070	< 0.007
Ru-103	< 0.033	< 0.007
Ru-106	< 0.11	< 0.032
Cs-134	< 0.009	< 0.006
Cs-137	< 0.010	< 0.006
Ce-141	< 0.16	< 0.026
Ce-144	< 0.12	< 0.036

Table 19. Green leafy vegetables, analyses for strontium-89, strontium-90, iodine-131 and other gamma-emitting isotopes.
Collection: Monthly, in season Units: pCi/g wet

Location	T-19 (I)			
Lab Code	TVE-3734	TVE-4298	TVE-4942	TVE-5426
Date Collected	7/6/2005	7/26/2005	8/31/2005	9/27/2005
Sample Type	Cabbage	Cabbage	Cabbage	Cabbage
Sr-89	< 0.002	< 0.002	< 0.005	< 0.002
Sr-90	0.002 ± 0.001	< 0.001	0.003 ± 0.001	< 0.001
I-131	< 0.022	< 0.021	< 0.018	< 0.019
K-40	2.64 ± 0.45	1.95 ± 0.36	1.58 ± 0.23	1.76 ± 0.31
Nb-95	< 0.013	< 0.012	< 0.005	< 0.009
Zr-95	< 0.024	< 0.026	< 0.010	< 0.015
Cs-134	< 0.018	< 0.016	< 0.006	< 0.010
Cs-137	< 0.015	< 0.014	< 0.007	< 0.006
Ce-141	< 0.027	< 0.021	< 0.018	< 0.022
Ce-144	< 0.12	< 0.11	< 0.078	< 0.067

Location	T-37 (C)			
Lab Code	TVE-3735	TVE-4299	TVE-4943	TVE-5428
Date Collected	7/5/2005	7/26/2005	8/30/2005	9/27/2005
Sample Type	Cabbage	Cabbage	Cabbage	Cabbage
Sr-89	< 0.003	< 0.002	< 0.005	< 0.002
Sr-90	0.002 ± 0.001	0.001 ± 0.001	< 0.001	< 0.001
I-131	< 0.019	< 0.010	< 0.010	< 0.019
K-40	2.66 ± 0.37	1.64 ± 0.23	1.87 ± 0.21	1.44 ± 0.25
Nb-95	< 0.010	< 0.008	< 0.010	< 0.013
Zr-95	< 0.026	< 0.016	< 0.019	< 0.031
Cs-134	< 0.009	< 0.007	< 0.007	< 0.006
Cs-137	< 0.008	< 0.010	< 0.007	< 0.012
Ce-141	< 0.028	< 0.014	< 0.018	< 0.020
Ce-144	< 0.095	< 0.040	< 0.097	< 0.099

Location	T-227		
Lab Code	TVE-3736	TVE-4300	TVE-4944
Date Collected	7/5/2005	7/27/2005	8/31/2005
Sample Type	Lettuce, Cabbage	Lettuce, Cabbage	Cabbage
Sr-89	< 0.005	< 0.003	< 0.005
Sr-90	< 0.003	< 0.003	< 0.001
I-131	< 0.023	< 0.014	< 0.012
K-40	5.07 ± 0.55	2.56 ± 0.28	2.44 ± 0.24
Nb-95	< 0.012	< 0.014	< 0.008
Zr-95	< 0.031	< 0.011	< 0.018
Cs-134	< 0.009	< 0.013	< 0.009
Cs-137	< 0.012	< 0.005	< 0.008
Ce-141	< 0.013	< 0.019	< 0.015
Ce-144	< 0.077	< 0.094	< 0.066

Table 20. Fruit, analyses for strontium-89, strontium-90, iodine-131 and other gamma-emitting isotopes.
Collection: Monthly, in season
Units: pCi/g wet

Location	T-8 (I)	T-25 (I)
Lab Code	TVE-5425	TVE-5427
Date Collected	9/22/2005	9/22/2005
Sample Type	Apples	Apples
Sr-89	< 0.002	< 0.003
Sr-90	< 0.001	< 0.002
I-131	< 0.025	< 0.019
K-40	0.91 ± 0.18	1.01 ± 0.15
Nb-95	< 0.009	< 0.010
Zr-95	< 0.013	< 0.010
Cs-134	< 0.008	< 0.010
Cs-137	< 0.008	< 0.008
Ce-141	< 0.010	< 0.014
Ce-144	< 0.041	< 0.056

Location	T-209 (C)
Lab Code	TVE-5429
Date Collected	9/22/2005
Sample Type	Apples
Sr-89	< 0.001
Sr-90	0.001 ± 0.001
I-131	< 0.014
K-40	0.88 ± 0.13
Nb-95	< 0.007
Zr-95	< 0.008
Cs-134	< 0.005
Cs-137	< 0.005
Ce-141	< 0.013
Ce-144	< 0.045

Table 21. Animal - wildlife feed, analyses for gamma-emitting isotopes.
Collection: Monthly, in season
Units: pCi/g wet

	Indicators	
Location	T-31	T-198
Lab Code	TCF-5430	TCF-5431
Date Collected	9/20/2005	9/19/2005
Sample Type	Cattails	Cattails
Be-7	1.38 ± 0.42	< 0.31
K-40	2.77 ± 0.44	0.89 ± 0.29
Nb-95	< 0.027	< 0.023
Zr-95	< 0.065	< 0.057
Ru-103	< 0.027	< 0.034
Ru-106	< 0.17	< 0.21
Cs-134	< 0.023	< 0.026
Cs-137	< 0.022	< 0.014
Ce-141	< 0.057	< 0.073
Ce-144	< 0.15	< 0.14

	Control
Location	T-32
Lab Code	TCF-5432, 3
Date Collected	9/19/2005
Sample Type	Cattails
Be-7	0.78 ± 0.25
K-40	1.41 ± 0.27
Nb-95	< 0.028
Zr-95	< 0.037
Ru-103	< 0.026
Ru-106	< 0.18
Cs-134	< 0.017
Cs-137	< 0.016
Ce-141	< 0.066
Ce-144	< 0.12

Table 22. Soil samples, analyses for gamma-emitting isotopes.
Collection: Annual
Units: pCi/g dry

Location	T-1	T-2	T-3	T-4
Lab Code	TSO-3047	TSO-3048	TSO-3049	TSO-3050
Date Collected	5/19/2005	5/19/2005	5/19/2005	5/19/2005
Be-7	0.59 ± 0.33	< 0.37	0.80 ± 0.25	0.74 ± 0.21
K-40	9.87 ± 0.61	6.33 ± 0.71	9.29 ± 0.60	5.41 ± 0.42
Mn-54	< 0.017	< 0.028	< 0.021	< 0.013
Nb-95	< 0.029	< 0.039	< 0.032	< 0.049
Zr-95	< 0.029	< 0.054	< 0.042	< 0.050
Ru-103	< 0.027	< 0.040	< 0.040	< 0.030
Ru-106	< 0.18	< 0.20	< 0.090	< 0.13
Cs-134	< 0.013	< 0.038	< 0.029	< 0.025
Cs-137	0.042 ± 0.015	0.10 ± 0.043	0.049 ± 0.029	< 0.019
Ce-141	< 0.051	< 0.070	< 0.078	< 0.078
Ce-144	< 0.11	< 0.080	< 0.13	< 0.12

Location	T-7	T-8
Lab Code	TSO-3051	TSO-3052
Date Collected	5/19/2005	5/19/2005
Be-7	0.42 ± 0.23	< 0.40
K-40	10.22 ± 0.56	21.15 ± 1.04
Mn-54	< 0.013	< 0.031
Nb-95	< 0.021	< 0.044
Zr-95	< 0.028	< 0.031
Ru-103	< 0.022	< 0.047
Ru-106	< 0.14	< 0.25
Cs-134	< 0.013	< 0.023
Cs-137	< 0.017	0.32 ± 0.045
Ce-141	< 0.051	< 0.12
Ce-144	< 0.10	< 0.19

Location	T-9	T-11	T-12	T-27
Lab Code	TSO-3053	TSO-3054	TSO-3055	TSO-3056, 7
Date Collected	5/19/2005	5/19/2005	5/19/2005	5/19/2005
Be-7	< 0.64	< 0.18	0.74 ± 0.40	0.30 ± 0.13
K-40	23.97 ± 1.44	12.00 ± 0.60	10.10 ± 0.58	20.90 ± 0.58
Mn-54	< 0.051	< 0.014	< 0.018	< 0.012
Nb-95	< 0.13	< 0.037	< 0.073	< 0.034
Zr-95	< 0.13	< 0.041	< 0.070	< 0.034
Ru-103	< 0.068	< 0.026	< 0.027	< 0.019
Ru-106	< 0.40	< 0.10	< 0.24	< 0.11
Cs-134	< 0.074	< 0.014	< 0.032	< 0.017
Cs-137	0.13 ± 0.053	0.11 ± 0.025	0.23 ± 0.055	0.18 ± 0.021
Ce-141	< 0.14	< 0.046	< 0.12	< 0.049
Ce-144	< 0.25	< 0.057	< 0.23	< 0.077

Table 23. Treated surface water samples, analyses for gross beta.
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Location		T-11 (C)		Mean± s.d.
Lab Code	TSWT-415	TSWT-883	TSWT-1513	1st Qtr.
Date Collected	01-25-05	02-22-05	03-29-05	
Gross beta	3.2 ± 0.6	2.9 ± 0.7	2.1 ± 0.4	2.7 ± 0.6
Lab Code	TSWT-2153	TSWT-3084	TSWT-3630	2nd Qtr.
Date Collected	04-26-05	05-31-05	06-28-05	
Gross beta	2.2 ± 0.6	2.0 ± 0.4	2.3 ± 0.6	2.2 ± 0.2
Lab Code	TSWT-4301	TSWT-4947	TSWT-5438	3rd Qtr.
Date Collected	07-26-05	08-30-05	09-27-05	
Gross beta	1.3 ± 0.3	1.4 ± 0.4	1.2 ± 0.3	1.3 ± 0.1
Lab Code	TSWT-6150	TSWT-6718	TSWT-7280	4th Qtr.
Date Collected	10-25-05	11-29-05	12-27-05	
Gross beta	1.8 ± 0.4	1.0 ± 0.3	1.5 ± 0.4	1.4 ± 0.4

Location		T-12 (C)		Mean± s.d.
Lab Code	TSWT-416	TSWT-884	TSWT-1514	1st Qtr.
Date Collected	01-25-05	02-22-05	03-29-05	
Gross beta	2.4 ± 0.5	1.9 ± 0.6	1.5 ± 0.4	1.9 ± 0.5
Lab Code	TSWT-2154	TSWT-3085	TSWT-3631, 2	2nd Qtr.
Date Collected	04-26-05	05-31-05	06-28-05	
Gross beta	1.6 ± 0.5	1.4 ± 0.3	1.9 ± 0.4	1.6 ± 0.3
Lab Code	TSWT-4302	TSWT-4948	TSWT-5438	3rd Qtr.
Date Collected	07-26-05	08-30-05	09-27-05	
Gross beta	1.3 ± 0.3	0.9 ± 0.3	2.2 ± 0.4	1.5 ± 0.7
Lab Code	TSWT-6151	TSWT-6719	TSWT-7281	4th Qtr.
Date Collected	10-25-05	11-29-05	12-27-05	
Gross beta	1.2 ± 0.3	0.7 ± 0.3	1.2 ± 0.3	1.0 ± 0.3

Table 23. Treated surface water samples, analyses for gross beta.
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Location		T-22		Mean± s.d.
Lab Code	TSWT-417	TSWT-885	TSWT-1515	1st Qtr.
Date Collected	01-25-05	02-22-05	03-29-05	
Gross beta	2.8 ± 0.6	3.1 ± 0.6	2.9 ± 0.5	2.9 ± 0.2
Lab Code	TSWT-2155	TSWT-3086	TSWT-3633	2nd Qtr.
Date Collected	04-26-05	05-31-05	06-28-05	
Gross beta	1.7 ± 0.4	2.0 ± 0.4	3.0 ± 0.6	2.2 ± 0.7
Lab Code	TSWT-4303	TSWT-4949	TSWT-5440	3rd Qtr.
Date Collected	07-26-05	08-30-05	09-27-05	
Gross beta	1.4 ± 0.4	1.5 ± 0.5	1.8 ± 0.4	1.6 ± 0.2
Lab Code	TSWT-6152	TSWT-6720	TSWT-7282, 3	4th Qtr.
Date Collected	10-25-05	11-29-05	12-27-05	
Gross beta	2.4 ± 0.4	1.9 ± 0.6	1.7 ± 0.3	2.0 ± 0.4

Location		T-50		Mean± s.d.
Lab Code	TSWT-418	TSWT-886	TSWT-1516	1st Qtr.
Date Collected	01-25-05	02-22-05	03-29-05	
Gross beta	2.8 ± 0.6	3.2 ± 0.7	2.0 ± 0.4	2.7 ± 0.6
Lab Code	TSWT-2156	TSWT-3087	TSWT-3634	2nd Qtr.
Date Collected	04-26-05	05-31-05	06-28-05	
Gross beta	2.5 ± 0.7	1.5 ± 0.4	2.2 ± 0.6	2.1 ± 0.5
Lab Code	TSWT-4304	TSWT-4950	TSWT-5441	3rd Qtr.
Date Collected	07-26-05	08-30-05	09-27-05	
Gross beta	1.3 ± 0.4	1.5 ± 0.6	1.9 ± 0.4	1.6 ± 0.3
Lab Code	TSWT-6153	TSWT-6721, 2	TSWT-7284	4th Qtr.
Date Collected	10-25-05	11-29-05	12-27-05	
Gross beta	1.3 ± 0.4	0.9 ± 0.2	1.4 ± 0.3	1.2 ± 0.3

Table 23. Treated surface water samples, analyses for gross beta.
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Location		T-143 (QC)		Mean± s.d.
Lab Code	TSWT-419	TSWT-887	TSWT-1517	1st Qtr.
Date Collected	01-25-05	02-22-05	03-29-05	
Gross beta	2.6 ± 0.5	2.8 ± 0.6	3.1 ± 0.8	2.8 ± 0.3
Lab Code	TSWT-2157	TSWT-3088	TSWT-3635	2nd Qtr.
Date Collected	04-26-05	05-31-05	06-28-05	
Gross beta	1.7 ± 0.5	1.5 ± 0.4	1.8 ± 0.6	1.7 ± 0.2
Lab Code	TSWT-4305	TSWT-4951	TSWT-5442	3rd Qtr.
Date Collected	07-26-05	08-30-05	09-27-05	
Gross beta	1.8 ± 0.4	1.1 ± 0.3	1.5 ± 0.4	1.5 ± 0.4
Lab Code	TSWT-6154	TSWT-6723	TSWT-7285	4th Qtr.
Date Collected	10-25-05	11-29-05	12-27-05	
Gross beta	0.8 ± 0.3	1.1 ± 0.3	1.7 ± 0.4	1.2 ± 0.5

Table 24. Treated surface water samples, analyses for tritium, strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly composites of weekly grab samples
Units: pCi/L

Location	T-11 (C)				
Period Lab Code	1st Qtr. TSWT-1608	2nd Qtr. TSWT-3721	3rd Qtr. TSWT-5496	4th Qtr. TSWT-7444	Req. LLD
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.7	< 0.7	< 0.8	< 0.7	
Sr-90	< 0.6	< 0.7	< 0.7	< 0.5	
Mn-54	< 2.2	< 3.5	< 1.8	< 4.6	15
Fe-59	< 7.4	< 8.3	< 2.5	< 9.0	30
Co-58	< 2.7	< 3.1	< 1.2	< 6.0	15
Co-60	< 1.8	< 2.4	< 0.9	< 3.0	15
Zn-65	< 5.3	< 4.3	< 3.7	< 6.2	30
Zr-Nb-95	< 3.4	< 3.5	< 3.2	< 6.6	15
Cs-134	< 3.9	< 2.5	< 1.7	< 5.2	15
Cs-137	< 3.2	< 4.8	< 1.7	< 4.3	18
Ba-La-140	< 2.9	< 9.8	< 11.1	< 7.6	15

Location	T-12 (C)				
Period Lab Code	1st Qtr. TSWT-1609	2nd Qtr. TSWT-3722	3rd Qtr. TSWT-5497	4th Qtr. TSWT-7445, 6	Req. LLD
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.7	< 0.6	< 0.9	< 0.6	
Sr-90	< 0.6	< 0.7	< 0.6	< 0.5	
Mn-54	< 1.7	< 2.6	< 0.9	< 3.5	15
Fe-59	< 6.9	< 4.9	< 5.4	< 7.6	30
Co-58	< 2.4	< 2.8	< 2.5	< 4.1	15
Co-60	< 2.5	< 2.8	< 1.4	< 2.8	15
Zn-65	< 2.2	< 3.3	< 4.0	< 4.4	30
Zr-Nb-95	< 4.5	< 2.7	< 3.6	< 5.9	15
Cs-134	< 3.4	< 3.3	< 2.0	< 4.1	15
Cs-137	< 1.6	< 3.2	< 1.4	< 4.6	18
Ba-La-140	< 2.1	< 3.8	< 12.7	< 9.0	15

Table 24. Treated surface water samples, analyses for tritium, strontium-89, strontium-90 and gamma-emitting isotopes.
Collection: Quarterly composites of weekly grab samples.
Units: pCi/L

Location	T-22				
Period Lab Code	1st Qtr. TSWT-1610	2nd Qtr. TSWT-3723	3rd Qtr. TSWT-5498	4th Qtr. TSWT-7447	Req. LLD
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.7	< 0.7	< 1.1	< 0.6	
Sr-90	< 0.6	< 0.5	< 0.8	< 0.5	
Mn-54	< 2.5	< 5.3	< 2.4	< 5.4	15
Fe-59	< 8.4	< 7.5	< 5.3	< 9.7	30
Co-58	< 3.1	< 4.7	< 2.3	< 4.8	15
Co-60	< 5.0	< 2.7	< 2.0	< 2.6	15
Zn-65	< 7.3	< 8.7	< 4.2	< 6.5	30
Zr-Nb-95	< 2.6	< 8.0	< 3.8	< 8.2	15
Cs-134	< 1.8	< 5.6	< 2.1	< 4.2	15
Cs-137	< 2.5	< 4.8	< 2.3	< 5.6	18
Ba-La-140	< 5.1	< 10.2	< 13.9	< 7.6	15

Location	T-50				
Period Lab Code	1st Qtr. TSWT-1611	2nd Qtr. TSWT-3724	3rd Qtr. TSWT-5499	4th Qtr. TSWT-7448	Req. LLD
H-3	< 330	< 330	< 330	< 330	330
Sr-89	< 0.9	< 0.7	< 1.1	< 0.8	
Sr-90	< 0.6	< 0.7	< 0.7	< 0.6	
Mn-54	< 2.3	< 4.2	< 1.3	< 3.2	15
Fe-59	< 3.2	< 7.4	< 4.9	< 10.1	30
Co-58	< 2.2	< 3.2	< 1.5	< 3.2	15
Co-60	< 1.2	< 1.8	< 1.4	< 3.4	15
Zn-65	< 2.6	< 4.4	< 2.7	< 4.6	30
Zr-Nb-95	< 4.0	< 3.7	< 3.5	< 5.4	15
Cs-134	< 3.8	< 3.2	< 1.5	< 5.1	15
Cs-137	< 2.0	< 2.9	< 1.9	< 4.0	18
Ba-La-140	< 6.1	< 8.9	< 10.8	< 7.5	15

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-3
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code	TSWU-420	TSWU-888	TSWU-1520	TSWU-2158,9	
Date Collected	1/25/2005	2/22/2005	3/29/2005	4/26/2005	Req. LLD
Gross beta	6.1 ± 0.7	4.4 ± 1.1	2.4 ± 0.4	3.6 ± 0.5	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 5.2	< 4.7	< 2.5	< 1.6	15
Fe-59	< 4.9	< 3.8	< 5.8	< 2.0	30
Co-58	< 4.1	< 4.1	< 2.3	< 2.3	15
Co-60	< 5.8	< 4.8	< 2.7	< 1.7	15
Zn-65	< 7.1	< 4.9	< 3.3	< 2.0	30
Zr-Nb-95	< 6.2	< 4.4	< 4.5	< 3.4	15
Cs-134	< 7.0	< 4.7	< 2.6	< 2.6	15
Cs-137	< 3.7	< 4.5	< 1.6	< 2.3	18
Ba-La-140	< 3.4	< 3.8	< 3.4	< 4.1	15

Lab Code	TSWU-3091	TSWU-3693	TSWU-4306	TSWU-4952	
Date Collected	5/31/2005	6/28/2005	7/26/2005	8/30/2005	Req. LLD
Gross beta	1.9 ± 0.4	2.5 ± 0.6	3.0 ± 0.6	1.7 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 5.6	< 4.0	< 3.1	< 4.4	15
Fe-59	< 6.6	< 5.1	< 4.0	< 5.0	30
Co-58	< 7.1	< 5.2	< 3.3	< 3.2	15
Co-60	< 4.1	< 3.5	< 2.6	< 2.2	15
Zn-65	< 8.1	< 6.4	< 2.6	< 4.1	30
Zr-Nb-95	< 3.2	< 4.6	< 4.7	< 2.7	15
Cs-134	< 5.2	< 3.6	< 3.8	< 3.3	15
Cs-137	< 5.3	< 3.7	< 3.5	< 4.7	18
Ba-La-140	< 10.6	< 5.6	< 2.9	< 5.1	15

Lab Code	TSWU-5585	TSWU-6155	TSWU-6804	TSWU-7286	
Date Collected	9/27/2005	10/25/2005	11/29/2005	12/27/2005	Req. LLD
Gross beta	4.1 ± 0.8	1.9 ± 0.4	2.8 ± 0.4	5.2 ± 0.8	4.0
H-3	< 330	< 330	529 ± 125 [a]	< 330	330
Mn-54	< 3.0	< 4.6	< 4.5	< 3.6	15
Fe-59	< 8.7	< 8.2	< 8.8	< 4.2	30
Co-58	< 3.3	< 3.3	< 2.0	< 3.9	15
Co-60	< 3.9	< 4.5	< 1.9	< 2.8	15
Zn-65	< 5.3	< 6.3	< 8.1	< 2.5	30
Zr-Nb-95	< 4.5	< 3.9	< 5.1	< 4.5	15
Cs-134	< 3.6	< 4.7	< 4.0	< 5.1	15
Cs-137	< 3.0	< 5.4	< 4.5	< 3.0	18
Ba-La-140	< 4.3	< 3.4	< 3.9	< 2.7	15

[a] Analysis was repeated, result of reanalysis : 505 ± 115 pCi/L.

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-11 (C)
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code	TSWU-422	TSWU-890	TSWU-1523	TSWU-2161	
Date Collected	1/25/2005	2/22/2005	3/29/2005	4/26/2005	Req. LLD
Gross beta	3.7 ± 0.6	3.2 ± 0.9	2.1 ± 0.4	2.4 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.1	< 3.4	< 4.1	< 1.8	15
Fe-59	< 3.2	< 6.0	< 12.2	< 8.6	30
Co-58	< 2.1	< 3.5	< 4.0	< 4.2	15
Co-60	< 3.2	< 4.7	< 4.4	< 4.4	15
Zn-65	< 3.5	< 7.1	< 9.7	< 5.9	30
Zr-Nb-95	< 2.7	< 7.1	< 7.3	< 3.7	15
Cs-134	< 3.3	< 5.5	< 3.7	< 4.4	15
Cs-137	< 3.8	< 4.2	< 3.3	< 3.1	18
Ba-La-140	< 2.8	< 7.9	< 3.5	< 5.4	15

Lab Code	TSWU-3093	TSWU-3695	TSWU-4308	TSWU-4954	
Date Collected	5/31/2005	6/28/2005	7/26/2005	8/30/2005	Req. LLD
Gross beta	1.5 ± 0.4	1.9 ± 0.5	1.3 ± 0.3	2.0 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.4	< 2.9	< 3.2	< 3.7	15
Fe-59	< 4.5	< 7.5	< 5.4	< 8.9	30
Co-58	< 1.9	< 3.8	< 2.6	< 4.8	15
Co-60	< 2.5	< 1.3	< 1.3	< 3.1	15
Zn-65	< 4.2	< 1.3	< 1.6	< 6.4	30
Zr-Nb-95	< 2.2	< 4.4	< 3.7	< 5.9	15
Cs-134	< 2.4	< 3.1	< 4.9	< 4.7	15
Cs-137	< 2.3	< 1.8	< 3.9	< 5.2	18
Ba-La-140	< 6.4	< 6.0	< 3.3	< 8.3	15

Lab Code	TSWU-5587	TSWU-6158	TSWU-6806	TSWU-7288	
Date Collected	9/27/2005	10/25/2005	11/29/2005	12/27/2005	Req. LLD
Gross beta	1.9 ± 0.2	1.8 ± 0.6	1.5 ± 0.4	3.1 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 1.6	< 1.7	< 2.1	< 3.0	15
Fe-59	< 5.0	< 4.7	< 5.6	< 4.1	30
Co-58	< 2.1	< 3.1	< 2.9	< 3.1	15
Co-60	< 2.8	< 1.1	< 2.8	< 2.8	15
Zn-65	< 3.7	< 4.1	< 4.5	< 5.4	30
Zr-Nb-95	< 3.3	< 3.4	< 3.9	< 4.9	15
Cs-134	< 2.8	< 4.5	< 2.8	< 4.6	15
Cs-137	< 2.9	< 2.3	< 3.3	< 5.3	18
Ba-La-140	< 6.0	< 4.3	< 2.0	< 4.6	15

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-12 (C)
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code	TSWU-423	TSWU-891	TSWU-1524	TSWU-2162	
Date Collected	1/25/2005	2/22/2005	3/29/2005	4/26/2005	Req. LLD
Gross beta	3.2 ± 0.6	4.0 ± 1.1	2.3 ± 0.4	2.4 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.6	< 2.7	< 1.8	< 3.6	15
Fe-59	< 6.1	< 5.3	< 5.3	< 5.4	30
Co-58	< 2.8	< 2.8	< 3.0	< 3.1	15
Co-60	< 1.4	< 3.6	< 2.5	< 2.8	15
Zn-65	< 3.5	< 4.9	< 3.9	< 6.8	30
Zr-Nb-95	< 4.7	< 4.8	< 3.6	< 3.3	15
Cs-134	< 3.5	< 3.2	< 2.0	< 3.1	15
Cs-137	< 3.0	< 3.4	< 4.0	< 3.2	18
Ba-La-140	< 1.7	< 3.9	< 2.8	< 1.8	15

Lab Code	TSWU-3094	TSWU-3696	TSWU-4309	TSWU-4955	
Date Collected	5/31/2005	6/28/2005	7/26/2005	8/30/2005	Req. LLD
Gross beta	1.4 ± 0.4	2.4 ± 0.6	1.9 ± 0.4	2.8 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.2	< 2.3	< 2.3	< 4.7	15
Fe-59	< 6.1	< 3.7	< 4.4	< 12.6	30
Co-58	< 2.8	< 1.9	< 2.4	< 3.6	15
Co-60	< 1.3	< 1.1	< 2.6	< 4.5	15
Zn-65	< 5.1	< 2.0	< 5.8	< 9.6	30
Zr-Nb-95	< 4.9	< 3.2	< 3.6	< 5.0	15
Cs-134	< 3.8	< 2.5	< 3.5	< 5.0	15
Cs-137	< 2.3	< 2.4	< 3.9	< 4.4	18
Ba-La-140	< 3.9	< 3.1	< 2.8	< 6.8	15

Lab Code	TSWU-5588	TSWU-6159	TSWU-6807	TSWU-7289	
Date Collected	9/27/2005	10/25/2005	11/29/2005	12/27/2005	Req. LLD
Gross beta	2.5 ± 0.4	3.2 ± 0.6	1.1 ± 0.3	2.5 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.2	< 1.6	< 5.0	< 3.3	15
Fe-59	< 8.3	< 7.4	< 8.4	< 4.3	30
Co-58	< 2.6	< 2.6	< 3.4	< 5.8	15
Co-60	< 3.0	< 2.3	< 2.7	< 3.6	15
Zn-65	< 4.0	< 4.8	< 4.4	< 6.1	30
Zr-Nb-95	< 3.0	< 4.2	< 3.9	< 5.5	15
Cs-134	< 3.2	< 3.8	< 4.3	< 4.9	15
Cs-137	< 3.3	< 3.4	< 4.9	< 4.8	18
Ba-La-140	< 6.5	< 4.8	< 5.3	< 4.7	15

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-22
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code Date Collected	TSWU-425 1/25/2005	TSWU-893,4 2/22/2005	TSWU-1526 3/29/2005	TSWU-2164 4/26/2005	Req. LLD
Gross beta	3.3 ± 0.7	4.1 ± 0.6	2.0 ± 0.4	1.6 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.4	< 2.3	< 4.0	< 1.7	15
Fe-59	< 4.4	< 3.4	< 9.1	< 5.4	30
Co-58	< 1.8	< 1.9	< 4.6	< 3.7	15
Co-60	< 2.4	< 2.8	< 6.1	< 2.0	15
Zn-65	< 3.2	< 2.6	< 3.8	< 8.9	30
Zr-Nb-95	< 3.3	< 3.7	< 6.2	< 3.6	15
Cs-134	< 3.1	< 3.1	< 4.3	< 3.4	15
Cs-137	< 3.7	< 3.1	< 3.6	< 4.0	18
Ba-La-140	< 2.9	< 2.1	< 5.5	< 4.6	15

Lab Code Date Collected	TSWU-3096 5/31/2005	TSWU-3699 6/28/2005	TSWU-4311, 12 7/26/2005	TSWU-4957 8/30/2005	Req. LLD
Gross beta	1.7 ± 0.4	2.0 ± 0.6	2.2 ± 0.4	1.4 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.6	< 1.4	< 2.7	< 3.9	15
Fe-59	< 5.7	< 3.3	< 6.1	< 10.1	30
Co-58	< 2.1	< 1.2	< 4.6	< 2.6	15
Co-60	< 2.7	< 1.6	< 2.6	< 3.5	15
Zn-65	< 6.1	< 3.5	< 4.3	< 5.9	30
Zr-Nb-95	< 4.5	< 3.1	< 3.9	< 5.8	15
Cs-134	< 3.6	< 1.3	< 3.7	< 2.3	15
Cs-137	< 3.0	< 2.6	< 4.6	< 4.1	18
Ba-La-140	< 8.7	< 2.7	< 6.2	< 5.2	15

Lab Code Date Collected	TSWU-5590 9/27/2005	TSWU-6161 10/25/2005	TSWU-6809 11/29/2005	TSWU-7291 12/27/2005	Req. LLD
Gross beta	1.5 ± 0.4	3.3 ± 0.6	3.1 ± 0.7	1.6 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.4	< 3.0	< 6.1	< 4.4	15
Fe-59	< 8.0	< 6.4	< 6.8	< 8.2	30
Co-58	< 5.6	< 3.0	< 5.4	< 4.7	15
Co-60	< 4.2	< 4.8	< 4.8	< 3.5	15
Zn-65	< 9.5	< 8.0	< 9.8	< 6.0	30
Zr-Nb-95	< 5.3	< 4.9	< 5.5	< 5.3	15
Cs-134	< 4.3	< 4.3	< 3.2	< 4.8	15
Cs-137	< 4.4	< 4.5	< 3.8	< 4.4	18
Ba-La-140	< 8.1	< 3.8	< 6.3	< 3.9	15

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-50
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code Date Collected	TSWU-426 1/25/2005	TSWU-895 2/22/2005	TSWU-1527 3/29/2005	TSWU-2165 4/26/2005	Req. LLD
Gross beta	3.3 ± 0.6	3.0 ± 0.6	2.2 ± 0.4	2.8 ± 0.7	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 6.0	< 4.2	< 5.6	< 3.1	15
Fe-59	< 4.4	< 4.7	< 13.3	< 7.8	30
Co-58	< 4.8	< 4.2	< 3.4	< 3.4	15
Co-60	< 5.1	< 5.1	< 4.1	< 2.4	15
Zn-65	< 3.8	< 4.6	< 8.5	< 1.7	30
Zr-Nb-95	< 2.7	< 4.3	< 6.6	< 3.7	15
Cs-134	< 4.9	< 7.6	< 4.5	< 2.5	15
Cs-137	< 3.7	< 4.7	< 5.1	< 3.2	18
Ba-La-140	< 3.6	< 3.8	< 4.3	< 3.6	15

Lab Code Date Collected	TSWU-3097 5/31/2005	TSWU-3700 6/28/2005	TSWU-4313 7/26/2005	TSWU-4958 8/30/2005	Req. LLD
Gross beta	1.8 ± 0.4	1.5 ± 0.4	1.4 ± 0.4	1.9 ± 0.5	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 1.7	< 2.7	< 5.4	< 3.2	15
Fe-59	< 5.1	< 7.4	< 4.3	< 7.1	30
Co-58	< 1.9	< 2.6	< 4.1	< 2.7	15
Co-60	< 2.7	< 2.7	< 3.5	< 1.5	15
Zn-65	< 4.8	< 2.9	< 4.5	< 3.5	30
Zr-Nb-95	< 3.5	< 4.8	< 2.2	< 4.7	15
Cs-134	< 2.7	< 2.1	< 3.5	< 2.7	15
Cs-137	< 1.7	< 2.8	< 2.5	< 3.0	18
Ba-La-140	< 2.5	< 8.9	< 4.8	< 6.7	15

Lab Code Date Collected	TSWU-5591 9/27/2005	TSWU-6162 10/25/2005	TSWU-6810 11/29/2005	TSWU-7292 12/27/2005	Req. LLD
Gross beta	1.1 ± 0.3	2.3 ± 0.6	2.5 ± 0.6	2.0 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.3	< 6.4	< 3.0	< 3.5	15
Fe-59	< 5.4	< 10.1	< 6.3	< 8.8	30
Co-58	< 2.3	< 3.8	< 4.5	< 2.5	15
Co-60	< 1.5	< 4.1	< 2.7	< 3.0	15
Zn-65	< 2.8	< 8.4	< 4.0	< 6.0	30
Zr-Nb-95	< 3.4	< 5.5	< 4.6	< 5.0	15
Cs-134	< 3.5	< 3.9	< 4.2	< 2.5	15
Cs-137	< 1.8	< 4.7	< 6.2	< 5.8	18
Ba-La-140	< 4.0	< 6.0	< 4.8	< 3.8	15

Table 25. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Location: T-145 (QC)
Collection: Monthly composites of weekly grab samples
Units: pCi/L

Lab Code Date Collected	TSWU-427 1/25/2005	TSWU-896 2/22/2005	TSWU-1528 3/29/2005	TSWU-2166 4/26/2005	Req. LLD
Gross beta	3.3 ± 0.7	2.7 ± 0.6	2.4 ± 0.4	1.4 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.0	< 5.0	< 4.7	< 3.5	15
Fe-59	< 4.7	< 4.1	< 7.8	< 7.0	30
Co-58	< 2.8	< 2.8	< 4.8	< 3.0	15
Co-60	< 2.4	< 5.1	< 4.2	< 5.3	15
Zn-65	< 4.2	< 7.3	< 6.0	< 4.8	30
Zr-Nb-95	< 5.0	< 6.3	< 3.5	< 5.2	15
Cs-134	< 3.4	< 4.8	< 3.3	< 1.8	15
Cs-137	< 2.7	< 5.5	< 3.6	< 3.5	18
Ba-La-140	< 4.3	< 9.7	< 7.7	< 6.2	15

Lab Code Date Collected	TSWU-3098 5/31/2005	TSWU-3701 6/28/2005	TSWU-4314 7/26/2005	TSWU-4959 8/30/2005	Req. LLD
Gross beta	2.4 ± 0.4	1.3 ± 0.3	1.6 ± 0.4	1.8 ± 0.6	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 3.1	< 2.8	< 3.1	< 5.3	15
Fe-59	< 3.4	< 9.8	< 4.0	< 5.5	30
Co-58	< 1.8	< 4.5	< 2.3	< 3.9	15
Co-60	< 1.5	< 4.5	< 2.3	< 1.9	15
Zn-65	< 2.4	< 2.6	< 5.5	< 4.4	30
Zr-Nb-95	< 3.7	< 3.3	< 2.3	< 5.1	15
Cs-134	< 3.3	< 3.9	< 3.5	< 3.0	15
Cs-137	< 1.7	< 5.7	< 2.4	< 3.2	18
Ba-La-140	< 4.8	< 9.8	< 3.9	< 8.4	15

Lab Code Date Collected	TSWU-5592 9/27/2005	TSWU-6163 10/25/2005	TSWU-6811 11/29/2005	TSWU-7293 12/27/2005	Req. LLD
Gross beta	3.0 ± 0.5	1.4 ± 0.3	1.9 ± 0.6	1.6 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 5.0	< 4.4	< 2.9	< 4.9	15
Fe-59	< 9.0	< 5.8	< 5.1	< 4.0	30
Co-58	< 5.2	< 2.0	< 4.6	< 1.9	15
Co-60	< 4.2	< 3.9	< 2.4	< 2.9	15
Zn-65	< 4.5	< 3.8	< 3.1	< 4.6	30
Zr-Nb-95	< 7.1	< 4.3	< 4.0	< 4.8	15
Cs-134	< 5.3	< 4.2	< 3.1	< 4.2	15
Cs-137	< 5.6	< 4.8	< 5.7	< 2.4	18
Ba-La-140	< 4.8	< 4.1	< 4.7	< 3.6	15

Table 26. Untreated surface water samples, analyses for strontium-89 and strontium-90.
Collection: Quarterly composites of weekly grab samples
Units: pCi/L

Location	T-3			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	TSWU-1753	TSWU-4021	TSWU-5930	TSWU-7382, 3
Sr-89	< 0.7	< 0.6	< 0.8	< 0.6
Sr-90	< 0.7	< 0.6	< 0.5	< 0.6

Location	T-11 (C)			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	TSWU-1754	TSWU-4022	TSWU-5931	TSWU-7384
Sr-89	< 0.7	< 0.7	< 1.2	< 0.6
Sr-90	< 0.6	< 0.6	< 0.9	0.6 ± 0.3

Location	T-12 (C)			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	TSWU-1755	TSWU-4023	TSWU-5932	TSWU-7385
Sr-89	< 0.6	< 0.6	< 0.9	< 0.5
Sr-90	< 0.6	< 0.6	< 0.6	< 0.5

Location	T-22			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	TSWU-1756	TSWU-4024	TSWU-5933	TSWU-7386
Sr-89	< 0.6	< 0.6	< 0.7	< 0.6
Sr-90	< 0.5	< 0.5	< 0.6	0.6 ± 0.3

Location	T-50			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	TSWU-1757	TSWU-4025	TSWU-5934	TSWU-7387
Sr-89	< 0.6	< 0.6	< 0.8	< 0.6
Sr-90	< 0.5	0.6 ± 0.3	< 0.5	< 0.6

Table 27. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Collection: Monthly collection
Units: pCi/L
Location: T-132 (I)

Lab Code Date Collected	TSWU-2167 4/21/2005	TSWU-3099 5/19/2005	TSWU-3702 6/15/2005	TSWU-4315 7/20/2005	Req. LLD
Gross Beta	1.8 ± 0.4	3.2 ± 0.7	1.4 ± 0.3	1.8 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 6.0	< 4.3	< 3.6	< 3.9	15
Fe-59	< 11.5	< 6.0	< 6.0	< 7.4	30
Co-58	< 6.8	< 2.1	< 2.8	< 3.8	15
Co-60	< 3.7	< 1.8	< 3.2	< 2.9	15
Zn-65	< 9.1	< 3.8	< 6.2	< 7.6	30
Zr-Nb-95	< 4.0	< 5.2	< 4.1	< 5.6	15
Cs-134	< 7.3	< 3.6	< 3.2	< 3.3	15
Cs-137	< 3.8	< 2.9	< 2.8	< 2.3	18
Ba-La-140	< 5.5	< 4.9	< 9.4	< 4.6	15

Lab Code Date Collected	TSWU-4960 8/16/2005	TSWU-5593 9/19/2005	TSWU-6164 10/11/2005	Req. LLD
Gross Beta	1.4 ± 0.4	2.0 ± 0.6	1.0 ± 0.3	4.0
H-3	< 330	< 330	< 330	330
Mn-54	< 3.8	< 1.7	< 2.5	15
Fe-59	< 11.7	< 2.8	< 4.8	30
Co-58	< 2.6	< 2.6	< 3.0	15
Co-60	< 3.9	< 1.9	< 1.8	15
Zn-65	< 3.9	< 4.1	< 3.4	30
Zr-Nb-95	< 5.0	< 3.4	< 4.8	15
Cs-134	< 3.1	< 2.4	< 2.6	15
Cs-137	< 4.5	< 2.6	< 1.8	18
Ba-La-140	< 8.8	< 5.8	< 8.6	15

Table 27. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Collection: Monthly collection
Units: pCi/L
Location: T-134 (U)

Lab Code Date Collected	TSWU-2168 4/21/2005	TSWU-3100 5/19/2005	TSWU-3703 6/15/2005	TSWU-4316 7/20/2005	Req. LLD
Gross Beta	1.6 ± 0.4	3.3 ± 0.7	1.5 ± 0.4	1.1 ± 0.3	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.9	< 3.7	< 1.3	< 1.8	15
Fe-59	< 9.9	< 6.9	< 3.4	< 3.9	30
Co-58	< 4.8	< 4.2	< 1.0	< 2.9	15
Co-60	< 5.2	< 2.5	< 1.0	< 2.5	15
Zn-65	< 4.1	< 5.8	< 2.4	< 5.7	30
Zr-Nb-95	< 3.5	< 3.1	< 2.2	< 4.3	15
Cs-134	< 1.8	< 3.6	< 1.4	< 2.6	15
Cs-137	< 4.8	< 3.8	< 1.0	< 2.2	18
Ba-La-140	< 5.0	< 6.7	< 5.7	< 3.0	15

Lab Code Date Collected	TSWU-4961 8/16/2005	TSWU-5594 9/19/2005	TSWU-6165 10/11/2005	Req. LLD
Gross Beta	1.7 ± 0.4	1.8 ± 0.4	1.4 ± 0.4	4.0
H-3	976 ± 119 [a]	< 330	< 330	330
Mn-54	< 3.3	< 3.7	< 3.0	15
Fe-59	< 6.2	< 8.3	< 7.6	30
Co-58	< 1.9	< 3.1	< 4.8	15
Co-60	< 1.9	< 1.8	< 4.1	15
Zn-65	< 2.5	< 6.3	< 5.3	30
Zr-Nb-95	< 5.9	< 5.9	< 3.4	15
Cs-134	< 3.5	< 3.4	< 2.3	15
Cs-137	< 2.1	< 4.6	< 2.3	18
Ba-La-140	< 6.1	< 7.8	< 8.5	15

[a] Analysis was repeated; result of reanalysis: 888 ± 121 pCi/L.

Table 27. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Collection: Monthly collection
Units: pCi/L
Location: T-137 (C)

Lab Code Date Collected	TSWU-2169 4/21/2005	TSWU-3101 5/19/2005	TSWU-3704 6/15/2005	TSWU-4317 7/20/2005	Req. LLD
Gross Beta	2.4 ± 0.4	1.5 ± 0.4	2.8 ± 0.4	1.5 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 4.1	< 2.3	< 1.4	< 4.0	15
Fe-59	< 10.5	< 3.5	< 3.5	< 3.6	30
Co-58	< 6.1	< 2.4	< 0.8	< 2.0	15
Co-60	< 4.4	< 2.4	< 0.7	< 1.6	15
Zn-65	< 5.5	< 3.4	< 1.5	< 3.5	30
Zr-Nb-95	< 1.9	< 3.2	< 2.2	< 3.6	15
Cs-134	< 5.9	< 2.3	< 2.0	< 3.4	15
Cs-137	< 4.4	< 2.0	< 1.3	< 4.2	18
Ba-La-140	< 5.4	< 3.6	< 3.5	< 3.9	15

Lab Code Date Collected	TSWU-4962 8/16/2005	TSWU-5595 9/19/2005	TSWU-6166 10/11/2005	Req. LLD
Gross Beta	4.0 ± 0.5	1.8 ± 0.4	1.7 ± 0.4	4.0
H-3	< 330	< 330	< 330	330
Mn-54	< 2.9	< 1.9	< 2.6	15
Fe-59	< 11.8	< 5.7	< 5.7	30
Co-58	< 3.6	< 1.6	< 2.1	15
Co-60	< 4.0	< 1.6	< 1.3	15
Zn-65	< 5.8	< 2.1	< 3.4	30
Zr-Nb-95	< 5.7	< 3.7	< 4.1	15
Cs-134	< 2.0	< 3.2	< 3.4	15
Cs-137	< 4.6	< 2.7	< 1.6	18
Ba-La-140	< 12.3	< 7.2	< 5.4	15

Table 27. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Collection: Monthly collection
Units: pCi/L
Location: T-158 (C)

Lab Code Date Collected	TSWU-2170 4/21/2005	TSWU-3102 5/19/2005	TSWU-3705 6/15/2005	TSWU-4318 7/20/2005	Req. LLD
Gross Beta	1.6 ± 0.4	2.4 ± 0.6	1.4 ± 0.3	3.2 ± 0.5	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 2.5	< 3.1	< 1.1	< 4.8	15
Fe-59	< 5.4	< 6.5	< 2.8	< 9.1	30
Co-58	< 3.3	< 4.2	< 1.4	< 4.6	15
Co-60	< 2.7	< 3.9	< 1.1	< 5.7	15
Zn-65	< 1.8	< 4.7	< 1.9	< 7.4	30
Zr-Nb-95	< 4.2	< 2.3	< 2.1	< 3.7	15
Cs-134	< 3.7	< 3.6	< 0.8	< 3.7	15
Cs-137	< 2.1	< 2.2	< 1.2	< 6.3	18
Ba-La-140	< 4.6	< 9.7	< 2.2	< 4.5	15

Lab Code Date Collected	TSWU-4963 8/16/2005	TSWU-5596 9/19/2005	TSWU-6167 10/11/2005	Req. LLD
Gross Beta	1.7 ± 0.4	2.4 ± 0.6	2.4 ± 0.4	4.0
H-3	< 330	< 330	< 330	330
Mn-54	< 2.4	< 2.1	< 3.6	15
Fe-59	< 3.7	< 3.4	< 6.4	30
Co-58	< 4.3	< 3.6	< 4.3	15
Co-60	< 2.3	< 2.9	< 3.1	15
Zn-65	< 2.4	< 1.5	< 3.7	30
Zr-Nb-95	< 2.8	< 4.2	< 3.6	15
Cs-134	< 2.9	< 2.4	< 2.9	15
Cs-137	< 3.0	< 1.7	< 4.4	18
Ba-La-140	< 8.3	< 10.1	< 4.4	15

Table 27. Untreated surface water, analyses for gross beta, tritium and gamma emitting isotopes.
Collection: Monthly collection
Units: pCi/L
Location: T-162 (C)

Lab Code Date Collected	TSWU-2171 4/21/2005	TSWU-3103, 4 5/19/2005	TSWU-3706 6/15/2005	TSWU-4319 7/20/2005	Req. LLD
Gross Beta	2.5 ± 0.6	3.5 ± 0.4	1.4 ± 0.4	1.6 ± 0.4	4.0
H-3	< 330	< 330	< 330	< 330	330
Mn-54	< 4.1	< 2.5	< 3.0	< 5.4	15
Fe-59	< 11.2	< 5.0	< 6.1	< 7.0	30
Co-58	< 4.7	< 1.5	< 2.9	< 4.0	15
Co-60	< 4.7	< 1.5	< 2.0	< 2.2	15
Zn-65	< 3.1	< 1.6	< 3.6	< 8.7	30
Zr-Nb-95	< 4.5	< 2.9	< 2.8	< 2.5	15
Cs-134	< 5.5	< 2.1	< 1.3	< 1.6	15
Cs-137	< 6.1	< 2.1	< 2.7	< 3.9	18
Ba-La-140	< 3.9	< 4.6	< 8.5	< 6.4	15

Lab Code Date Collected	TSWU-4964 8/16/2005	TSWU-5597 9/19/2005	TSWU-6168 10/11/2005	Req. LLD
Gross Beta	2.1 ± 0.4	2.5 ± 0.7	1.6 ± 0.4	4.0
H-3	< 330	< 330	< 330	330
Mn-54	< 3.1	< 1.6	< 2.7	15
Fe-59	< 6.7	< 4.9	< 12.1	30
Co-58	< 2.6	< 2.1	< 4.0	15
Co-60	< 1.7	< 1.5	< 2.4	15
Zn-65	< 2.3	< 4.2	< 9.0	30
Zr-Nb-95	< 5.5	< 3.7	< 2.8	15
Cs-134	< 3.8	< 2.0	< 3.6	15
Cs-137	< 2.5	< 1.9	< 3.3	18
Ba-La-140	< 12.9	< 6.2	< 11.5	15

Table 28. Fish samples, analyses for gross beta and gamma-emitting isotopes.
Collection: Semiannually
Units: pCi/g wet

Location	T-33 (Lake Erie, 1.5 mi. NE of Station)		
Lab Code	TF-3010	TF-3011	TF-3012
Date Collected	4/18/2005	4/18/2005	5/9/2005
Sample Type	Carp	Walleye	White Bass / Perch
Gross Beta	3.88 ± 0.12	5.55 ± 0.19	3.77 ± 0.14
K-40	2.68 ± 0.41	2.83 ± 0.50	2.55 ± 0.47
Mn-54	< 0.011	< 0.014	< 0.021
Fe-59	< 0.085	< 0.085	< 0.051
Co-58	< 0.029	< 0.016	< 0.034
Co-60	< 0.012	< 0.019	< 0.016
Zn-65	< 0.036	< 0.032	< 0.036
Cs-134	< 0.013	< 0.016	< 0.024
Cs-137	< 0.012	< 0.020	< 0.025

Location	T-35		
Lab Code	TF-3013	TF-3014	TF-3015
Date Collected	5/26/2005	5/6/2005	5/6/2005
Sample Type	Carp	Walleye	Perch
Gross Beta	3.53 ± 0.11	4.49 ± 0.11	4.17 ± 0.11
K-40	2.55 ± 0.36	3.37 ± 0.59	2.22 ± 0.44
Mn-54	< 0.014	< 0.016	< 0.018
Fe-59	< 0.040	< 0.094	< 0.061
Co-58	< 0.017	< 0.021	< 0.026
Co-60	< 0.010	< 0.012	< 0.009
Zn-65	< 0.017	< 0.064	< 0.030
Cs-134	< 0.016	< 0.019	< 0.023
Cs-137	< 0.007	< 0.026	< 0.011

Table 29. Shoreline sediment samples, analyses for gamma-emitting isotopes.
Collection: Semiannually
Units: pCi/g dry

Location	T-3	T-4	T-4P	T-27B	T-132
Lab Code	TSS-3625	TSS-3627	TSS-3627	TSS-3628	TSS-3629
Date Collected	6/8/2005	6/8/2005	6/8/2005	6/8/2005	6/8/2005
K-40	13.53 ± 0.61	16.80 ± 0.84	20.54 ± 0.89	11.40 ± 0.58	11.37 ± 0.55
Mn-54	< 0.008	< 0.027	< 0.030	< 0.015	< 0.008
Co-58	< 0.016	< 0.021	< 0.036	< 0.017	< 0.020
Co-60	< 0.010	< 0.017	< 0.019	< 0.010	< 0.008
Cs-134	< 0.012	< 0.018	< 0.023	< 0.011	< 0.010
Cs-137	< 0.012	< 0.027	< 0.025	< 0.017	< 0.015
Lab Code	TSS-6812	TSS-6813	TSS-6814	TSS-6815	TSS-6816
Date Collected	11/9/2005	11/9/2005	11/9/2005	11/9/2005	11/9/2005
K-40	13.62 ± 0.78	12.96 ± 0.68	19.93 ± 1.49	11.91 ± 0.83	10.29 ± 0.81
Mn-54	< 0.018	< 0.017	< 0.041	< 0.015	< 0.022
Co-58	< 0.022	< 0.028	< 0.059	< 0.030	< 0.039
Co-60	< 0.027	< 0.018	< 0.050	< 0.027	< 0.023
Cs-134	< 0.026	< 0.035	< 0.080	< 0.018	< 0.034
Cs-137	< 0.025	< 0.018	0.083 ± 0.042	< 0.022	< 0.025

Environmental, Inc.
Midwest Laboratory
an Allegheny Technologies Co.

700 Landwehr Road • Northbrook, IL 60062-2310
ph. (847) 564-0700 • fax (847) 564-4517

APPENDIX A

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, 2005 through December, 2005

Appendix A

Interlaboratory Comparison Program Results

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

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

Table A-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 A-6 were obtained through participation in the Mixed Analyte Performance Evaluation 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	5.0 pCi/liter
	> 100 pCi/liter or kg	5% of known value
Strontium-89[b]	5 to 50 pCi/liter or kg	5.0 pCi/liter
	> 50 pCi/liter or kg	10% of known value
Strontium-90[b]	2 to 30 pCi/liter or kg	5.0 pCi/liter
	> 30 pCi/liter or kg	10% of known value
Potassium-40	≥ 0.1 g/liter or kg	5% of known value
Gross alpha	≤ 20 pCi/liter	5.0 pCi/liter
	> 20 pCi/liter	25% of known value
Gross beta	≤ 100 pCi/liter	5.0 pCi/liter
	> 100 pCi/liter	5% of known value
Tritium	≤ 4,000 pCi/liter	$\pm 1\sigma$ = (pCi/liter) = $169.85 \times (\text{known})^{0.0933}$
	> 4,000 pCi/liter	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	6.0 pCi/liter
	> 55 pCi/liter	10% of known value
Uranium-238, Nickel-63[b] Technetium-99[b]	≤ 35 pCi/liter	6.0 pCi/liter
	> 35 pCi/liter	15% of known value
Iron-55[b]	50 to 100 pCi/liter	10 pCi/liter
	> 100 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 A-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	Acceptance
STW-1051	02/15/05	Sr-89	28.0 ± 1.2	29.4	20.7 - 38.1	Pass
STW-1051	02/15/05	Sr-90	25.1 ± 0.7	24.4	15.7 - 33.1	Pass
STW-1052	02/15/05	Ba-133	52.9 ± 2.8	53.4	44.2 - 62.6	Pass
STW-1052	02/15/05	Co-60	54.4 ± 0.4	56.6	47.9 - 65.3	Pass
STW-1052	02/15/05	Cs-134	67.7 ± 1.8	64.9	56.2 - 73.6	Pass
STW-1052	02/15/05	Cs-137	39.6 ± 1.8	40.2	31.5 - 48.9	Pass
STW-1052	02/15/05	Zn-65	159.7 ± 3.0	161.0	133.0 - 189.0	Pass
STW-1053	02/15/05	Gr. Alpha	55.1 ± 1.8	67.9	38.5 - 97.3	Pass
STW-1053	02/15/05	Gr. Beta	46.8 ± 1.3	51.1	38.5 - 97.3	Pass
STW-1054	02/15/05	Ra-226	13.7 ± 1.5	14.1	10.4 - 17.8	Pass
STW-1054	02/15/05	Ra-228	13.3 ± 0.6	13.7	7.8 - 19.6	Pass
STW-1054	02/15/05	Uranium	5.1 ± 0.2	5.0	0.0 - 10.2	Pass
STW-1055	05/17/05	Sr-89	45.1 ± 4.1	41.3	32.6 - 50.0	Pass
STW-1055	05/17/05	Sr-90	7.5 ± 0.9	5.9	0.0 - 14.6	Pass
STW-1056	05/17/05	Ba-133	87.1 ± 2.0	88.4	73.1 - 104.0	Pass
STW-1056	05/17/05	Co-60	38.4 ± 0.8	37.0	28.3 - 45.7	Pass
STW-1056	05/17/05	Cs-134	75.3 ± 0.7	78.6	69.9 - 87.3	Pass
STW-1056	05/17/05	Cs-137	201.0 ± 8.4	194.0	184.0 - 218.0	Pass
STW-1056	05/17/05	Zn-65	130.0 ± 6.7	118.0	97.6 - 138.0	Pass
STW-1057	05/17/05	Gr. Alpha	42.7 ± 2.9	37.0	21.0 - 53.0	Pass
STW-1057	05/17/05	Gr. Beta	34.0 ± 0.4	34.2	25.5 - 42.9	Pass
STW-1058	05/17/05	I-131	14.7 ± 0.5	15.5	10.3 - 20.7	Pass
STW-1059	05/17/05	Ra-226	6.6 ± 0.1	7.6	5.6 - 9.5	Pass
STW-1059	05/17/05	Ra-228	19.3 ± 0.7	18.9	10.7 - 27.1	Pass
STW-1059	05/17/05	Uranium	9.6 ± 0.1	10.1	4.9 - 15.3	Pass
STW-1060	05/17/05	H-3	24100.0 ± 109.0	24400.0	20200.0 - 28600.0	Pass
STW-1067	08/16/05	Sr-89	29.1 ± 3.0	28.0	19.3 - 36.7	Pass
STW-1067	08/16/05	Sr-90	36.0 ± 0.6	33.8	25.1 - 42.5	Pass
STW-1068	08/16/05	Ba-133	107.0 ± 1.7	106.0	87.7 - 124.0	Pass
STW-1068	08/16/05	Co-60	15.2 ± 0.2	13.5	4.8 - 22.2	Pass
STW-1068	08/16/05	Cs-134	89.1 ± 0.3	92.1	83.4 - 101.0	Pass
STW-1068	08/16/05	Cs-137	72.1 ± 1.0	72.7	64.0 - 81.4	Pass
STW-1068	08/16/05	Zn-65	67.4 ± 1.4	65.7	54.3 - 77.1	Pass
STW-1069	08/16/05	Gr. Alpha	44.3 ± 1.5	55.7	31.6 - 79.8	Pass
STW-1069	08/16/05	Gr. Beta	58.4 ± 2.1	61.3	44.0 - 78.6	Pass
STW-1070	08/16/05	Ra-226	16.6 ± 1.5	16.6	12.3 - 20.9	Pass
STW-1070	08/16/05	Ra-228	6.2 ± 0.3	6.2	3.5 - 8.9	Pass
STW-1070	08/16/05	Uranium	4.5 ± 0.1	4.5	0.0 - 9.7	Pass

TABLE A-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	Acceptance
STW-1072	11/15/05	Sr-89	20.6 ± 0.4	19.0	10.3 - 27.7	Pass
STW-1072	11/15/05	Sr-90	15.0 ± 0.3	16.0	7.3 - 24.7	Pass
STW-1073	11/15/05	Ba-133	31.8 ± 1.8	31.2	22.5 - 39.9	Pass
STW-1073	11/15/05	Co-60	85.0 ± 1.4	84.1	75.4 - 92.8	Pass
STW-1073	11/15/05	Cs-134	37.2 ± 2.1	33.9	25.2 - 42.6	Pass
STW-1073	11/15/05	Cs-137	27.8 ± 0.7	28.3	19.6 - 37.0	Pass
STW-1073	11/15/05	Zn-65	109.0 ± 1.0	105.0	86.8 - 123.0	Pass
STW-1074 [d]	11/15/05	Gr. Alpha	41.1 ± 1.2	23.3	13.2 - 33.4	Fail
STW-1074	11/15/05	Gr. Beta	42.7 ± 0.5	39.1	30.4 - 47.8	Pass
STW-1075	11/15/05	I-131	20.5 ± 0.6	17.4	12.2 - 22.6	Pass
STW-1076	11/15/05	Ra-226	7.8 ± 0.6	8.3	6.2 - 10.5	Pass
STW-1076 [e]	11/15/05	Ra-228	5.5 ± 0.6	3.5	2.0 - 5.0	Fail
STW-1076	11/15/05	Uranium	15.5 ± 0.3	16.1	10.9 - 21.3	Pass
STW-1077	11/15/05	H-3	12500.0 ± 238.0	12200.0	10100.0 - 14300.0	Pass

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

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

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

[d] The original samples were calculated using an Am-241 efficiency. The samples were spiked with Th-232. Samples were recounted and calculated using the Th-232 efficiency. Results of the recount: 27.01 ± 2.35 pCi/L.

[e] Decay of short-lived radium daughters contributed to a higher counting rate. Delay of counting for 100 minutes provided better results. The reported result was the average of the first cycle of 100 minutes, the average of the second cycle counts was 4.01 pCi/L

TABLE A-2. Crosscheck program results; Thermoluminescent Dosimetry, (TLD, CaSO4: Dy Cards).

Lab Code	Date	Description	Known Value (mR)	Lab Result ± 2 sigma (mR)	Control Limits	Acceptance
Environmental, Inc.						
2005-1	4/4/2005	30 cm	55.01	64.02 ± 2.86	38.51 - 71.51	Pass
2005-1	4/4/2005	60 cm	13.75	15.43 ± 1.02	9.63 - 17.88	Pass
2005-1	4/4/2005	60 cm	13.75	14.98 ± 0.80	9.63 - 17.88	Pass
2005-1	4/4/2005	90 cm	6.11	6.24 ± 0.16	4.28 - 7.94	Pass
2005-1	4/4/2005	90 cm	6.11	5.45 ± 0.48	4.28 - 7.94	Pass
2005-1	4/4/2005	120 cm	3.44	3.50 ± 0.35	2.41 - 4.47	Pass
2005-1	4/4/2005	120 cm	3.44	3.15 ± 0.18	2.41 - 4.47	Pass
2005-1	4/4/2005	150 cm	2.2	2.31 ± 0.25	1.54 - 2.86	Pass
2005-1	4/4/2005	180 cm	1.53	1.65 ± 0.41	1.07 - 1.99	Pass
Environmental, Inc.						
2005-2	9/12/2005	30 cm	54.84	59.30 ± 2.66	38.39 - 71.29	Pass
2005-2	9/12/2005	60 cm	13.71	17.55 ± 1.30	9.60 - 17.82	Pass
2005-2	9/12/2005	75 cm	8.77	8.24 ± 0.38	6.14 - 11.40	Pass
2005-2	9/12/2005	90 cm	6.09	5.94 ± 0.49	4.26 - 7.92	Pass
2005-2	9/12/2005	90 cm	6.09	5.93 ± 0.37	4.26 - 7.92	Pass
2005-2	9/12/2005	120 cm	3.43	3.42 ± 0.18	2.40 - 4.46	Pass
2005-2	9/12/2005	150 cm	2.19	1.71 ± 0.14	1.53 - 2.85	Pass
2005-2	9/12/2005	150 cm	2.19	1.87 ± 0.27	1.53 - 2.85	Pass
2005-2	9/12/2005	180 cm	1.52	1.58 ± 0.99	1.06 - 1.98	Pass

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

Lab Code [b]	Date	Analysis	Concentration (pCi/L)[a] Laboratory results 2s, n=1 [c]	Known Activity	Control Limits [d]	Acceptance
W-11105	1/11/2005	Gr. Alpha	24.05 ± 1.01	20.08	10.04 - 30.12	Pass
W-11105	1/11/2005	Gr. Beta	61.59 ± 1.11	65.70	55.70 - 75.70	Pass
SPW-764	2/18/2005	H-3	77595.00 ± 764.00	80543.00	64434.40 - 96651.60	Pass
SPAP-766	2/18/2005	Gr. Beta	416.08 ± 5.52	463.00	370.40 - 509.30	Pass
STW-2887	2/28/2005	Tc-99	32.91 ± 1.23	32.98	20.98 - 44.98	Pass
W-30105	3/1/2005	Gr. Alpha	25.22 ± 0.45	20.08	10.04 - 30.12	Pass
W-30105	3/1/2005	Gr. Beta	62.27 ± 0.48	65.73	55.73 - 75.73	Pass
SPW-1836	4/15/2005	I-131	109.79 ± 0.94	106.30	85.04 - 127.56	Pass
SPW-1836	4/15/2005	I-131(G)	110.25 ± 9.68	106.30	95.67 - 116.93	Pass
SPMI-1838	4/15/2005	Cs-134	25.94 ± 1.28	26.60	16.60 - 36.60	Pass
SPMI-1838	4/15/2005	Cs-137	59.31 ± 3.66	60.90	50.90 - 70.90	Pass
SPMI-1838	4/15/2005	I-131	97.71 ± 0.81	106.30	85.04 - 127.56	Pass
SPMI-1838	4/15/2005	I-131(G)	109.45 ± 3.06	106.30	95.67 - 116.93	Pass
SPMI-1838	4/15/2005	Sr-89	104.44 ± 2.89	108.20	86.56 - 129.84	Pass
SPMI-1838	4/15/2005	Sr-90	8.97 ± 0.79	7.53	0.00 - 17.53	Pass
SPVE-1932	4/18/2005	I-131(G)	1.00 ± 0.04	0.73	0.44 - 1.02	Pass
SPCH-1935	4/18/2005	I-131	382.40 ± 14.95	328.64	262.91 - 394.37	Pass
SPAP-1966	4/18/2005	Cs-134	52.10 ± 7.27	53.35	43.35 - 63.35	Pass
SPAP-1966	4/18/2005	Cs-134	57.28 ± 13.47	53.35	43.35 - 63.35	Pass
SPAP-1966	4/18/2005	Cs-137	124.68 ± 18.41	121.77	109.59 - 133.95	Pass
SPAP-1968	4/18/2005	Cs-134	52.10 ± 7.27	53.35	43.35 - 63.35	Pass
SPAP-1968	4/18/2005	Cs-137	116.79 ± 14.00	121.77	109.59 - 133.95	Pass
SPW-2098	4/26/2005	Fe-55	2565.20 ± 63.66	3017.60	2414.08 - 3621.12	Pass
SPW-2922	5/31/2005	Cs-134	27.01 ± 1.09	25.54	15.54 - 35.54	Pass
SPW-2922	5/31/2005	Cs-134	65.38 ± 2.92	60.71	50.71 - 70.71	Pass
SPW-2922	5/31/2005	Sr-89	107.90 ± 3.60	113.90	91.12 - 136.68	Pass
SPW-2922	5/31/2005	Sr-90	11.11 ± 1.13	6.90	0.00 - 16.90	Pass
SPAP-2892	6/1/2005	Gr. Beta	420.32 ± 5.55	448.00	358.40 - 492.80	Pass
SPW-2895	6/1/2005	H-3	75271.00 ± 724.00	78676.00	62940.80 - 94411.20	Pass
w-60105	6/1/2005	Gr. Alpha	23.69 ± 0.52	20.08	10.04 - 30.12	Pass
w-60105	6/1/2005	Gr. Beta	60.08 ± 0.57	65.73	55.73 - 75.73	Pass
SPF-3089	6/7/2005	Cs-134	1.08 ± 0.05	1.02	0.61 - 1.43	Pass
SPF-3089	6/7/2005	Cs-137	2.54 ± 0.10	2.43	1.46 - 3.40	Pass
SPW-	7/1/2005	Ni-63	20.57 ± 1.10	16.75	10.05 - 23.45	Pass
SPW-47731	8/24/2005	C-14	2112.30 ± 9.13	2370.80	1422.48 - 3319.12	Pass
SPW-47732	8/24/2005	C-14	2294.10 ± 10.37	2370.80	1422.48 - 3319.12	Pass
SPW-4775	8/24/2005	Fe-55	2633.50 ± 62.40	2777.50	2222.00 - 3333.00	Pass
SPMI-4834	8/30/2005	Cs-134	49.27 ± 4.68	47.02	37.02 - 57.02	Pass
SPMI-4834	8/30/2005	Cs-137	58.17 ± 8.18	60.37	50.37 - 70.37	Pass
SPMI-4834	8/30/2005	Sr-89	66.39 ± 3.13	65.90	52.72 - 79.08	Pass
SPMI-4834	8/30/2005	Sr-90	11.15 ± 1.13	9.60	0.00 - 19.60	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L) Laboratory results 2s, n=1[b]	Known Activity	Control Limits[c]	Acceptance
SPW-4836	8/30/2005	Cs-134	47.35 ± 5.19	47.02	37.02 - 57.02	Pass
SPW-4836	8/30/2005	Cs-137	62.91 ± 9.08	60.37	50.37 - 70.37	Pass
SPW-4836	8/30/2005	Sr-89	11.04 ± 0.98	9.60	0.00 - 19.60	Pass
SPW-4836	8/30/2005	Sr-90	65.89 ± 2.79	65.90	52.72 - 79.08	Pass
SPW-5014	8/30/2005	H-3	77518.20 ± 753.80	77602.52	62082.02 - 93123.02	Pass
W-90705	9/7/2005	Gr. Alpha	24.61 ± 0.48	20.08	10.04 - 30.12	Pass
W-90705	9/7/2005	Gr. Beta	58.35 ± 0.49	65.73	55.73 - 75.73	Pass
SPW-5237	9/22/2005	C-14	2387.40 ± 11.00	2370.80	1422.48 - 3319.12	Pass
SPW-5508	9/26/2005	Ni-63	20.64 ± 1.23	16.70	10.02 - 23.38	Pass
SPW-6019	10/24/2005	Tc-99	547.99 ± 6.69	539.22	377.45 - 700.99	Pass
SPF-6293	11/4/2005	Cs-134	941.30 ± 44.10	886.00	797.40 - 974.60	Pass
SPF-6293	11/4/2005	Cs-137	2570.40 ± 105.30	2400.00	2160.00 - 2640.00	Pass
SPAP-6309	11/7/2005	Cs-134	41.24 ± 1.91	44.03	34.03 - 54.03	Pass
SPAP-6309	11/7/2005	Cs-137	114.03 ± 5.01	120.24	108.22 - 132.26	Pass
SPAP-6311	11/7/2005	Gr. Beta	1.58 ± 0.02	1.42	1.14 - 11.42	Pass
SPW-6451	11/10/2005	H-3	77126.00 ± 747.00	76749.00	61399.20 - 92098.80	Pass
W-120105	12/1/2005	Gr. Alpha	25.16 ± 0.45	20.08	10.04 - 30.12	Pass
W-120105	12/1/2005	Gr. Beta	74.58 ± 0.81	65.73	55.73 - 75.73	Pass
SPW-7440	12/30/2005	Cs-134	42.67 ± 4.22	42.03	32.03 - 52.03	Pass
SPW-7440	12/30/2005	Cs-137	61.19 ± 7.20	59.91	49.91 - 69.91	Pass
SPMI-7442	12/31/2005	Cs-134	40.41 ± 5.66	42.03	32.03 - 52.03	Pass
SPMI-7442	12/31/2005	Cs-137	60.05 ± 7.80	59.91	49.91 - 69.91	Pass

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/filter), charcoal (pCi/m^3), and solid samples (pCi/g).

[b] Laboratory codes as follows: W (water), MI (milk), AP (air filter), SO (soil), VE (vegetation), CH (charcoal canister), F (fish).

[c] Results are based on single determinations.

[d] 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 A-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)
W-11105	water	1/11/2005	Gr. Alpha	0.055	0.00 ± 0.038	1
W-11105	water	1/11/2005	Gr. Beta	0.15	-0.016 ± 0.10	3.2
SPW-765	water	2/18/2005	H-3	165.8	7.4 ± 82.5	200
SPAP-766	Air Filter	2/18/2005	Gr. Beta	0.72	0.29 ± 0.48	3.2
STW-2888	water	2/28/2005	Tc-99	1.32	0.45 ± 0.81	10
W-30105	water	3/1/2005	Gr. Alpha	0.067	-0.007 ± 0.043	1
W-30105	water	3/1/2005	Gr. Beta	0.18	-0.04 ± 0.11	3.2
SPW-1837	water	4/15/2005	Cs-134	4.66		10
SPW-1837	water	4/15/2005	Cs-137	5.38		10
SPW-1837	water	4/15/2005	I-131	0.30	-0.13 ± 0.16	0.5
SPW-1837	water	4/15/2005	I-131(G)	6.56		20
SPMI-1839	Milk	4/15/2005	I-131	0.26	-0.083 ± 0.14	0.5
SPMI-1839	Milk	4/15/2005	Sr-89	0.54	-0.069 ± 0.56	5
SPMI-1839	Milk	4/15/2005	Sr-90	0.53	0.88 ± 0.34	1
SPCH-1934	Charcoal	4/18/2005	I-131(G)	2.34		9.6
SPW-2097	water	4/26/2005	Fe-55	859.0	96.1 ± 528.4	1000
SPW-2923	water	5/31/2005	Cs-134	3.29		10
SPW-2923	water	5/31/2005	Cs-137	3.87		10
SPW-2896	water	6/1/2005	H-3	138.30	48.1 ± 85.9	200
w-60105	water	6/1/2005	Gr. Alpha	0.061	0.002 ± 0.043	1
w-60105	water	6/1/2005	Gr. Beta	0.16	0.056 ± 0.11	3.2
SPF-3090	Fish	6/7/2005	Cs-134	15.69		100
SPF-3090	Fish	6/7/2005	Cs-137	11.71		100
SPW-	water	7/1/2005	Ni-63	1.60	0.79 ± 0.99	20
SPW-4774	water	8/24/2005	C-14	12.18	2.84 ± 6.45	200
SPW-4776	water	8/24/2005	Fe-55	833	275 ± 525	1000
SPMI-4835	Milk	8/30/2005	Co-60	4.42		10
SPMI-4835	Milk	8/30/2005	Cs-134	4.18		10
SPMI-4835	Milk	8/30/2005	Cs-137	6.25		10
SPMI-4835	Milk	8/30/2005	I-131(G)	5.37		20
SPMI-4835	Milk	8/30/2005	Sr-89	0.66	-0.23 ± 0.65	5
SPMI-4835 [d]	Milk	8/30/2005	Sr-90	0.66	1.02 ± 0.41	1
SPW-4837	water	8/30/2005	Co-60	2.48		10
SPW-4837	water	8/30/2005	Cs-134	3.85		10
SPW-4837	water	8/30/2005	Cs-137	3.00		10
SPW-4837	water	8/30/2005	Sr-89	0.63	0.25 ± 0.53	5
SPW-4837	water	8/30/2005	Sr-90	0.63	-0.035 ± 0.29	1
SPW-5015	water	8/30/2005	H-3	142.8	168 ± 93	200
SPW-5238	water	9/22/2005	C-14	17.10	3.02 ± 9.04	200

TABLE A-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)
W-90705	water	9/7/2005	Gr. Alpha	0.056	0.034 ± 0.04	1
W-90705	water	9/7/2005	Gr. Beta	0.16	0.082 ± 0.11	3.2
SPW-5238	water	9/22/2005	C-14	17.10	3.02 ± 9.04	200
SPW-5509	water	9/26/2005	Ni-63	1.25	1.23 ± 0.79	20
SPW-6020	water	10/24/2005	Tc-99	4.81	-1.75 ± 2.90	10
SPF-6294	Fish	11/4/2005	Cs-134	18.60		100
SPF-6294	Fish	11/4/2005	Cs-137	12.99		100
SPAP-6310	Air Filter	11/7/2005	Cs-134	3.23		100
SPAP-6310	Air Filter	11/7/2005	Cs-137	3.86		100
SPAP-6312	Air Filter	11/7/2005	Gr. Beta	1.22	-0.64 ± 0.64	3.2
W-120105	water	12/1/2005	Gr. Alpha	0.05	0.033 ± 0.04	1
W-120105	water	12/1/2005	Gr. Beta	0.15	-0.043 ± 0.11	3.2
SPMI-7419	Milk	12/22/2005	Co-60	7.24		10
SPMI-7419	Milk	12/22/2005	Cs-137	5.61		10
SPMI-7419	Milk	12/22/2005	I-131(G)	10.96		20
SPW-7421	water	12/22/2005	Co-60	2.43		10
SPW-7421	water	12/22/2005	Cs-137	3.12		10
SPW-7441	water	12/30/2005	Cs-134	4.25		10
SPW-7441	water	12/30/2005	Cs-137	1.63		10
SPMI-7443	Milk	12/30/2005	Cs-134	4.74		10
SPMI-7443	Milk	12/30/2005	Cs-137	8.53		10

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/filter), charcoal (pCi/charcoal canister), and solid samples (pCi/g).
[b] Activity reported is a net activity result. For gamma spectroscopic analysis, activity detected below the LLD value is not reported
[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 A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
SW-62, 63	1/3/2005	Gr. Beta	3.01 ± 0.57	2.39 ± 0.58	2.70 ± 0.41	Pass
SW-62, 63	1/3/2005	K-40	2.00 ± 0.20	2.10 ± 0.20	2.05 ± 0.14	Pass
CF-95, 96	1/3/2005	Gr. Beta	6.26 ± 0.23	6.28 ± 0.23	6.27 ± 0.16	Pass
CF-95, 96	1/3/2005	K-40	5.68 ± 0.59	5.37 ± 0.48	5.53 ± 0.38	Pass
AP-791, 792	1/14/2005	Be-7	0.057 ± 0.017	0.07 ± 0.04	0.06 ± 0.02	Pass
WW-353, 354	1/19/2005	Gr. Beta	8.37 ± 1.21	10.28 ± 1.34	9.32 ± 0.90	Pass
SO-383, 384	1/19/2005	H-3	453.50 ± 107.20	417.90 ± 106.00	435.70 ± 75.38	Pass
LW-431, 432	1/27/2005	Gr. Beta	2.45 ± 0.54	2.20 ± 0.54	2.33 ± 0.38	Pass
MI-486, 487	2/1/2005	K-40	1319.40 ± 163.60	1177.20 ± 179.70	1248.30 ± 121.51	Pass
SW-511, 512	2/1/2005	I-131	0.37 ± 0.22	0.44 ± 0.23	0.40 ± 0.16	Pass
TD-628, 629	2/1/2005	H-3	489663 ± 1918	491225 ± 1915	490444 ± 1355	Pass
DW-538, 539	2/3/2005	Gr. Beta	3.93 ± 1.18	3.62 ± 1.10	3.78 ± 0.81	Pass
MI-564, 565	2/8/2005	K-40	1316.20 ± 171.10	1292.60 ± 154.40	1304.40 ± 115.23	Pass
DW-50134, 5	2/11/2005	Gr. Beta	18.41 ± 0.98	16.76 ± 0.98	17.59 ± 0.69	Pass
SWU-893, 894	2/22/2005	Gr. Beta	4.00 ± 0.96	4.20 ± 0.72	4.10 ± 0.60	Pass
SW-925, 926	2/25/2005	Gr. Beta	5.97 ± 1.51	6.14 ± 1.55	6.06 ± 1.08	Pass
SW-950, 951	3/1/2005	Gr. Beta	0.92 ± 0.27	1.21 ± 0.27	1.07 ± 0.19	Pass
SW-950, 951	3/1/2005	Gr. Beta	2.06 ± 0.40	2.29 ± 0.44	2.18 ± 0.30	Pass
SW-973, 974	3/1/2005	I-131	1.08 ± 0.19	0.92 ± 0.18	1.00 ± 0.13	Pass
DW-50248, 9	3/16/2005	Gr. Alpha	5.27 ± 1.06	4.17 ± 0.90	4.72 ± 0.70	Pass
DW-1264, 1265	3/19/2005	I-131	0.54 ± 0.21	0.73 ± 0.20	0.63 ± 0.15	Pass
AP-1955, 1956	3/28/2005	Be-7	0.071 ± 0.009	0.071 ± 0.009	0.071 ± 0.006	Pass
AP-1890, 1891	3/29/2005	Be-7	0.060 ± 0.013	0.069 ± 0.013	0.065 ± 0.009	Pass
AP-2025, 2026	3/29/2005	Be-7	0.063 ± 0.012	0.071 ± 0.011	0.067 ± 0.008	Pass
MI-1346, 1347	3/30/2005	K-40	1252.80 ± 120.50	1334.10 ± 106.60	1293.45 ± 80.44	Pass
AP-2048, 2049	3/30/2005	Be-7	0.075 ± 0.018	0.071 ± 0.015	0.073 ± 0.012	Pass
AP-2081, 2082	3/30/2005	Be-7	0.073 ± 0.016	0.061 ± 0.018	0.067 ± 0.012	Pass
SWU-1521, 1522	3/31/2005	Gr. Beta	2.83 ± 1.16	3.46 ± 1.23	3.14 ± 0.85	Pass
WW-1738, 1739	4/5/2005	Gr. Beta	11.44 ± 1.17	11.14 ± 1.62	11.29 ± 1.00	Pass
SW-1857, 1858	4/13/2005	Gr. Beta	7.04 ± 1.71	9.96 ± 1.65	8.50 ± 1.19	Pass
LW-1911, 1912	4/14/2005	Gr. Beta	2.50 ± 0.63	3.23 ± 0.67	2.86 ± 0.46	Pass
F-1976, 1977	4/18/2005	K-40	3.09 ± 0.60	3.33 ± 0.40	3.21 ± 0.36	Pass
MI-2111, 2112	4/26/2005	K-40	1291.50 ± 177.90	1323.70 ± 108.80	1307.60 ± 104.27	Pass
SWU-2158, 2159	4/26/2005	Gr. Beta	3.69 ± 0.74	3.54 ± 0.66	3.62 ± 0.50	Pass
DW-2349, 2350	4/29/2005	I-131	0.58 ± 0.27	0.49 ± 0.27	0.53 ± 0.19	Pass
SO-2305, 2306	5/2/2005	Cs-137	0.11 ± 0.05	0.11 ± 0.04	0.11 ± 0.03	Pass
SO-2305, 2306	5/2/2005	Gr. Alpha	7.55 ± 2.88	12.41 ± 3.38	9.98 ± 2.22	Pass
SO-2305, 2306	5/2/2005	Gr. Beta	28.74 ± 2.57	28.17 ± 2.52	28.46 ± 1.80	Pass
SO-2305, 2306	5/2/2005	K-40	21.51 ± 1.22	21.42 ± 1.24	21.47 ± 0.87	Pass
SO-2305, 2306	5/2/2005	Sr-90	32.90 ± 9.90	29.60 ± 13.90	31.25 ± 8.53	Pass
MI-2260, 2261	5/3/2005	K-40	1028.10 ± 99.36	1206.70 ± 118.50	1117.40 ± 77.32	Pass
F-2630, 2631	5/5/2005	K-40	3.08 ± 0.46	3.04 ± 0.51	3.06 ± 0.34	Pass
VE-2502, 2503	5/10/2005	Gr. Alpha	0.06 ± 0.03	0.07 ± 0.04	0.07 ± 0.03	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
VE-2502, 2503	5/10/2005	Gr. Beta	3.81 ± 0.10	3.86 ± 0.10	3.83 ± 0.07	Pass
VE-2502, 2503	5/10/2005	K-40	3.79 ± 0.40	4.30 ± 0.59	4.04 ± 0.36	Pass
G-2546, 2547	5/11/2005	Be-7	0.81 ± 0.39	1.25 ± 0.38	1.03 ± 0.27	Pass
G-2546, 2547	5/11/2005	K-40	9.43 ± 1.00	7.96 ± 0.85	8.70 ± 0.66	Pass
SS-2787, 2788	5/18/2005	Cs-137	0.13 ± 0.04	0.14 ± 0.05	0.13 ± 0.03	Pass
SS-2787, 2788	5/18/2005	K-40	12.44 ± 0.76	13.33 ± 0.83	12.88 ± 0.56	Pass
SO-3056, 3057	5/19/2005	Cs-137	0.18 ± 0.04	0.17 ± 0.01	0.18 ± 0.02	Pass
SO-3056, 3057 [b]	5/19/2005	K-40	20.06 ± 1.10	21.73 ± 0.36	20.90 ± 0.58	Fail
SS-3175, 3176	5/23/2005	K-40	6.06 ± 0.44	5.96 ± 0.61	6.01 ± 0.38	Pass
SO-2865, 2866	5/25/2005	Cs-137	0.18 ± 0.04	0.18 ± 0.03	0.18 ± 0.02	Pass
SO-2865, 2866	5/25/2005	Gr. Beta	32.95 ± 2.48	33.88 ± 2.36	33.41 ± 1.71	Pass
SO-2865, 2866	5/25/2005	K-40	21.93 ± 0.97	22.32 ± 0.98	22.13 ± 0.69	Pass
DW-2935, 2936	5/27/2005	I-131	0.51 ± 0.34	0.56 ± 0.30	0.53 ± 0.23	Pass
SWU-3103, 3104	6/1/2005	Gr. Beta	3.29 ± 0.49	3.75 ± 0.66	3.52 ± 0.41	Pass
G-2958, 2959	6/1/2005	Be-7	1.06 ± 0.40	1.21 ± 0.28	1.14 ± 0.24	Pass
G-2958, 2959 [b]	6/1/2005	Gr. Beta	8.06 ± 0.07	7.79 ± 0.07	7.93 ± 0.05	Fail
G-2958, 2959	6/1/2005	K-40	5.93 ± 0.73	6.05 ± 0.28	5.99 ± 0.39	Pass
BS-4089, 4090	6/3/2005	Co-60	0.11 ± 0.02	0.10 ± 0.02	0.11 ± 0.02	Pass
BS-4089, 4090	6/3/2005	Cs-137	0.60 ± 0.05	0.62 ± 0.05	0.61 ± 0.04	Pass
DW-50527, 8	6/8/2005	Gr. Alpha	11.58 ± 1.31	13.52 ± 1.43	12.55 ± 0.97	Pass
VE-3278, 3279	6/13/2005	K-40	6.34 ± 0.59	7.29 ± 0.68	6.81 ± 0.45	Pass
MI-3299, 3300	6/15/2005	K-40	1215.40 ± 110.20	1250.70 ± 106.70	1233.05 ± 76.70	Pass
BS-3348, 3349	6/17/2005	Co-60	0.20 ± 0.04	0.22 ± 0.04	0.21 ± 0.03	Pass
BS-3348, 3349	6/17/2005	Cs-137	2.59 ± 0.10	2.51 ± 0.07	2.55 ± 0.06	Pass
BS-3348, 3349	6/17/2005	K-40	11.57 ± 0.81	11.82 ± 0.76	11.69 ± 0.56	Pass
DW-3486, 3487	6/28/2005	Gr. Beta	0.97 ± 0.54	1.67 ± 0.58	1.32 ± 0.40	Pass
SWT-3631, 3632	6/28/2005	Gr. Beta	2.12 ± 0.53	1.62 ± 0.56	1.87 ± 0.39	Pass
W-3507, 3508	6/29/2005	H-3	38717 ± 382	38017 ± 535	38367 ± 329	Pass
VE-3555, 3556	6/29/2005	Gr. Beta	7.53 ± 0.18	7.56 ± 0.18	7.55 ± 0.13	Pass
VE-3555, 3556	6/29/2005	K-40	5.70 ± 0.52	5.64 ± 0.53	5.67 ± 0.37	Pass
AP-3781, 3782	6/29/2005	Be-7	0.09 ± 0.02	0.08 ± 0.02	0.09 ± 0.01	Pass
LW-3610, 3611	6/30/2005	Gr. Beta	1.37 ± 0.35	1.40 ± 0.36	1.39 ± 0.25	Pass
SW-3760, 3761	6/30/2005	Gr. Beta	9.70 ± 1.63	9.77 ± 1.61	9.73 ± 1.15	Pass
E-3654, 3655	7/5/2005	Gr. Beta	1.76 ± 0.07	1.69 ± 0.07	1.72 ± 0.05	Pass
E-3654, 3655	7/5/2005	K-40	1.49 ± 0.25	1.05 ± 0.21	1.27 ± 0.16	Pass
MI-3676, 3677	7/5/2005	K-40	1383.90 ± 116.20	1428.20 ± 125.40	1406.05 ± 85.48	Pass
DW-3739, 3740	7/5/2005	I-131	1.93 ± 0.24	2.18 ± 0.23	2.05 ± 0.17	Pass
W-3808, 3809	7/6/2005	H-3	4189.61 ± 196.68	4438.33 ± 201.39	4313.97 ± 140.75	Pass
DW-3938, 3939	7/8/2005	I-131	1.11 ± 0.30	1.26 ± 0.31	1.18 ± 0.22	Pass
VE-3896, 3897	7/12/2005	K-40	3.44 ± 0.62	3.60 ± 0.36	3.52 ± 0.36	Pass
MI-3963, 3964	7/13/2005	K-40	1438.70 ± 102.80	1351.80 ± 100.80	1395.25 ± 71.99	Pass
DW-4068, 4069	7/15/2005	I-131	0.64 ± 0.27	0.91 ± 0.28	0.78 ± 0.20	Pass

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

			Concentration (pCi/L)[a]			
Lab Code	Date	Analysis	First Result	Second Result	Averaged Result	Acceptance
VE-4290, 4291	7/26/2005	Gr. Alpha	0.11 ± 0.04	0.05 ± 0.03	0.08 ± 0.03	Pass
VE-4290, 4291	7/26/2005	Gr. Beta	4.55 ± 0.13	4.69 ± 0.14	4.62 ± 0.09	Pass
SWU-4311, 4312	7/26/2005	Gr. Beta	2.62 ± 0.64	1.67 ± 0.37	2.15 ± 0.37	Pass
SWU-4311, 4312	7/26/2005	H-3	192.30 ± 92.90	304.60 ± 97.40	248.45 ± 67.30	Pass
G-4383, 4384	8/1/2005	Be-7	2.06 ± 0.49	1.76 ± 0.29	1.91 ± 0.28	Pass
G-4383, 4384	8/1/2005	Gr. Beta	8.76 ± 0.22	8.40 ± 0.20	8.58 ± 0.15	Pass
G-4383, 4384	8/1/2005	K-40	6.74 ± 0.64	6.88 ± 0.92	6.81 ± 0.56	Pass
MI-4425, 4426	8/1/2005	K-40	1358.10 ± 169.20	1267.90 ± 164.40	1313.00 ± 117.96	Pass
TD-4446, 4447	8/1/2005	H-3	563.00 ± 252.00	529.00 ± 251.00	546.00 ± 177.84	Pass
SL-4473, 4474	8/4/2005	Gr. Beta	5.44 ± 0.48	4.57 ± 0.42	5.00 ± 0.32	Pass
SL-4473, 4474	8/4/2005	K-40	2.91 ± 0.83	2.74 ± 0.54	2.82 ± 0.49	Pass
VE-4532, 4533	8/5/2005	Gr. Beta	31.20 ± 1.20	31.70 ± 1.20	31.45 ± 0.85	Pass
VE-4618, 4619	8/9/2005	Gr. Alpha	0.09 ± 0.05	0.09 ± 0.04	0.09 ± 0.03	Pass
VE-4618, 4619	8/9/2005	Gr. Beta	4.60 ± 0.13	4.54 ± 0.12	4.57 ± 0.09	Pass
VE-4618, 4619	8/9/2005	K-40	4.19 ± 0.46	4.34 ± 0.47	4.27 ± 0.33	Pass
F-4639, 4640	8/11/2005	Cs-137	0.05 ± 0.02	0.05 ± 0.02	0.05 ± 0.02	Pass
F-4639, 4640	8/11/2005	Gr. Beta	3.33 ± 0.11	3.37 ± 0.10	3.35 ± 0.07	Pass
F-4639, 4640	8/11/2005	K-40	2.62 ± 0.57	2.58 ± 0.59	2.60 ± 0.41	Pass
DW-4730, 4731	8/12/2005	I-131	0.82 ± 0.23	0.83 ± 0.25	0.83 ± 0.17	Pass
MI-4855, 4856	8/28/2005	K-40	1341.50 ± 107.70	1340.00 ± 114.70	1340.75 ± 78.67	Pass
MI-4855, 4856	8/28/2005	Sr-90	0.77 ± 0.37	0.87 ± 0.37	0.82 ± 0.26	Pass
MI-4945, 4946	8/31/2005	K-40	1388.90 ± 158.90	1307.50 ± 165.20	1348.20 ± 114.61	Pass
MI-4945, 4946	8/31/2005	Sr-90	0.67 ± 0.34	0.82 ± 0.36	0.75 ± 0.25	Pass
TD-4921, 4922	9/1/2005	H-3	5737.00 ± 266.00	5860.00 ± 269.00	5798.50 ± 189.15	Pass
VE-4900, 4901	9/2/2005	Gr. Beta	3.40 ± 0.06	3.51 ± 0.06	3.45 ± 0.04	Pass
VE-4900, 4901	9/2/2005	K-40	2.15 ± 0.27	2.27 ± 0.24	2.21 ± 0.18	Pass
DW-50769, 50770	9/2/2005	Gr. Alpha	6.17 ± 1.42	6.08 ± 1.46	6.13 ± 1.02	Pass
VE-4990, 4991	9/6/2005	K-40	18.81 ± 1.12	19.52 ± 0.86	19.17 ± 0.71	Pass
MI-5011, 5012	9/8/2005	K-40	1584.00 ± 194.00	1707.60 ± 173.00	1645.80 ± 129.97	Pass
VE-5119, 5120	9/12/2005	Gr. Alpha	0.10 ± 0.06	0.09 ± 0.05	0.10 ± 0.04	Pass
VE-5119, 5120	9/12/2005	Gr. Beta	6.05 ± 0.18	5.92 ± 0.17	5.98 ± 0.12	Pass
VE-5119, 5120	9/12/2005	K-40	4.61 ± 0.46	4.74 ± 0.69	4.68 ± 0.41	Pass
LW-5361, 5362	9/12/2005	Gr. Beta	1.09 ± 0.33	1.18 ± 0.34	1.13 ± 0.24	Pass
SW-5098, 5099	9/13/2005	I-131	0.44 ± 0.22	0.31 ± 0.20	0.38 ± 0.15	Pass
LW-5178, 5179	9/14/2005	Gr. Beta	2.92 ± 0.56	2.95 ± 0.59	2.93 ± 0.41	Pass
DW-5239, 5240	9/16/2005	I-131	0.45 ± 0.27	0.55 ± 0.29	0.50 ± 0.20	Pass
CF-5432, 5433	9/19/2005	Be-7	0.91 ± 0.40	0.64 ± 0.30	0.78 ± 0.25	Pass
CF-5432, 5433	9/19/2005	K-40	1.43 ± 0.34	1.38 ± 0.43	1.41 ± 0.27	Pass
MI-5292, 5293	9/21/2005	K-40	1228.80 ± 78.13	1297.00 ± 81.03	1262.90 ± 56.28	Pass
BS-5340, 5341	9/23/2005	Be-7	1286.10 ± 550.80	1222.90 ± 394.40	1254.50 ± 338.72	Pass
BS-5340, 5341	9/23/2005	Cs-137	726.97 ± 76.24	677.49 ± 70.03	702.23 ± 51.76	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
BS-5340, 5341	9/23/2005	K-40	12404 ± 1154	13033 ± 983	12719 ± 758	Pass
DW-5382, 5383	9/23/2005	I-131	0.79 ± 0.31	0.53 ± 0.31	0.66 ± 0.22	Pass
MI-5405, 5406	9/27/2005	K-40	1324.80 ± 112.20	1366.80 ± 99.44	1345.80 ± 74.96	Pass
AP-5769, 5770	9/27/2005	Be-7	0.08 ± 0.01	0.09 ± 0.02	0.08 ± 0.01	Pass
AP-5983, 5984	9/27/2005	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01	Pass
AP-5878, 5879	9/29/2005	Be-7	0.06 ± 0.01	0.07 ± 0.01	0.07 ± 0.01	Pass
G-5526, 5527	10/3/2005	Be-7	4.03 ± 0.62	4.07 ± 0.80	4.05 ± 0.51	Pass
G-5526, 5527	10/3/2005	Gr. Beta	8.10 ± 0.30	8.80 ± 0.40	8.41 ± 0.24	Pass
G-5526, 5527	10/3/2005	K-40	4.93 ± 0.67	6.00 ± 0.72	5.47 ± 0.49	Pass
VE-5721, 5722	10/10/2005	Gr. Alpha	0.07 ± 0.05	0.08 ± 0.06	0.08 ± 0.04	Pass
VE-5721, 5722	10/10/2005	Gr. Beta	5.09 ± 0.15	5.00 ± 0.16	5.05 ± 0.11	Pass
VE-5721, 5722	10/10/2005	K-40	4.27 ± 0.43	4.20 ± 0.34	4.23 ± 0.27	Pass
CF-5695, 5696	10/11/2005	Be-7	2.70 ± 0.37	2.80 ± 0.34	2.75 ± 0.25	Pass
CF-5695, 5696	10/11/2005	K-40	11.79 ± 0.86	13.11 ± 0.68	12.45 ± 0.55	Pass
LW-6129, 6130	10/11/2005	Gr. Beta	1.34 ± 0.25	1.85 ± 0.29	1.59 ± 0.19	Pass
LW-6129, 6130	10/11/2005	H-3	304.35 ± 95.31	369.23 ± 97.88	336.79 ± 68.31	Pass
DW-50844, 5	10/11/2005	Gr. Beta	5.30 ± 1.50	4.20 ± 1.40	4.75 ± 1.03	Pass
LW-5748, 5749 [c]	10/12/2005	Gr. Beta	1.09 ± 0.25	1.89 ± 0.28	1.49 ± 0.19	Fail
AP-6485, 6486	10/20/2005	Be-7	0.10 ± 0.03	0.09 ± 0.03	0.09 ± 0.02	Pass
SWU-6156, 6157	10/25/2005	Gr. Beta	4.69 ± 1.34	4.18 ± 1.34	4.44 ± 0.95	Pass
VE-6186, 6187	10/26/2005	K-40	2.90 ± 0.49	2.83 ± 0.51	2.87 ± 0.35	Pass
LW-6203, 6204	10/27/2005	Gr. Beta	2.92 ± 0.62	3.09 ± 0.66	3.01 ± 0.45	Pass
SO-6270, 6271	10/28/2005	Cs-137	0.33 ± 0.03	0.34 ± 0.04	0.33 ± 0.03	Pass
SO-6270, 6271	10/28/2005	Gr. Beta	26.85 ± 2.78	22.25 ± 2.41	24.55 ± 1.84	Pass
SO-6270, 6271	10/28/2005	K-40	13.67 ± 0.74	14.02 ± 0.76	13.85 ± 0.53	Pass
TD-6320, 6321	11/1/2005	H-3	444202 ± 1770	446633 ± 1775	445418 ± 1253	Pass
SO-6605, 6606	11/11/2005	Gr. Beta	18.22 ± 2.23	18.47 ± 2.22	18.35 ± 1.57	Pass
CF-6509, 6510	11/14/2005	K-40	0.85 ± 0.14	0.99 ± 0.22	0.92 ± 0.13	Pass
SW-6638, 6639	11/22/2005	I-131	0.95 ± 0.35	0.67 ± 0.31	0.81 ± 0.23	Pass
SO-6887, 6888	11/22/2005	Gr. Alpha	6.80 ± 2.92	10.27 ± 3.26	8.53 ± 2.19	Pass
SO-6887, 6888	11/22/2005	Gr. Beta	19.27 ± 2.16	18.43 ± 2.21	18.85 ± 1.54	Pass
SO-6887, 6888	11/22/2005	K-40	14.29 ± 1.11	13.78 ± 0.78	14.03 ± 0.68	Pass
SWT-6721, 6722	11/29/2005	Gr. Beta	0.98 ± 0.31	0.87 ± 0.31	0.93 ± 0.22	Pass
VE-6775, 6776	11/29/2005	Gr. Beta	12.75 ± 0.28	13.16 ± 0.21	12.96 ± 0.18	Pass
LW-6743, 6744	11/30/2005	Gr. Beta	3.19 ± 0.47	2.50 ± 0.44	2.85 ± 0.32	Pass
DW-51023, 4	12/2/2005	Gr. Alpha	0.55 ± 1.40	2.21 ± 1.31	1.38 ± 0.96	Pass
SWT-7282, 7283	12/27/2005	Gr. Beta	1.62 ± 0.37	1.85 ± 0.38	1.74 ± 0.27	Pass

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 (pC /g).

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

[c] Recount of W-5748, 2.38 ± 0.85 pCi/L Averaged result; 2.14 ± 0.45 pCi/L

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

Lab Code[c]	Date	Analysis	Concentration[b] Laboratory result	Known Activity	Control Limits[d]	Acceptance
STW-1045	01/01/05	Gr. Alpha	0.45 ± 0.10	0.53	0.00 - 1.05	Pass
STW-1045	01/01/05	Gr. Beta	1.90 ± 0.10	1.67	0.84 - 2.51	Pass
STW-1046	01/01/05	Am-241	1.62 ± 0.12	1.72	1.20 - 2.24	Pass
STW-1046	01/01/05	Co-57	239.40 ± 1.20	227.00	158.90 - 295.10	Pass
STW-1046	01/01/05	Co-60	248.70 ± 1.00	251.00	175.70 - 326.30	Pass
STW-1046	01/01/05	Cs-134	115.50 ± 1.80	127.00	88.90 - 165.10	Pass
STW-1046	01/01/05	Cs-137	328.50 ± 1.70	332.00	232.40 - 431.60	Pass
STW-1046	01/01/05	Fe-55	64.90 ± 7.00	75.90	53.13 - 98.67	Pass
STW-1046	01/01/05	H-3	304.00 ± 9.70	280.00	196.00 - 364.00	Pass
STW-1046	01/01/05	Mn-54	334.80 ± 1.90	331.00	231.70 - 430.30	Pass
STW-1046	01/01/05	Ni-63	7.10 ± 1.60	9.00	0.00 - 20.00	Pass
STW-1046	01/01/05	Pu-238	0.01 ± 0.02	0.02	0.00 - 1.00	Pass
STW-1046	01/01/05	Pu-239/40	2.50 ± 0.14	2.40	1.68 - 3.12	Pass
STW-1046	01/01/05	Sr-90	0.70 ± 0.80	0.00	0.00 - 5.00	Pass
STW-1046	01/01/05	Tc-99	43.20 ± 1.40	42.90	30.03 - 55.77	Pass
STW-1046	01/01/05	U-233/4	3.31 ± 0.20	3.24	2.27 - 4.21	Pass
STW-1046	01/01/05	U-238	3.38 ± 0.20	3.33	2.33 - 4.33	Pass
STW-1046	01/01/05	Zn-65	538.40 ± 3.80	496.00	347.20 - 644.80	Pass
STVE-1047	01/01/05	Co-57	10.60 ± 0.20	9.88	6.92 - 12.84	Pass
STVE-1047	01/01/05	Co-60	3.00 ± 0.20	3.15	2.21 - 4.10	Pass
STVE-1047	01/01/05	Cs-134	4.80 ± 0.40	5.00	3.50 - 6.50	Pass
STVE-1047	01/01/05	Cs-137	4.10 ± 0.30	4.11	2.88 - 5.34	Pass
STVE-1047	01/01/05	Mn-54	5.10 ± 0.30	5.18	3.63 - 6.73	Pass
STVE-1047	01/01/05	Zn-65	6.20 ± 0.50	6.29	4.40 - 8.18	Pass
STSO-1048	01/01/05	Am-241	96.60 ± 10.00	109.00	76.30 - 141.70	Pass
STSO-1048	01/01/05	Co-57	264.00 ± 2.00	242.00	169.40 - 314.60	Pass
STSO-1048	01/01/05	Co-60	226.50 ± 2.20	212.00	148.40 - 275.60	Pass
STSO-1048	01/01/05	Cs-134	760.60 ± 3.70	759.00	531.30 - 986.70	Pass
STSO-1048	01/01/05	Cs-137	336.20 ± 3.60	315.00	220.50 - 409.50	Pass
STSO-1048	01/01/05	K-40	663.70 ± 18.00	604.00	422.80 - 785.20	Pass
STSO-1048	01/01/05	Mn-54	541.30 ± 3.90	485.00	339.50 - 630.50	Pass
STSO-1048	01/01/05	Ni-63	924.30 ± 17.20	1220.00	854.00 - 1586.00	Pass
STSO-1048	01/01/05	Pu-238	0.60 ± 0.80	0.48	0.00 - 1.00	Pass
STSO-1048	01/01/05	Pu-239/40	78.00 ± 4.80	89.50	62.65 - 116.35	Pass
STSO-1048	01/01/05	Sr-90	514.60 ± 18.70	640.00	448.00 - 832.00	Pass
STSO-1048	01/01/05	U-233/4	47.90 ± 4.00	62.50	43.75 - 81.25	Pass
STSO-1048	01/01/05	U-238	226.30 ± 8.60	249.00	174.30 - 323.70	Pass
STSO-1048	01/01/05	Zn-65	851.30 ± 7.30	810.00	567.00 - 1053.00	Pass
STAP-1050	01/01/05	Gr. Alpha	0.11 ± 0.03	0.23	0.00 - 0.46	Pass
STAP-1050	01/01/05	Gr. Beta	0.38 ± 0.05	0.30	0.15 - 0.45	Pass

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

		Concentration [b]				
Lab Code[c]	Date	Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STAP-1049	01/01/05	Am-241	0.10 ± 0.04	0.10	0.07 - 0.13	Pass
STAP-1049	01/01/05	Co-57	4.76 ± 0.64	4.92	3.44 - 6.40	Pass
STAP-1049	01/01/05	Co-60	2.84 ± 0.22	3.03	2.12 - 3.94	Pass
STAP-1049	01/01/05	Cs-134	3.54 ± 0.37	3.51	2.46 - 4.56	Pass
STAP-1049	01/01/05	Cs-137	2.20 ± 0.27	2.26	1.58 - 2.94	Pass
STAP-1049	01/01/05	Mn-54	3.15 ± 0.21	3.33	2.33 - 4.33	Pass
STAP-1049	01/01/05	Pu-238	0.16 ± 0.04	0.20	0.14 - 0.25	Pass
STAP-1049	01/01/05	Pu-239/40	0.17 ± 0.02	0.17	0.14 - 0.25	Pass
STAP-1049[e]	01/01/05	Sr-90	2.24 ± 0.34	1.35	0.95 - 1.76	Fail
STAP-1049	01/01/05	U-233/4	0.34 ± 0.02	0.34	0.24 - 0.44	Pass
STAP-1049	01/01/05	U-238	0.35 ± 0.02	0.35	0.25 - 0.46	Pass
STAP-1049	01/01/05	Zn-65	3.12 ± 0.15	3.14	2.20 - 4.08	Pass
STW-1061	07/01/05	Am-241	2.21 ± 0.13	2.23	1.56 - 2.90	Pass
STW-1061	07/01/05	Co-57	293.20 ± 7.30	272.00	190.40 - 353.60	Pass
STW-1061	07/01/05	Co-60	275.70 ± 1.30	261.00	182.70 - 339.30	Pass
STW-1061	07/01/05	Cs-134	171.80 ± 4.00	167.00	116.90 - 217.10	Pass
STW-1061	07/01/05	Cs-137	342.10 ± 2.20	333.00	233.10 - 432.90	Pass
STW-1061	07/01/05	Fe-55	167.80 ± 9.30	196.00	137.20 - 254.80	Pass
STW-1061	07/01/05	H-3	514.20 ± 12.60	527.00	368.90 - 685.10	Pass
STW-1061	07/01/05	Mn-54	437.00 ± 2.50	418.00	292.60 - 543.40	Pass
STW-1061	07/01/05	Ni-63	105.10 ± 3.60	100.00	70.00 - 130.00	Pass
STW-1061	07/01/05	Pu-238	1.64 ± 0.12	1.91	1.34 - 2.48	Pass
STW-1061	07/01/05	Pu-239/40	2.32 ± 0.13	2.75	1.93 - 3.58	Pass
STW-1061	07/01/05	Sr-90	9.20 ± 1.30	8.98	6.29 - 11.67	Pass
STW-1061	07/01/05	Tc-99	72.30 ± 2.30	66.50	46.55 - 86.45	Pass
STW-1061	07/01/05	U-233/4	4.11 ± 0.18	4.10	2.87 - 5.33	Pass
STW-1061	07/01/05	U-238	4.14 ± 0.18	4.26	2.98 - 5.54	Pass
STW-1061	07/01/05	Zn-65	364.60 ± 4.90	330.00	231.00 - 429.00	Pass
STW-1062	07/01/05	Gr. Alpha	0.57 ± 0.05	0.79	0.21 - 1.38	Pass
STW-1062	07/01/05	Gr. Beta	1.36 ± 0.05	1.35	0.85 - 1.92	Pass
STSO-1063[f]	07/01/05	Am-241	48.40 ± 3.90	81.10	56.77 - 105.43	Fail
STSO-1063	07/01/05	Co-57	608.30 ± 2.80	524.00	366.80 - 681.20	Pass
STSO-1063	07/01/05	Co-60	322.70 ± 2.40	287.00	200.90 - 373.10	Pass
STSO-1063	07/01/05	Cs-134	632.10 ± 5.20	568.00	397.60 - 738.40	Pass
STSO-1063	07/01/05	Cs-137	512.40 ± 4.20	439.00	307.30 - 570.70	Pass
STSO-1063	07/01/05	K-40	720.50 ± 19.00	604.00	422.80 - 785.20	Pass
STSO-1063	07/01/05	Mn-54	516.80 ± 5.10	439.00	307.30 - 570.70	Pass
STSO-1063	07/01/05	Ni-63	366.50 ± 13.30	445.00	311.50 - 578.50	Pass
STSO-1063	07/01/05	Pu-238	68.80 ± 15.00	60.80	42.56 - 79.04	Pass
STSO-1063	07/01/05	Pu-239/40	0.00 ± 0.00	0.00	0.00 - 0.00	
STSO-1063	07/01/05	Sr-90	602.90 ± 17.20	757.00	529.90 - 984.10	Pass
STSO-1063	07/01/05	U-233/4	61.50 ± 1.00	52.50	36.75 - 68.25	Pass
STSO-1063	07/01/05	U-238	164.50 ± 16.70	168.00	117.60 - 218.40	Pass
STSO-1063	07/01/05	Zn-65	874.70 ± 8.40	823.00	576.10 - 1070.00	Pass

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

			Concentration [b]			
Lab Code[c]	Date	Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STVE-1064	07/01/05	Am-241	0.18 ± 0.03	0.23	0.16 - 0.30	Pass
STVE-1064	07/01/05	Co-57	15.90 ± 0.20	13.30	9.31 - 17.29	Pass
STVE-1064	07/01/05	Co-60	4.80 ± 0.10	4.43	3.10 - 5.76	Pass
STVE-1064	07/01/05	Cs-134	4.60 ± 0.20	4.09	2.86 - 5.32	Pass
STVE-1064	07/01/05	Cs-137	5.90 ± 0.30	5.43	3.80 - 7.06	Pass
STVE-1064	07/01/05	Mn-54	7.20 ± 0.20	6.57	4.60 - 8.54	Pass
STVE-1064	07/01/05	Pu-238	0.04 ± 0.02	0.00	0.00 - 1.00	Pass
STVE-1064	07/01/05	Pu-239/40	0.13 ± 0.02	0.16	0.11 - 0.21	Pass
STVE-1064	07/01/05	Sr-90	2.80 ± 0.30	2.42	1.69 - 3.15	Pass
STVE-1064	07/01/05	U-233/4	0.28 ± 0.03	0.33	0.23 - 0.43	Pass
STVE-1064	07/01/05	U-238	0.33 ± 0.04	0.35	0.24 - 0.45	Pass
STVE-1064	07/01/05	Zn-65	11.00 ± 0.50	10.20	7.14 - 13.26	Pass
STAP-1065	07/01/05	Gr. Alpha	0.30 ± 0.04	0.48	0.00 - 0.80	Pass
STAP-1065	07/01/05	Gr. Beta	0.97 ± 0.06	0.83	0.55 - 1.22	Pass
STAP-1066	07/01/05	Am-241	0.14 ± 0.03	0.16	0.11 - 0.21	Pass
STAP-1066	07/01/05	Co-57	5.81 ± 0.17	6.20	4.34 - 8.06	Pass
STAP-1066	07/01/05	Co-60	2.79 ± 0.14	2.85	2.00 - 3.71	Pass
STAP-1066	07/01/05	Cs-134	3.67 ± 0.12	3.85	2.70 - 5.01	Pass
STAP-1066	07/01/05	Cs-137	2.93 ± 0.23	3.23	2.26 - 4.20	Pass
STAP-1066	07/01/05	Mn-54	4.11 ± 0.26	4.37	3.06 - 5.68	Pass
STAP-1066	07/01/05	Pu-238	0.11 ± 0.02	0.10	0.07 - 0.13	Pass
STAP-1066	07/01/05	Pu-239/40	0.10 ± 0.01	0.09	0.06 - 0.12	Pass
STAP-1066	07/01/05	Sr-90	2.25 ± 0.29	2.25	1.58 - 2.93	Pass
STAP-1066	07/01/05	U-233/4	0.28 ± 0.02	0.27	0.19 - 0.35	Pass
STAP-1066	07/01/05	U-238	0.28 ± 0.02	0.28	0.20 - 0.37	Pass
STAP-1066	07/01/05	Zn-65	4.11 ± 0.26	4.33	3.06 - 5.68	Pass

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

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

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

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

[e] The strontium carbonate precipitates were redissolved and processed. The average of the three analyses was 1.34 p although the recovery was only 30%. The result of a new analysis was 1.56 pCi/L.

[f] Incorrect sample weight used in calculation. Result of recalculation: 97.0 ± 7.8 Bq/kg.

APPENDIX B

DATA REPORTING CONVENTIONS

Data Reporting Conventions

1.0. All activities, except gross alpha and gross beta, are decay corrected to collection time or the end of the collection period.

2.0. Single Measurements

Each single measurement is reported as follows: $x \pm s$

where: x = value of the measurement;

s = 2s counting uncertainty (corresponding to the 95% confidence level).

In cases where the activity is less than the lower limit of detection L, it is reported as: <L, where L = the lower limit of detection based on 4.66s uncertainty for a background sample.

3.0. Duplicate analyses

3.1 Individual results: For two analysis results; $x_1 \pm s_1$ and $x_2 \pm s_2$

Reported result: $x \pm s$; where $x = (1/2)(x_1 + x_2)$ and $s = (1/2)\sqrt{s_1^2 + s_2^2}$

3.2. Individual results: $<L_1$, $<L_2$ Reported result: <L, where L = lower of L_1 and L_2

3.3. Individual results: $x \pm s$, <L Reported result: $x \pm s$ if $x \geq L$; <L otherwise.

4.0. Computation of Averages and Standard Deviations

4.1 Averages and standard deviations listed in the tables are computed from all of the individual measurements over the period averaged; for example, an annual standard deviation would not be the average of quarterly standard deviations. The average $\bar{x}$ and standard deviation s of a set of n numbers $x_1, x_2 \ldots x_n$ are defined as follows:

$$\bar{x} = \frac{1}{n} \Sigma x \qquad s = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n-1}}$$

4.2 Values below the highest lower limit of detection are not included in the average.

4.3 If all values in the averaging group are less than the highest LLD, the highest LLD is reported.

4.4 If all but one of the values are less than the highest LLD, the single value x and associated two sigma error is reported.

4.5 In rounding off, the following rules are followed:

4.5.1. If the number following those to be retained is less than 5, the number is dropped, and the retained number s are kept unchanged. As an example, 11.443 is rounded off to 11.44.

4.5.2. If the number following those to be retained is equal to or greater than 5, the number is dropped and the last retained number is raised by 1. As an example, 11.445 is rounded off to 11.45.

APPENDIX C
PROGRAM DEVIATIONS

Appendix C. Program Deviations

Collection Date	Sample Type	Location	Program Deviation
10-04-05	Airborne Iodine	T-1	Iodine-131 concentration: < 0.072 pCi/m^3. Collection run time, 48.3 hrs., Volume 79 m^3. The sampler pump failed, due to an open fuse.

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility	Davis-Besse Nuclear Power Station	Docket No.	50-346
Location of Facility	Ottawa, Ohio	Reporting Period	January-December, 2005
	(County, State)		

Sample Type (Units)	Type and Number of Analyses[a]	LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Airborne Particulates (pCi/m3)	GB 528[f]	0.005	0.025 (316/316) (0.008-0.058)	T-27, Crane Creek S.P. 5.3 mi. SW	0.026 (53/53) (0.009-0.052)	0.025 (212/212) (0.007-0.056)	0
	Sr-89 40	0.0014	< LLD	-	-	< LLD	0
	Sr-90 40	0.0008	< LLD	-	-	< LLD	0
	GS 40						
	Be-7	0.015	0.071 (24/24) (0.046-0.094)	T-12, Water Treatment Plant, 23.5 mi. WNW	0.075 (4/4) (0.070-0.083)	0.065 (16/16) (0.039-0.092)	0
	K-40	0.027	< LLD	-	-	< LLD	0
	Nb-95	0.0012	< LLD	-	-	< LLD	0
	Zr-95	0.0020	< LLD	-	-	< LLD	0
	Ru-103	0.0012	< LLD	-	-	< LLD	0
	Ru-106	0.0088	< LLD	-	-	< LLD	0
	Cs-134	0.0010	< LLD	-	-	< LLD	0
	Cs-137	0.0010	< LLD	-	-	< LLD	0
	Ce-141	0.0019	< LLD	-	-	< LLD	0
	Ce-144	0.0059	< LLD	-	-	< LLD	0
Airborne Iodine (pCi/m3)	I-131 528	0.07	< LLD	-	-	< LLD	0
TLD (Quarterly) (mR/91 days)	Gamma 351	1.0	14.1 (307/307) (7.2-24.4)	T-45, Site Boundary 0.5 mi. WNW	20.3 (4/4) (18.5-21.5)	14.9 (44/44) (11.2-20.4)	0
TLD (Quarterly) (mR/91 days) (Shield)	Gamma 4	1.0	7.2 (4/4) (6.7-8.0)	-	-	None	0
TLD (Annual) (mR/365 days)	Gamma 87	1.0	54.9 (76/76) (32.2-80.9)	T-45, Site Boundary 0.5 mi. WNW	80.9 (1/1)	57.4 (11/11) (38.2-74.1)	0
TLD (Annual) (mR/365 days) (Shield)	Gamma 1	1.0	25.2 (1/1)	-	-	None	0

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility: Davis-Besse Nuclear Power Station — Docket No. 50-346

Location of Facility: Ottawa, Ohio (County, State) — Reporting Period: January-December, 2005

Sample Type (Units)	Type and Number of Analyses[a]		LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Milk (pCi/L)	I-131	12	0.4	none	-	-	< LLD	0
	Sr-89	12	0.7	none	-	-	< LLD	0
	Sr-90	12	0.7	none	T-24, Sandusky 21.0 mi. SE	0.9 (9/12) (0.7-1.4)	0.9 (9/12) (0.7-1.4)	0
	GS	12						
	K-40		100	none	T-24, Sandusky 21.0 mi. SE	1286 (12/12) (1191-1391)	1286 (12/12) (1191-1391)	0
	Cs-134		6.0	none	-	-	< LLD	0
	Cs-137		6.3	none	-	-	< LLD	0
	Ba-La-140		5.6	none	-	-	< LLD	0
(g/L)	Ca	12	0.50	none	T-24, Sandusky 21.0 mi. SE	0.99 (12/12) (0.86-1.15)	0.99 (12/12) (0.86-1.15)	0
(g/L)	K (stable)	12		none	T-24, Sandusky 21.0 mi. SE	1.49 (12/12) (1.38-1.61)	1.49 (12/12) (1.38-1.61)	0
(pCi/g)	Sr-90/Ca	12		none	T-24, Sandusky 21.0 mi. SE	1.03 (5/12) (0.83-1.35)	1.03 (5/12) (0.83-1.35)	0
(pCi/g)	Cs-137/K	12		none	-	-	< LLD	0
Ground Water (pCi/L)	GB (TR)	7	3.5	5.6 (2/3) (5.5-5.6)	T-225, Residence 1.55 mi. NW	5.6 (2/3) (5.5-5.6)	4.5 (1/4)	
	H-3	7	330	< LLD	-	-	< LLD	0
	Sr-89	7	0.9	< LLD	-	-	< LLD	0
	Sr-90	7	0.7	< LLD	-	-	< LLD	0
	GS							
	Mn-54		15	< LLD	-	-	< LLD	0
	Fe-59		30	< LLD	-	-	< LLD	0
	Co-58		15	< LLD	-	-	< LLD	0
	Co-60		15	< LLD	-	-	< LLD	0
	Zn-65		30	< LLD	-	-	< LLD	0
	Zr-95		15	< LLD	-	-	< LLD	0
	Cs-134		10	< LLD	-	-	< LLD	0
	Cs-137		10	< LLD	-	-	< LLD	0
	Ba-La-140		15	< LLD	-	-	< LLD	0

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility: Davis-Besse Nuclear Power Station — Docket No. 50-346

Location of Facility: Ottawa, Ohio (County, State) — Reporting Period: January-December, 2005

Sample Type (Units)	Type and Number of Analyses[a]	LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Edible Meal (pCi/g wet)	GS 2						
	K-40	0.10	2.84 (1/1)	T-31, Roving On-site location	2.84 (1/1)	2.34 (1/1)	0
	Nb-95	0.071	< LLD	-	-	< LLD	0
	Zr-95	0.070	< LLD	-	-	< LLD	0
	Ru-103	0.033	< LLD	-	-	< LLD	0
	Ru-106	0.11	< LLD	-	-	< LLD	0
	Cs-134	0.009	< LLD	-	-	< LLD	0
	Cs-137	0.010	< LLD	-	-	< LLD	0
	Ce-141	0.16	< LLD	-	-	< LLD	0
	Ce-144	0.12	< LLD	-	-	< LLD	0
Fruits and Vegetables (pCi/g wet)	Sr-89 3	0.003	< LLD	-	-	< LLD	0
	Sr-90 3	0.002	< LLD	-	-	< LLD	0
	I-131 3	0.025	< LLD	-	-	< LLD	0
	GS 3						
	K-40	0.50	0.96 (2/2) (0.91-1.01)	T-25, Residence 1.6 mi. S	1.01 (1/1)	0.88 (1/1)	0
	Nb-95	0.010	< LLD	-	-	< LLD	0
	Zr-95	0.013	< LLD	-	-	< LLD	0
	Cs-134	0.010	< LLD	-	-	< LLD	0
	Cs-137	0.008	< LLD	-	-	< LLD	0
	Ce-141	0.014	< LLD	-	-	< LLD	0
	Ce-144	0.056	< LLD	-	-	< LLD	0
Broad Leaf Vegetation (pCi/g wet)	Sr-89 11	0.005	< LLD	-	-	< LLD	0
	Sr-90 11	0.003	0.003 (1/7)	T-19, Residence 1.0 mi. W	0.003 (1/4)	< LLD	0
	I-131 11	0.023	< LLD	-	-	< LLD	0
	GS 11						
	K-40	0.50	2.57 (7/7) (1.58-5.07)	T-227, Roving Off-site location	3.82 (3/3) (2.44-5.07)	2.15 (4/4) (1.44-2.66)	0
	Nb-95	0.014	< LLD	-	-	< LLD	0
	Zr-95	0.031	< LLD	-	-	< LLD	0
	Cs-134	0.018	< LLD	-	-	< LLD	0
	Cs-137	0.015	< LLD	-	-	< LLD	0
	Ce-141	0.028	< LLD	-	-	< LLD	0
	Ce-144	0.12	< LLD	-	-	< LLD	0

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility: Davis-Besse Nuclear Power Station
Location of Facility: Ottawa, Ohio
(County, State)

Docket No. 50-346
Reporting Period January-December, 2005

Sample Type (Units)	Type and Number of Analyses[a]	LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Animal / Wildlife Feed (pCi/g wet)	GS 3						
	Be-7	0.31	1.38 (1/2)	T-31, Roving On-site location	1.38 (1/1)	0.78 (1/1)	0
	K-40	0.10	1.83 (2/2) (0.89-2.77)	T-31, Roving On-site location	2.77 (1/1)	1.41 (1/1)	0
	Nb-95	0.028	< LLD	-	-	< LLD	0
	Zr-95	0.065	< LLD	-	-	< LLD	0
	Ru-103	0.034	< LLD	-	-	< LLD	0
	Ru-106	0.21	< LLD	-	-	< LLD	0
	Cs-134	0.026	< LLD	-	-	< LLD	0
	Cs-137	0.022	< LLD	-	-	< LLD	0
	Ce-141	0.073	< LLD	-	-	< LLD	0
	Ce-144	0.15	< LLD	-	-	< LLD	0
Soil (pCi/g dry)	GS 10						
	Be-7	0.64	0.77 (2/6) (0.74-0.80)	T-3, Site Boundary 1.4 mi. ESE	0.80 (1/1)	0.74 (1/4)	0
	K-40	0.10	10.38 (6/6) (5.41-21.15)	T-9, Oak Harbor 6.8 mi. SW	23.97 (1/1)	16.74 (4/4) (10.10-23.97)	0
	Nb-95	0.13	< LLD	-	-	< LLD	0
	Zr-95	0.13	< LLD	-	-	< LLD	0
	Ru-103	0.068	< LLD	-	-	< LLD	0
	Ru-106	0.4	< LLD	-	-	< LLD	0
	Cs-134	0.074	< LLD	-	-	< LLD	0
	Cs-137	0.019	0.13 (4/6) (0.042-0.32)	T-8, Farm 2.7 mi. WSW	0.32 (1/1)	0.16 (4/4) (0.11-0.23)	0
	Ce-141	0.14	< LLD	-	-	< LLD	0
	Ce-144	0.25	< LLD	-	-	< LLD	0

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility	Davis-Besse Nuclear Power Station	Docket No.	50-346
Location of Facility	Ottawa, Ohio (County, State)	Reporting Period	January-December, 2005

Sample Type (Units)	Type and Number of Analyses[a]	LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Fish (pCi/g wet)	GB 6	0.10	4.40 (3/3) (3.77-5.55)	T-33, Lake Erie 1.5 mi. NE	4.40 (3/3) (3.77-5.55)	4.06 (3/3) (3.53-4.49)	0
	GS 6						
	K-40	0.10	2.69 (3/3) (2.55-2.83)	T-35, Lake Erie > 10 mi.	2.71 (3/3) (2.22-3.37)	2.71 (3/3) (2.22-3.37)	0
	Mn-54	0.021	< LLD	-	-	< LLD	0
	Fe-59	0.094	< LLD	-	-	< LLD	0
	Co-58	0.034	< LLD	-	-	< LLD	0
	Co-60	0.019	< LLD	-	-	< LLD	0
	Zn-65	0.064	< LLD	-	-	< LLD	0
	Cs-134	0.024	< LLD	-	-	< LLD	0
	Cs-137	0.026	< LLD	-	-	< LLD	0
Shoreline Sediments (pCi/g dry)	GS 8						
	K-40	0.10	13.10 (6/6) (10.29-16.80)	T-4, Site Boundary 0.8 mi. S	14.88 (2/2) (12.96-16.80)	11.66 (2/2) (11.40-11.91)	0
	Mn-54	0.041	< LLD	-	-	< LLD	0
	Co-58	0.059	< LLD	-	-	< LLD	0
	Co-60	0.05	< LLD	-	-	< LLD	0
	Cs-134	0.08	< LLD	-	-	< LLD	0
	Cs-137	0.027	< LLD	-	-	< LLD	0

[a] GB = gross beta, GS = gamma scan.

[b] LLD = nominal lower limit of detection based on a 4.66 sigma counting error for background sample.

[c] Mean and range are based on detectable measurements only (i.e., >LLD) Fraction of detectable measurements at specified locations is indicated in parentheses (F).

[d] Locations are specified by station code (Table 4.1) and distance (miles) and direction relative to reactor site..

[e] Non-routine results are those which exceed ten times the control station value.

[f] One result was eliminated from the calculation due to low volume. Location T-1 for the week ending 10-04-05.

Table 4.5 Radiological Environmental Monitoring Program Summary

Name of Facility: Davis-Besse Nuclear Power Station
Location of Facility: Ottawa, Ohio
(County, State)
Docket No. 50-346
Reporting Period January-December, 2005

Sample Type (Units)	Type and Number of Analyses[a]		LLD[b]	Indicator Locations Mean (F)[c] Range[c]	Location with Highest Annual Mean: Location[d]	Location with Highest Annual Mean: Mean (F)[c] Range[c]	Control Locations Mean (F)[c] Range[c]	Number Non-Routine Results[e]
Treated Surface Water (pCi/L)	GB (TR)	48	0.5	2.0 (24/24) (0.9-3.2)	T-22, Carroll Twp. WTP, 3.0 mi. NW	2.2 (12/12) (1.4-3.1)	1.7 (24/24) (0.7-3.2)	0
	H-3	16	330	< LLD	-	-	< LLD	0
	Sr-89	16	1.1	< LLD	-	-	< LLD	0
	Sr-90	16	0.8	< LLD	-	-	< LLD	0
	GS	16						
	Mn-54		15	< LLD	-	-	< LLD	0
	Fe-59		30	< LLD	-	-	< LLD	0
	Co-58		15	< LLD	-	-	< LLD	0
	Co-60		15	< LLD	-	-	< LLD	0
	Zn-65		30	< LLD	-	-	< LLD	0
	Zr-Nb-95		15	< LLD	-	-	< LLD	0
	Cs-134		10	< LLD	-	-	< LLD	0
	Cs-137		10	< LLD	-	-	< LLD	0
	Ba-La-140		15	< LLD	-	-	< LLD	0
Untreated Surface Water (pCi/L)	GB (TR)	95	1.0	2.3 (50/50) (1.0-6.1)	T-3, Site Boundary 1.4 mi. ESE	3.3 (12/12) (1.7-6.1)	2.2 (45/45) (1.1-4.0)	0
	H-3	95	330	753 (2/50) (529-976)	T-134, Lake Erie Unassigned	976 (1/7)	< LLD	0
	Sr-89	20	1.2	< LLD	-	-	< LLD	0
	Sr-90	20	0.9	< LLD	-	-	< LLD	0
	GS	95						
	Mn-54		15	< LLD	-	-	< LLD	0
	Fe-59		30	< LLD	-	-	< LLD	0
	Co-58		15	< LLD	-	-	< LLD	0
	Co-60		15	< LLD	-	-	< LLD	0
	Zn-65		30	< LLD	-	-	< LLD	0
	Zr-Nb-95		15	< LLD	-	-	< LLD	0
	Cs-134		10	< LLD	-	-	< LLD	0
	Cs-137		10	< LLD	-	-	< LLD	0
	Ba-La-140		15	< LLD	-	-	< LLD	0