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**DUANE ARNOLD ENERGY CENTER
CEDAR RAPIDS, IOWA
Docket No. 50-331**

**RADIOLOGICAL ENVIRONMENTAL
MONITORING PROGRAM (REMP)**

**ANNUAL REPORT - PART II
DATA TABULATIONS AND ANALYSES**

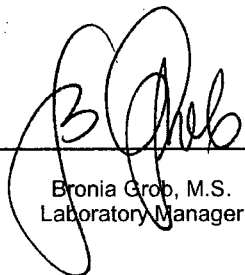
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TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	List of Tables	iii
1.0	INTRODUCTION	v
2.0	LISTING OF MISSED SAMPLES	vi
3.0	DATA TABLES	vii
 <u>Appendices</u>		
A	Supplemental Analyses	A-1

LIST OF TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Airborne particulates collected at Location D-3 (Hiawatha), analysis for gross beta	1-1
2	Airborne particulates and iodine collected at Location D-5 (Palo), analysis for gross beta and iodine-131	2-1
3	Airborne particulates collected at Location D-6 (Center Point), analysis for gross beta	3-1
4	Airborne particulates and iodine collected at Location D-7, (Shellsburg), analysis for gross beta and iodine-131	4-1
5	Airborne particulates and iodine collected at Location D-11 (Toddsville), analysis for gross beta and iodine-131	5-1
6	Airborne particulates collected at Location D-13 (Alburnett), analysis for gross beta	6-1
7	Airborne particulates and iodine collected at Location D-15 (on-site, north), analysis for gross beta and iodine-131	7-1
8	Airborne particulates collected at Location D-16 (on-site, south), analysis for gross beta	8-1
9	Airborne particulate samples, quarterly composites of weekly samples, analysis for gamma-emitting isotopes	9-1
10	Ambient gamma radiation (TLD), quarterly exposure	10-1
11	Milk samples, analysis for iodine-131 and gamma emitting isotopes.....	11-1
12	Ground water, analysis for gross beta and tritium	
12.1	Well water (potable), analysis for gross beta and tritium	12-1
12.2	On-site monitoring wells, analysis for gross beta and tritium.....	12-2
13	Vegetation samples (broadleaf), analysis for iodine-131 and gamma-emitting isotopes.....	13-1
14	Vegetation samples (hay and grain), analysis for gamma-emitting isotopes	14-1
15	Surface water samples, analysis for tritium and gamma-emitting isotopes	15-1
16	Surface water samples, quarterly composites of monthly samples, analysis for tritium.....	16-1

LIST OF TABLES (continued)

17	Fish samples, analysis for gamma-emitting isotopes	17-1
18	River sediment samples, analysis for gamma-emitting isotopes	18-1
19	Precipitation samples, analysis for gamma-emitting isotopes	19-1
20	Precipitation samples, quarterly composites of monthly samples, analysis for tritium	20-1
21	Soil samples, analysis for strontium-90 and gamma-emitting isotopes	21-1

In addition, the following tables are in the Appendices:

Appendix A

A-1	Precipitation, analysis for tritium	A-2
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1.0 INTRODUCTION

The following constitutes a supplement to the Annual Report for the Radiological Environmental Monitoring Program conducted at the Duane Arnold Energy Center, Palo, Iowa in 2006. Results of completed analyses are presented in the attached tables.

For information regarding sampling locations, type and frequency of collection, and sample codes, please refer to Part I, Tables 5.3 - 5.5 and Figures 5.1 and 5.2.

2.0 LISTING OF MISSED SAMPLES

Sample Type	Analysis	Location(s)	Collection Date or Period	Comments
MI	Gamma, I-131	D-96	2006	No sample; herd sold.
MI	Gamma, I-131	D-101	2006	No sample; goat sold.
AP/I	Beta, I-131	D-07	03-09-06	Electric off due to relocation.
TLD	Ambient Gamma	D-1	1st Qtr	TLD missing in field.
TLD	Ambient Gamma	D-2	2nd Qtr	TLD missing in field.
BS ^a	Gamma	D-50, D-51, D-107	07-19-06	Sediments collected, but sampling frequency requirements not met.
AP	Beta	D-16	08-23-06	Filter lost in field.
VE	Gamma	D-58	10-02-06	No broadleaf or forage sample received.
VE	Gamma	D-96	10-02-06	No vegetation samples received.
VE	Gamma	D-109	10-02-06	No broadleaf sample received.

^a Constitutes a missed sample per the minimum requirements specified by the ODAM.

3.0 DATA TABLES

DUANE ARNOLD

Table 1. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.
 Location: D-3 (Hiawatha)
 Units: pCi/m³
 Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	330	0.019 ± 0.003	07-06-06	287	0.038 ± 0.004
01-12-06	290	0.030 ± 0.004	07-13-06	291	0.029 ± 0.004
01-19-06	217 ^b	0.024 ± 0.005	07-20-06	292	0.035 ± 0.004
01-26-06	291	0.027 ± 0.004	07-27-06	244	0.033 ± 0.005
02-02-06	291	0.023 ± 0.004	08-03-06	286	0.035 ± 0.004
02-09-06	291	0.028 ± 0.004	08-10-06	285	0.031 ± 0.004
02-16-06	291	0.030 ± 0.004	08-17-06	285	0.029 ± 0.004
02-23-06	292	0.037 ± 0.004	08-23-06	246	0.037 ± 0.005
03-02-06	291	0.028 ± 0.004	08-31-06	327	0.049 ± 0.005
03-09-06	289	0.017 ± 0.004	09-07-06	282	0.032 ± 0.004
03-16-06	293	0.025 ± 0.004	09-14-06	215 ^d	0.034 ± 0.005
03-23-06	289	0.030 ± 0.004	09-21-06	64 ^d	0.097 ± 0.016
03-30-06	292	0.008 ± 0.003	09-28-06	285	0.027 ± 0.004
1st Quarter Mean ± s.d.		0.025 ± 0.007	3rd Quarter Mean ± s.d.		0.039 ± 0.018
04-06-06	301	0.021 ± 0.004	10-05-06	290	0.030 ± 0.004
04-13-06	300	0.028 ± 0.004	10-12-06	285	0.017 ± 0.003
04-20-06	300	0.022 ± 0.004	10-19-06	291	0.022 ± 0.004
04-27-06	300	0.018 ± 0.004	10-26-06	289	0.026 ± 0.005
05-04-06	299	0.023 ± 0.004	11-02-06	289	0.023 ± 0.004
05-11-06	300	0.018 ± 0.003	11-09-06	289	0.042 ± 0.005
05-17-06	257	0.010 ± 0.003	11-16-06	288	0.033 ± 0.004
05-25-06	343	0.020 ± 0.003	11-22-06	245	0.049 ± 0.005
06-01-06	299	0.026 ± 0.004	11-30-06	331	0.050 ± 0.005
06-08-06	297	0.021 ± 0.004	12-07-06	290	0.043 ± 0.005
06-15-06	308	0.021 ± 0.003	12-14-06	287	0.047 ± 0.005
06-22-06	287	0.025 ± 0.004	12-21-06	288	0.025 ± 0.004
06-29-06	153 ^c	0.039 ± 0.007	12-28-06	291	0.032 ± 0.004
2nd Quarter Mean ± s.d.		0.022 ± 0.007	4th Quarter Mean ± s.d.		0.034 ± 0.011
Cumulative Average					0.030
Previous Annual Average					0.027

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Volume low; power off; relocation.

^c Volume low; power off.

^d Low volume; no power due to construction; I-131 concentration, < 0.057pCi/m³.

DUANE ARNOLD

Table 2. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.
 Location: D-5 (Palo)
 Units: pCi/m³
 Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	320	0.023 ± 0.004	07-06-06	300	0.035 ± 0.004
01-12-06	281	0.029 ± 0.004	07-13-06	298	0.033 ± 0.004
01-19-06	284	0.029 ± 0.004	07-20-06	301	0.037 ± 0.004
01-26-06	203 ^b	0.034 ± 0.005	07-27-06	300	0.029 ± 0.004
02-02-06	234 ^b	0.031 ± 0.005	08-03-06	298	0.030 ± 0.004
02-09-06	283	0.029 ± 0.004	08-10-06	299	0.034 ± 0.004
02-16-06	283	0.027 ± 0.004	08-17-06	299	0.030 ± 0.004
02-23-06	283	0.039 ± 0.005	08-23-06	256	0.041 ± 0.005
03-02-06	278	0.037 ± 0.004	08-31-06	343	0.049 ± 0.004
03-09-06	281	0.019 ± 0.004	09-07-06	300	0.027 ± 0.004
03-16-06	284	0.022 ± 0.004	09-14-06	300	0.025 ± 0.004
03-23-06	287	0.022 ± 0.004	09-21-06	301	0.025 ± 0.004
03-30-06	289	0.012 ± 0.003	09-28-06	299	0.027 ± 0.004
1st Quarter Mean ± s.d.		<u>0.027 ± 0.008</u>	3rd Quarter Mean ± s.d.		<u>0.032 ± 0.007</u>
04-06-06	287	0.025 ± 0.004	10-05-06	301	0.037 ± 0.004
04-13-06	288	0.029 ± 0.004	10-12-06	298	0.020 ± 0.004
04-20-06	289	0.023 ± 0.004	10-19-06	302	0.025 ± 0.004
04-27-06	288	0.023 ± 0.004	10-26-06	299	0.030 ± 0.004
05-04-06	288	0.025 ± 0.004	11-02-06	301	0.027 ± 0.004
05-11-06	289	0.022 ± 0.004	11-09-06	300	0.053 ± 0.005
05-17-06	248	0.006 ± 0.003	11-16-06	301	0.036 ± 0.004
05-25-06	330	0.021 ± 0.003	11-22-06	254	0.048 ± 0.005
06-01-06	287	0.029 ± 0.004	11-30-06	344	0.057 ± 0.005
06-08-06	287	0.025 ± 0.004	12-07-06	302	0.046 ± 0.005
06-15-06	291	0.021 ± 0.004	12-14-06	287	0.045 ± 0.005
06-22-06	298	0.027 ± 0.004	12-21-06	300	0.031 ± 0.004
06-29-06	300	0.019 ± 0.004	12-28-06	287	0.035 ± 0.004
2nd Quarter Mean ± s.d.		<u>0.023 ± 0.006</u>	4th Quarter Mean ± s.d.		<u>0.038 ± 0.011</u>
			Cumulative Average		0.030
			Previous Annual Average		0.032

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Volume low due to electric off; relocation.

DUANE ARNOLD

Table 3. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.
 Location: D-6 (Center Point)
 Units: pCi/m³
 Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	326	0.017 ± 0.003	07-06-06	280	0.036 ± 0.004
01-12-06	287	0.031 ± 0.004	07-13-06	278	0.024 ± 0.004
01-19-06	290	0.018 ± 0.004	07-20-06	281	0.032 ± 0.004
01-26-06	288	0.033 ± 0.004	07-27-06	279	0.028 ± 0.004
02-02-06	288	0.025 ± 0.004	08-03-06	279	0.028 ± 0.004
02-09-06	289	0.026 ± 0.004	08-10-06	280	0.029 ± 0.004
02-16-06	289	0.027 ± 0.004	08-17-06	279	0.029 ± 0.004
02-23-06	288	0.042 ± 0.005	08-23-06	238	0.033 ± 0.005
03-02-06	288	0.034 ± 0.004	08-31-06	320	0.046 ± 0.004
03-09-06	288	0.021 ± 0.004	09-07-06	280	0.027 ± 0.004
03-16-06	289	0.025 ± 0.004	09-14-06	280	0.022 ± 0.004
03-23-06	287	0.024 ± 0.004	09-21-06	281	0.019 ± 0.004
03-30-06	289	0.012 ± 0.003	09-28-06	291	0.028 ± 0.004
1st Quarter Mean ± s.d.		0.026 ± 0.008	3rd Quarter Mean ± s.d.		0.029 ± 0.007
04-06-06	289	0.019 ± 0.004	10-05-06	294	0.034 ± 0.004
04-13-06	161 ^b	0.029 ± 0.006	10-12-06	287	0.020 ± 0.004
04-20-06	292	0.020 ± 0.004	10-19-06	294	0.028 ± 0.004
04-27-06	290	0.017 ± 0.004	10-26-06	290	0.030 ± 0.004
			11-02-06	289	0.027 ± 0.004
05-04-06	291	0.023 ± 0.004			
05-11-06	291	0.016 ± 0.003	11-09-06	290	0.045 ± 0.005
05-17-06	250	0.008 ± 0.003	11-16-06	289	0.036 ± 0.004
05-25-06	333	0.020 ± 0.003	11-22-06	241	0.053 ± 0.006
06-01-06	290	0.030 ± 0.004	11-30-06	330	0.055 ± 0.005
06-08-06	290	0.026 ± 0.004	12-07-06	293	0.042 ± 0.004
06-15-06	294	0.023 ± 0.004	12-14-06	290	0.044 ± 0.005
06-22-06	279	0.026 ± 0.004	12-21-06	289	0.029 ± 0.004
06-29-06	280	0.020 ± 0.004	12-28-06	292	0.036 ± 0.004
2nd Quarter Mean ± s.d.		0.021 ± 0.006	4th Quarter Mean ± s.d.		0.037 ± 0.010
Cumulative Average					0.028
Previous Annual Average					0.031

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Electric off; I-131 result: < 0.038 pCi/m³ due to low volume.

DUANE ARNOLD

Table 4. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.
 Location: D-7 (Shellsburg)
 Units: pCi/m³
 Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	323	0.023 ± 0.004	07-06-06	289	0.036 ± 0.004
01-12-06	284	0.032 ± 0.004	07-13-06	287	0.034 ± 0.004
01-19-06	287	0.029 ± 0.004	07-20-06	290	0.033 ± 0.004
01-26-06	285	0.027 ± 0.004	07-27-06	288	0.031 ± 0.004
02-02-06	286	0.026 ± 0.004	08-03-06	287	0.027 ± 0.004
02-09-06	286	0.027 ± 0.004	08-10-06	286	0.025 ± 0.004
02-16-06	286	0.027 ± 0.004	08-17-06	288	0.022 ± 0.004
02-23-06	286	0.037 ± 0.004	08-23-06	246	0.037 ± 0.005
03-02-06	210 ^b	0.036 ± 0.005	08-31-06	330	0.042 ± 0.004
03-09-06		ND ^c	09-07-06	289	0.032 ± 0.004
03-16-06	286	0.023 ± 0.004	09-14-06	289	0.025 ± 0.004
03-23-06	287	0.020 ± 0.004	09-21-06	289	0.020 ± 0.004
03-30-06	289	0.011 ± 0.003	09-28-06	288	0.029 ± 0.004
<u>1st Quarter Mean ± s.d.</u>		<u>0.027 ± 0.007</u>	<u>3rd Quarter Mean ± s.d.</u>		<u>0.030 ± 0.006</u>
04-06-06	215 ^d	0.018 ± 0.005	10-05-06	289	0.029 ± 0.004
04-13-06	242 ^e	0.027 ± 0.005	10-12-06	287	0.022 ± 0.004
04-20-06	291	0.023 ± 0.004	10-19-06	291	0.022 ± 0.004
04-27-06	287	0.016 ± 0.004	10-26-06	288	0.015 ± 0.003
			11-02-06	289	0.011 ± 0.003
05-04-06	288	0.023 ± 0.004			
05-11-06	289	0.018 ± 0.003	11-09-06	290	0.035 ± 0.004
05-17-06	248	0.009 ± 0.003	11-16-06	289	0.027 ± 0.004
05-25-06	330	0.022 ± 0.003	11-22-06	244	0.034 ± 0.005
06-01-06	287	0.032 ± 0.004	11-30-06	330	0.049 ± 0.005
06-08-06	287	0.030 ± 0.004	12-07-06	290	0.046 ± 0.005
06-15-06	291	0.025 ± 0.004	12-14-06	287	0.040 ± 0.005
06-22-06	287	0.029 ± 0.004	12-21-06	289	0.034 ± 0.004
06-29-06	289	0.024 ± 0.004	12-28-06	301	0.028 ± 0.004
<u>2nd Quarter Mean ± s.d.</u>		<u>0.023 ± 0.006</u>	<u>4th Quarter Mean ± s.d.</u>		<u>0.030 ± 0.011</u>
<u>Cumulative Average</u>					<u>0.027</u>
<u>Previous Annual Average</u>					<u>0.028</u>

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Volume low; electric off due to relocation.

^c "ND" = No data; see Table 2.0, Listing of Missed Samples.

^d Compressor failure.

^e 6-day run time.

DUANE ARNOLD

Table 5. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.

Location: D-11 (Toddville)

Units: pCi/m³

Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	333	0.022 ± 0.004	07-06-06	287	0.038 ± 0.004
01-12-06	293	0.033 ± 0.004	07-13-06	288	0.033 ± 0.004
01-19-06	295	0.032 ± 0.004	07-20-06	289	0.035 ± 0.004
01-26-06	294	0.030 ± 0.004	07-27-06	288	0.036 ± 0.004
02-02-06	293	0.023 ± 0.004	08-03-06	287	0.032 ± 0.004
02-09-06	293	0.027 ± 0.004	08-10-06	289	0.027 ± 0.004
02-16-06	294	0.028 ± 0.004	08-17-06	302	0.033 ± 0.004
02-23-06	295	0.041 ± 0.005	08-23-06	246	0.043 ± 0.005
03-02-06	294	0.034 ± 0.005	08-31-06	329	0.054 ± 0.005
03-09-06	292	0.022 ± 0.004	09-07-06	289	0.029 ± 0.004
03-16-06	296	0.027 ± 0.004	09-14-06	289	0.029 ± 0.004
03-23-06	292	0.023 ± 0.004	09-21-06	290	0.024 ± 0.004
03-30-06	296	0.010 ± 0.003	09-28-06	288	0.028 ± 0.004
1st Quarter Mean ± s.d.		0.027 ± 0.008	3rd Quarter Mean ± s.d.		0.034 ± 0.008
04-06-06	281	0.019 ± 0.004	10-05-06	290	0.038 ± 0.004
04-13-06	292	0.028 ± 0.004	10-12-06	285	0.019 ± 0.004
04-20-06	291	0.018 ± 0.003	10-19-06	291	0.022 ± 0.004
04-27-06	291	0.019 ± 0.004	10-26-06	289	0.026 ± 0.004
			11-02-06	289	0.025 ± 0.004
05-04-06	291	0.024 ± 0.004			
05-11-06	291	0.018 ± 0.003	11-09-06	289	0.043 ± 0.005
05-17-06	249	0.012 ± 0.004	11-16-06	288	0.031 ± 0.004
05-25-06	334	0.021 ± 0.003	11-22-06	242	0.044 ± 0.005
06-01-06	290	0.028 ± 0.004	11-30-06	331	0.050 ± 0.005
06-08-06	289	0.024 ± 0.004	12-07-06	290	0.038 ± 0.004
06-15-06	294	0.021 ± 0.004	12-14-06	287	0.040 ± 0.005
06-22-06	290	0.027 ± 0.004	12-21-06	288	0.027 ± 0.004
06-29-06	290	0.022 ± 0.004	12-28-06	289	0.035 ± 0.004
2nd Quarter Mean ± s.d.		0.022 ± 0.005	4th Quarter Mean ± s.d.		0.034 ± 0.009
			Cumulative Average		0.029
			Previous Annual Average		0.031

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

DUANE ARNOLD

Table 6. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.

Location: D-13 (Alburnett)

Units: pCi/m³

Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	342	0.018 ± 0.003	07-06-06	303	0.026 ± 0.004
01-12-06	302	0.028 ± 0.004	07-13-06	301	0.027 ± 0.004
01-19-06	304	0.028 ± 0.004	07-20-06	304	0.033 ± 0.004
01-26-06	303	0.025 ± 0.004	07-27-06	302	0.027 ± 0.004
02-02-06	302	0.024 ± 0.004	08-03-06	301	0.029 ± 0.004
02-09-06	303	0.027 ± 0.004	08-10-06	303	0.029 ± 0.004
02-16-06	303	0.028 ± 0.004	08-17-06	302	0.024 ± 0.004
02-23-06	302	0.035 ± 0.005	08-23-06	258	0.030 ± 0.005
03-02-06	176 ^b	0.031 ± 0.006	08-31-06	346	0.040 ± 0.004
03-09-06	253	0.021 ± 0.004	09-07-06	303	0.022 ± 0.004
03-16-06	304	0.020 ± 0.004	09-14-06	303	0.019 ± 0.003
03-23-06	301	0.018 ± 0.003	09-21-06	304	0.020 ± 0.003
03-30-06	304	0.014 ± 0.003	09-28-06	288	0.025 ± 0.004
1st Quarter Mean ± s.d.		0.024 ± 0.006	3rd Quarter Mean ± s.d.		0.027 ± 0.006
04-06-06	286	0.018 ± 0.004	10-05-06	291	0.036 ± 0.004
04-13-06	288	0.027 ± 0.004	10-12-06	285	0.023 ± 0.004
04-20-06	291	0.018 ± 0.003	10-19-06	291	0.023 ± 0.004
04-27-06	287	0.019 ± 0.004	10-26-06	288	0.029 ± 0.004
			11-02-06	286	0.025 ± 0.004
05-04-06	288	0.024 ± 0.004	11-09-06	290	0.041 ± 0.005
05-11-06	288	0.020 ± 0.004	11-16-06	289	0.034 ± 0.004
05-17-06	248	0.010 ± 0.004	11-22-06	245	0.045 ± 0.005
05-25-06	330	0.021 ± 0.003	11-30-06	327	0.053 ± 0.005
06-01-06	287	0.027 ± 0.004			
06-08-06	287	0.022 ± 0.004	12-07-06	290	0.045 ± 0.005
06-15-06	291	0.023 ± 0.004	12-14-06	287	0.043 ± 0.005
06-22-06	301	0.026 ± 0.004	12-21-06	289	0.027 ± 0.004
06-29-06	304	0.020 ± 0.004	12-28-06	291	0.034 ± 0.004
2nd Quarter Mean ± s.d.		0.021 ± 0.005	4th Quarter Mean ± s.d.		0.035 ± 0.010
Cumulative Average					0.027
Previous Annual Average					0.034

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Volume low; electric off due to relocation.

DUANE ARNOLD

Table 7. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.

Location: D-15 (On-site)

Units: pCi/m³

Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	318	0.023 ± 0.004	07-06-06	283	0.034 ± 0.004
01-12-06	278	0.032 ± 0.004	07-13-06	281	0.028 ± 0.004
01-19-06	281	0.032 ± 0.004	07-20-06	284	0.037 ± 0.004
01-26-06	279	0.029 ± 0.004	07-27-06	282	0.032 ± 0.004
02-02-06	280	0.021 ± 0.004	08-03-06	281	0.030 ± 0.004
02-09-06	280	0.025 ± 0.004	08-10-06	276	0.030 ± 0.004
02-16-06	280	0.025 ± 0.004	08-17-06	282	0.031 ± 0.004
02-23-06	280	0.037 ± 0.005	08-23-06	242	0.041 ± 0.005
03-02-06	278	0.033 ± 0.004	08-31-06	324	0.043 ± 0.004
03-09-06	281	0.021 ± 0.004	09-07-06	282	0.027 ± 0.004
03-16-06	280	0.021 ± 0.004	09-14-06	284	0.026 ± 0.004
03-23-06	287	0.019 ± 0.004	09-21-06	283	0.023 ± 0.004
03-30-06	204 ^b	0.013 ± 0.004	09-28-06	282	0.029 ± 0.004
1st Quarter Mean ± s.d.		0.025 ± 0.007	3rd Quarter Mean ± s.d.		0.032 ± 0.006
04-06-06	269	0.021 ± 0.004	10-05-06	283	0.032 ± 0.004
04-13-06	296	0.024 ± 0.004	10-12-06	290	0.021 ± 0.004
04-20-06	288	0.025 ± 0.004	10-19-06	294	0.022 ± 0.004
04-27-06	270	0.020 ± 0.004	10-26-06	290	0.029 ± 0.004
05-04-06	287	0.025 ± 0.004	11-02-06	293	0.021 ± 0.004
05-11-06	287	0.020 ± 0.004	11-09-06	290	0.043 ± 0.005
05-17-06	233	0.014 ± 0.004	11-16-06	294	0.032 ± 0.004
05-25-06	324	0.022 ± 0.003	11-22-06	242	0.044 ± 0.005
06-01-06	273	0.028 ± 0.004	11-30-06	334	0.052 ± 0.005
06-08-06	283 ^c	< 0.004	12-07-06	293	0.040 ± 0.004
06-15-06	269	0.022 ± 0.004	12-14-06	289	0.044 ± 0.005
06-22-06	277	0.028 ± 0.004	12-21-06	293	0.027 ± 0.004
06-29-06	283	0.019 ± 0.004	12-28-06	292	0.034 ± 0.004
2nd Quarter Mean ± s.d.		0.022 ± 0.004	4th Quarter Mean ± s.d.		0.034 ± 0.010
Cumulative Average					0.028
Previous Annual Average					0.030

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b Volume low; electric off.

^c Light seal.

DUANE ARNOLD

Table 8. Airborne particulates and charcoal canisters, analyses for gross beta and iodine-131^a.

Location: D-16 (On-site)

Units: pCi/m³

Collection: Continuous, weekly exchange.

Date Collected	Volume (m ³)	Gross Beta	Date Collected	Volume (m ³)	Gross Beta
<u>Required LLD</u>		<u>0.010</u>	<u>Required LLD</u>		<u>0.010</u>
01-05-06	321	0.023 ± 0.004	07-06-06	283	0.041 ± 0.005
01-12-06	281	0.036 ± 0.004	07-13-06	281	0.029 ± 0.004
01-19-06	284	0.031 ± 0.004	07-20-06	286	0.033 ± 0.004
01-26-06	282	0.025 ± 0.004	07-27-06	281	0.033 ± 0.004
02-02-06	283	0.023 ± 0.004	08-03-06	281	0.030 ± 0.004
02-09-06	280	0.030 ± 0.004	08-10-06	283	0.025 ± 0.004
02-16-06	283	0.031 ± 0.004	08-17-06	282	0.031 ± 0.004
02-23-06	283	0.025 ± 0.004	08-23-06		ND ^b
03-02-06	281	0.032 ± 0.004	08-31-06	324	0.047 ± 0.004
03-09-06	283	0.024 ± 0.004	09-07-06	283	0.030 ± 0.004
03-16-06	282	0.025 ± 0.004	09-14-06	249	0.026 ± 0.004
03-23-06	291	0.019 ± 0.004	09-21-06	283	0.025 ± 0.004
03-30-06	289	0.009 ± 0.003	09-28-06	283	0.027 ± 0.004
1st Quarter Mean ± s.d.		<u>0.026 ± 0.007</u>	3rd Quarter Mean ± s.d.		<u>0.031 ± 0.007</u>
04-06-06	289	0.018 ± 0.004	10-05-06	291	0.036 ± 0.004
04-13-06	291	0.026 ± 0.004	10-12-06	290	0.018 ± 0.004
04-20-06	293	0.020 ± 0.004	10-19-06	294	0.020 ± 0.004
04-27-06	289	0.017 ± 0.004	10-26-06	290	0.031 ± 0.004
			11-02-06	293	0.024 ± 0.004
05-04-06	291	0.026 ± 0.004			
05-11-06	291	0.019 ± 0.003	11-09-06	290	0.043 ± 0.005
05-17-06	251	0.009 ± 0.003	11-16-06	294	0.041 ± 0.004
05-25-06	333	0.020 ± 0.003	11-22-06	246	0.045 ± 0.005
06-01-06	290	0.030 ± 0.004	11-30-06	335	0.054 ± 0.005
06-08-06	289	0.024 ± 0.004	12-07-06	293	0.044 ± 0.005
06-15-06	276	0.019 ± 0.004	12-14-06	289	0.039 ± 0.005
06-22-06	281	0.024 ± 0.004	12-21-06	292	0.029 ± 0.004
06-29-06	284	0.019 ± 0.004	12-28-06	292	0.033 ± 0.004
2nd Quarter Mean ± s.d.		<u>0.021 ± 0.005</u>	4th Quarter Mean ± s.d.		<u>0.035 ± 0.011</u>
Cumulative Average					0.028
Previous Annual Average					0.033

^a Iodine-131 concentrations are < 0.03 pCi/m³ unless noted otherwise.

^b "ND" = No data; see Table 2.0, Listing of Missed Samples.

DUANE ARNOLD

Table 9. Airborne particulates, analyses for gamma-emitting isotopes.
 Collection: Quarterly Composite
 Units: pCi/m³

D-3				
Location	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Quarter				
Lab Code	DAP-2804	DAP-4951	DAP-7578	DAP-9542
Volume (m ³)	3747	3744	3389	3753
Be-7	0.058 ± 0.013	0.097 ± 0.018	0.105 ± 0.017	0.088 ± 0.015
Nb-95	< 0.0011	< 0.0015	< 0.0013	< 0.0011
Zr-95	< 0.0011	< 0.0015	< 0.0010	< 0.0008
Ru-103	< 0.0008	< 0.0008	< 0.0010	< 0.0010
Ru-106	< 0.0049	< 0.0071	< 0.0073	< 0.0053
Cs-134	< 0.0007	< 0.0009	< 0.0008	< 0.0008
Cs-137	< 0.0005	< 0.0006	< 0.0009	< 0.0006
Ce-141	< 0.0020	< 0.0027	< 0.0016	< 0.0011
Ce-144	< 0.0042	< 0.0043	< 0.0042	< 0.0026

D-5				
Location	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Quarter				
Lab Code	28051945	DAP-4952,3	DAP-7579	DAP-9543
Volume (m ³)	3590	3770	3894	3876
Be-7	0.059 ± 0.016	0.091 ± 0.012	0.092 ± 0.017	0.062 ± 0.013
Nb-95	< 0.0016	< 0.0005	< 0.0008	< 0.0008
Zr-95	< 0.0025	< 0.0017	< 0.0013	< 0.0009
Ru-103	< 0.0016	< 0.0008	< 0.0012	< 0.0007
Ru-106	< 0.0036	< 0.0041	< 0.0059	< 0.0057
Cs-134	< 0.0009	< 0.0007	< 0.0009	< 0.0003
Cs-137	< 0.0009	< 0.0005	< 0.0005	< 0.0006
Ce-141	< 0.0015	< 0.0011	< 0.0012	< 0.0014
Ce-144	< 0.0049	< 0.0047	< 0.0034	< 0.0044

D-6				
Location	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Quarter				
Lab Code	DAP-2806	DAP-4954	DAP-7580	DAP-9544
Volume (m ³)	3786	3630	3646	3768
Be-7	0.059 ± 0.017	0.055 ± 0.015	0.080 ± 0.020	0.071 ± 0.013
Nb-95	< 0.0022	< 0.0006	< 0.0009	< 0.0007
Zr-95	< 0.0031	< 0.0009	< 0.0013	< 0.0007
Ru-103	< 0.0014	< 0.0009	< 0.0009	< 0.0006
Ru-106	< 0.0048	< 0.0047	< 0.0049	< 0.0056
Cs-134	< 0.0005	< 0.0007	< 0.0009	< 0.0007
Cs-137	< 0.0006	< 0.0006	< 0.0004	< 0.0008
Ce-141	< 0.0014	< 0.0023	< 0.0025	< 0.0014
Ce-144	< 0.0057	< 0.0054	< 0.0027	< 0.0032

DUANE ARNOLD

Table 9. Airborne particulates, analyses for gamma-emitting isotopes.
 Collection: Quarterly Composite
 Units: pCi/m³

Location				
D-7				
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	DAP-2807	DAP-4955	DAP-7581	DAP-9545
Volume (m ³)	3395	3631	3746	3764
Be-7	0.064 ± 0.016	0.091 ± 0.019	0.094 ± 0.017	0.055 ± 0.013
Nb-95	< 0.0016	< 0.0008	< 0.0014	< 0.0011
Zr-95	< 0.0018	< 0.0014	< 0.0010	< 0.0014
Ru-103	< 0.0009	< 0.0011	< 0.0010	< 0.0004
Ru-106	< 0.0085	< 0.0036	< 0.0062	< 0.0059
Cs-134	< 0.0010	< 0.0009	< 0.0007	< 0.0009
Cs-137	< 0.0003	< 0.0007	< 0.0007	< 0.0007
Ce-141	< 0.0022	< 0.0015	< 0.0020	< 0.0016
Ce-144	< 0.0056	< 0.0042	< 0.0049	< 0.0051

Location				
D-11				
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	DAP-2808	DAP-4956	DAP-7582	DAP-9546
Volume (m ³)	3860	3773	3761	3748
Be-7	0.046 ± 0.015	0.086 ± 0.018	0.085 ± 0.017	0.078 ± 0.015
Nb-95	< 0.0013	< 0.0009	< 0.0008	< 0.0015
Zr-95	< 0.0027	< 0.0021	< 0.0014	< 0.0014
Ru-103	< 0.0013	< 0.0009	< 0.0008	< 0.0008
Ru-106	< 0.0078	< 0.0046	< 0.0063	< 0.0063
Cs-134	< 0.0009	< 0.0007	< 0.0005	< 0.0004
Cs-137	< 0.0009	< 0.0005	< 0.0004	< 0.0008
Ce-141	< 0.0015	< 0.0009	< 0.0022	< 0.0012
Ce-144	< 0.0049	< 0.0052	< 0.0019	< 0.0032

Location				
D-13				
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Lab Code	DAP-2809	DAP-4957	DAP-7583	DAP-9547
Volume (m ³)	3799	3776	3918	3749
Be-7	0.047 ± 0.017	0.092 ± 0.018	0.073 ± 0.016	0.063 ± 0.016
Nb-95	< 0.0021	< 0.0011	< 0.0008	< 0.0007
Zr-95	< 0.0009	< 0.0017	< 0.0015	< 0.0012
Ru-103	< 0.0009	< 0.0010	< 0.0011	< 0.0010
Ru-106	< 0.0083	< 0.0046	< 0.0052	< 0.0083
Cs-134	< 0.0004	< 0.0009	< 0.0007	< 0.0007
Cs-137	< 0.0010	< 0.0005	< 0.0006	< 0.0010
Ce-141	< 0.0025	< 0.0022	< 0.0020	< 0.0013
Ce-144	< 0.0049	< 0.0039	< 0.0041	< 0.0039

DUANE ARNOLD

Table 13. Airborne particulates, analyses for gamma-emitting isotopes.
Collection: Quarterly Composite
Units: pCi/m³

Location		D-15			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Lab Code	DAP-2810	DAP-4958	DAP-7584	DAP-9548	
Volume (m ³)	3606	3639	3666	3777	
Be-7	0.057 ± 0.015	0.086 ± 0.018	0.093 ± 0.017	0.063 ± 0.017	
Nb-95	< 0.0010	< 0.0015	< 0.0008	< 0.0008	
Zr-95	< 0.0012	< 0.0020	< 0.0017	< 0.0015	
Ru-103	< 0.0012	< 0.0010	< 0.0008	< 0.0008	
Ru-106	< 0.0058	< 0.0040	< 0.0053	< 0.0051	
Cs-134	< 0.0008	< 0.0007	< 0.0006	< 0.0005	
Cs-137	< 0.0009	< 0.0008	< 0.0006	< 0.0006	
Ce-141	< 0.0024	< 0.0019	< 0.0013	< 0.0018	
Ce-144	< 0.0049	< 0.0047	< 0.0051	< 0.0028	

Location		D-16			
Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Lab Code	DAP-2811	DAP-4959	DAP-7585	DAP-9549	
Volume (m ³)	3723	3748	3399	3789	
Be-7	0.063 ± 0.017	0.090 ± 0.015	0.088 ± 0.019	0.069 ± 0.016	
Nb-95	< 0.0009	< 0.0014	< 0.0015	< 0.0017	
Zr-95	< 0.0013	< 0.0013	< 0.0016	< 0.0021	
Ru-103	< 0.0015	< 0.0012	< 0.0009	< 0.0010	
Ru-106	< 0.0072	< 0.0073	< 0.0089	< 0.0073	
Cs-134	< 0.0008	< 0.0004	< 0.0008	< 0.0006	
Cs-137	< 0.0006	< 0.0007	< 0.0007	< 0.0007	
Ce-141	< 0.0018	< 0.0014	< 0.0028	< 0.0018	
Ce-144	< 0.0036	< 0.0032	< 0.0040	< 0.0045	

DUANE ARNOLD

Table 10. Area monitors (TLD), Quarterly
Units: mR/91 days

<u>Air Stations</u>	<u>1st Qtr.</u>	<u>2nd Qtr.</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>
D-1 (C)	ND ^a	15.8 ± 1.1	22.4 ± 0.8	16.2 ± 1.1
D-2 (C)	16.5 ± 0.7	ND ^a	19.7 ± 1.8	13.3 ± 1.8
D-3	16.4 ± 1.1	14.9 ± 0.8	17.1 ± 1.1	14.9 ± 0.9
D-5	17.9 ± 1.2	19.0 ± 0.8	18.6 ± 1.2	20.2 ± 1.2
D-6	17.1 ± 0.8	17.5 ± 0.9	17.9 ± 1.1	17.3 ± 0.9
D-7	16.4 ± 1.2	16.9 ± 0.8	17.3 ± 1.2	17.9 ± 1.0
D-8	20.2 ± 0.7	21.2 ± 1.3	21.8 ± 0.7	21.7 ± 1.5
D-10	18.4 ± 0.9	12.8 ± 0.9	19.3 ± 1.2	12.7 ± 1.1
D-11	16.2 ± 0.6	15.8 ± 1.9	16.2 ± 0.7	16.5 ± 2.1
D-13 (C)	18.0 ± 1.2	17.2 ± 0.8	18.2 ± 0.7	17.2 ± 1.2
D-15	17.1 ± 1.2	15.4 ± 0.7	17.2 ± 1.1	16.6 ± 1.2
D-16	18.8 ± 0.8	17.5 ± 1.9	20.1 ± 0.8	17.8 ± 2.1
Mean ± s.d.	17.5 ± 1.2	16.7 ± 2.2	18.8 ± 1.9	16.9 ± 2.5
<u>Within 0.5 mi. of Stack</u>				
D-17	21.0 ± 0.9	16.4 ± 1.0	21.3 ± 1.3	19.7 ± 1.9
D-18	18.5 ± 1.3	15.7 ± 1.5	18.2 ± 1.2	18.1 ± 1.8
D-19	17.8 ± 0.9	15.5 ± 1.2	17.3 ± 0.9	17.8 ± 1.4
D-20	19.3 ± 0.9	18.3 ± 0.9	19.8 ± 0.9	21.0 ± 1.6
D-21	20.4 ± 0.9	18.1 ± 1.2	18.9 ± 0.7	20.0 ± 1.4
D-22	18.7 ± 1.0	16.3 ± 0.8	18.6 ± 0.8	17.5 ± 1.0
D-23	17.0 ± 0.9	16.1 ± 1.9	16.3 ± 0.9	18.2 ± 1.4
D-28	21.7 ± 1.0	20.5 ± 0.9	21.4 ± 1.1	23.0 ± 1.3
D-29	23.1 ± 0.8	21.2 ± 1.1	22.2 ± 0.7	25.1 ± 1.5
D-30	23.2 ± 1.1	19.0 ± 1.3	22.1 ± 0.8	22.2 ± 1.6
D-31	22.9 ± 1.2	22.9 ± 1.3	21.2 ± 1.3	25.5 ± 1.7
D-32	23.4 ± 0.7	19.1 ± 1.3	23.0 ± 0.7	22.8 ± 1.9
D-82	17.3 ± 0.8	12.5 ± 0.7	16.6 ± 0.8	15.0 ± 1.0
D-83	18.8 ± 0.7	15.5 ± 0.7	18.7 ± 0.8	18.0 ± 1.2
D-84	19.0 ± 1.1	15.4 ± 1.0	18.2 ± 1.0	17.9 ± 1.2
D-85	19.2 ± 0.7	15.9 ± 1.4	19.4 ± 1.0	17.4 ± 1.3
D-86	21.4 ± 1.3	16.9 ± 1.0	20.5 ± 1.1	19.2 ± 1.4
D-91	16.4 ± 0.9	14.9 ± 0.9	16.6 ± 0.8	15.9 ± 1.5
Mean ± s.d.	20.0 ± 2.3	17.2 ± 2.6	19.5 ± 2.1	19.7 ± 3.0

^a "ND" = No data; TLD missing.

DUANE ARNOLD

Table 10. Area monitors (TLD), Quarterly
Units: mR/91 days

<u>Within 1.0 mi. of Stack</u>	<u>1st Qtr.</u>	<u>2nd Qtr.</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>
D-43	17.8 ± 0.8	14.8 ± 0.8	18.2 ± 0.9	18.1 ± 1.2
D-44	21.2 ± 1.0	18.3 ± 0.9	22.2 ± 1.0	23.5 ± 1.1
D-45	18.3 ± 1.6	14.2 ± 1.1	17.7 ± 0.9	17.3 ± 1.7
D-46	20.7 ± 1.9	19.5 ± 1.1	22.5 ± 1.3	23.7 ± 1.6
D-47	20.6 ± 0.8	18.1 ± 1.0	20.5 ± 0.8	22.9 ± 1.2
D-48	21.3 ± 0.7	20.0 ± 1.4	23.0 ± 0.7	23.9 ± 1.7
Mean ± s.d.	20.0 ± 1.5	17.5 ± 2.4	20.7 ± 2.3	21.6 ± 3.0
<u>Within 3.0 mi. of Stack</u>				
D-33	16.0 ± 0.8	14.3 ± 0.7	16.3 ± 1.0	17.1 ± 0.9
D-34	16.8 ± 0.7	13.5 ± 1.1	16.8 ± 0.9	15.4 ± 1.3
D-35	16.7 ± 0.9	13.6 ± 0.7	16.6 ± 0.7	16.6 ± 1.3
D-36	17.3 ± 1.0	15.7 ± 0.8	17.6 ± 1.0	18.9 ± 1.4
D-37	21.9 ± 1.2	19.5 ± 2.2	21.7 ± 1.2	22.7 ± 2.8
D-38	19.6 ± 1.1	17.2 ± 1.0	20.3 ± 1.0	19.8 ± 1.3
D-39	19.9 ± 1.0	16.9 ± 0.7	20.5 ± 1.1	20.3 ± 1.1
D-40	16.0 ± 0.8	14.7 ± 0.8	15.9 ± 0.8	17.4 ± 1.1
D-41	17.5 ± 1.0	14.3 ± 0.9	18.4 ± 1.0	16.9 ± 1.2
D-42	16.6 ± 0.8	13.7 ± 1.2	16.3 ± 0.8	16.5 ± 1.7
Mean ± s.d.	17.8 ± 2.0	15.3 ± 2.0	18.0 ± 2.1	18.2 ± 2.2

DUANE ARNOLD

Table 11. Milk samples, analyses for iodine-131 and gamma emitting isotopes.
Collection: Monthly during non-grazing season (October 1 through April 30); biweekly during grazing season (May 1 through September 30)

Location		D-96					
Date	Lab	Concentration (pCi/L)					
Collected	Code	I-131	K-40	Cs-134	Cs-137	Ba-140	La-140
01-04-06	NS ^a	-	-	-	-	-	-

Location		D-101					
Date	Lab	Concentration (pCi/L)					
Collected	Code	I-131	K-40	Cs-134	Cs-137	Ba-140	La-140
01-04-06	NS ^a	-	-	-	-	-	-

^a NS= No sample; sample not available. See Table 2.0, "Listing of Missed Samples."

DUANE ARNOLD

Table 11. Milk samples, analyses for iodine-131 and gamma emitting isotopes.
 Collection: Monthly during non-grazing season (October 1 through April 30); biweekly during grazing season (May 1 through September 30)

Location		D-108					
Date	Lab	Concentration (pCi/L)					
Collected	Code	I-131	K-40	Cs-134	Cs-137	Ba-140	La-140
01-04-06	DMI -90	< 0.5	1417 ± 109	< 5	< 5	< 60	< 5
02-07-06	DMI -640	< 0.5	1525 ± 112	< 5	< 5	< 60	< 5
03-07-06	DMI -1220	< 0.5	1357 ± 119	< 5	< 5	< 60	< 5
04-04-06	DMI -2037	< 0.5	1313 ± 183	< 5	< 5	< 60	< 5
05-02-06	DMI -3022	< 0.5	1139 ± 103	< 5	< 5	< 60	< 5
05-16-06	DMI -3274	< 0.5	1229 ± 110	< 5	< 5	< 60	< 5
05-31-06	DMI -3553	< 0.5	1156 ± 110	< 5	< 5	< 60	< 5
06-13-06	DMI -3925	< 0.5	1657 ± 137	< 5	< 5	< 60	< 5
06-26-06	DMI -4224	< 0.5	1317 ± 116	< 5	< 5	< 60	< 5
07-11-06	DMI -4605	< 0.5	1463 ± 105	< 5	< 5	< 60	< 5
07-25-06	DMI -5060	< 0.5	1202 ± 109	< 5	< 5	< 60	< 5
08-08-06	DMI -5378	< 0.5	1447 ± 113	< 5	< 5	< 60	< 5
08-22-06	DMI -5752	< 0.5	1482 ± 133	< 5	< 5	< 60	< 5
09-06-06	DMI -6099	< 0.5	1358 ± 167	< 5	< 5	< 60	< 5
09-19-06	DMI -6410	< 0.5	1358 ± 121	< 5	< 5	< 60	< 5
10-03-06	DMI -6783	< 0.5	1419 ± 120	< 5	< 5	< 60	< 5
11-07-06	DMI -8088	< 0.5	1200 ± 98	< 5	< 5	< 60	< 5
12-05-06	DMI -8752	< 0.5	1576 ± 117	< 5	< 5	< 60	< 5

Location		D-109					
Date	Lab	Concentration (pCi/L)					
Collected	Code	I-131	K-40	Cs-134	Cs-137	Ba-140	La-140
01-04-06	DMI -91	< 0.5	1258 ± 104	< 5	< 5	< 60	< 5
02-07-06	DMI -641	< 0.5	1240 ± 111	< 5	< 5	< 60	< 5
03-07-06	DMI -1221	< 0.5	1281 ± 116	< 5	< 5	< 60	< 5
04-04-06	DMI -2038	< 0.5	1333 ± 170	< 5	< 5	< 60	< 5
05-02-06	DMI -3023	< 0.5	1289 ± 116	< 5	< 5	< 60	< 5
05-16-06	DMI -3275	< 0.5	1307 ± 117	< 5	< 5	< 60	< 5
05-31-06	DMI -3554	< 0.5	1302 ± 103	< 5	< 5	< 60	< 5
06-13-06	DMI -3926	< 0.5	1267 ± 124	< 5	< 5	< 60	< 5
06-26-06	DMI -4225	< 0.5	1414 ± 119	< 5	< 5	< 60	< 5
07-11-06	DMI -4606	< 0.5	1439 ± 119	< 5	< 5	< 60	< 5
07-25-06	DMI -5061	< 0.5	1370 ± 118	< 5	< 5	< 60	< 5
08-08-06	DMI -5379	< 0.5	1152 ± 110	< 5	< 5	< 60	< 5
08-22-06	DMI -5753	< 0.5	1356 ± 116	< 5	< 5	< 60	< 5
09-06-06	DMI -6100	< 0.5	1328 ± 120	< 5	< 5	< 60	< 5
09-19-06	DMI -6411	< 0.5	1302 ± 127	< 5	< 5	< 60	< 5
10-03-06	DMI -6784	< 0.5	1203 ± 125	< 5	< 5	< 60	< 5
11-07-06	DMI -8089	< 0.5	1260 ± 107	< 5	< 5	< 60	< 5
12-05-06	DMI -8753	< 0.5	1263 ± 110	< 5	< 5	< 60	< 5

DUANE ARNOLD

Table 12.1. Well water samples, analyses for gross beta and tritium.

Collection: Quarterly

Units: pCi/L

Location				
D-53 Treated Municipal Water				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1502	DWW-4287	DWW-6631	DWW-9145
Gross Beta	1.4 ± 0.4	1.5 ± 0.6	3.7 ± 0.8	3.6 ± 0.7
H-3	< 182	< 144	< 193	< 173
Location				
D-54 Inlet to Municipal Water				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1503	DWW-4288	DWW-6632	DWW-9146
Gross Beta	5.1 ± 0.6	2.7 ± 0.6	3.5 ± 0.6	4.0 ± 0.8
H-3	< 182	< 166	< 193	< 173
Location				
D-55 On-site Well				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1504	DWW-4289	DWW-6633	DWW-9147
Gross Beta	< 0.5	< 1.2	< 1.2	< 1.2
H-3	< 182	< 166	< 193	< 173
Location				
D-57 Bull Farm				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1505	DWW-4153	DWW-6634	DWW-9148
Gross Beta	< 0.5	0.5 ± 0.3	2.0 ± 0.6	1.2 ± 0.6
H-3	< 182	< 141	< 193	< 173
Location				
D-58 Franz Farm				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1506	DWW-4154	DWW-6635	DWW-9149
Gross Beta	2.5 ± 0.5	3.4 ± 0.5	5.0 ± 0.8	5.7 ± 0.9
H-3	< 182	< 141	< 193	< 173
Location				
D-72 Van Note Farm				
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DWW-1507	DWW-4290	DWW-6636	DWW-9150
Gross Beta	< 0.5	< 1.1	< 1.3	< 1.3
H-3	< 182	< 166	< 193	< 173

Table 12.2. Ground water, Monitoring wells, analyses for gross beta and tritium.

Collection: Quarterly

Units: pCi/L

Period	1st Qtr. ^a	2nd Qtr. ^a	3rd Qtr.	4th Qtr.
Location MW-01A (shallow)				
Lab Code	-	-	DWW-6637	DWW-9151
Gross Beta			4.3 ± 0.7	4.7 ± 0.8
H-3			473 ± 114	504 ± 94
Location MW-01B (intermediate)				
Lab Code	-	-	DWW-6638	DWW-9152
Gross Beta			2.4 ± 0.7	1.9 ± 0.6
H-3			< 185	< 144
Location MW-02A (shallow)				
Lab Code	-	-	DWW-6639, 40	DWW-9153
Gross Beta			3.4 ± 0.5	6.0 ± 0.8
H-3			< 185	< 144
Location MW-02B (intermediate)				
Lab Code	-	-	DWW-6641	DWW-9154
Gross Beta			2.4 ± 0.6	1.4 ± 0.6
H-3			< 185	< 144
Location MW-03A (shallow)				
Lab Code	-	-	DWW-6642	DWW-9155
Gross Beta			4.4 ± 0.8	3.4 ± 0.7
H-3			< 185	< 144
Location MW-03B (intermediate)				
Lab Code	-	-	DWW-6643	DWW-9156
Gross Beta			2.6 ± 0.7	1.8 ± 0.6
H-3			< 185	< 144

^a Ground water monitoring of six on-site wells was added to the REMP in the third quarter, 2006, for analysis of gross beta and tritium. Analyses for strontium-89, strontium-90 and gamma emitting isotopes will be performed if the gross beta activity exceeds ten times the yearly mean of the potable water well control.

DUANE ARNOLD

Table 13. Vegetation (broadleaf), analyses for iodine-131 and other gamma-emitting isotopes.
 Collection: Annually
 Units: pCi/g wet

Location	D-57	D-58 ^a	D-72	D-96 ^a
Lab Code	DVE-6942		DVE-6943	
Date Collected	10/2/2006		10/2/2006	
Sample Type	Broad Leaf		Broad Leaf	
K-40	6.73 ± 0.68		6.77 ± 0.59	
Mn-54	< 0.018		< 0.016	
Co-58	< 0.014		< 0.018	
Co-60	< 0.019		< 0.011	
Nb-95	< 0.028		< 0.017	
Zr-95	< 0.049		< 0.036	
Ru-103	< 0.036		< 0.019	
Ru-106	< 0.28		< 0.07	
I-131	< 0.045		< 0.030	
Cs-134	< 0.023		< 0.016	
Cs-137	< 0.021		< 0.014	
Ce-141	< 0.063		< 0.031	
Ce-144	< 0.16		< 0.12	

Location	D-109 ^a	D-108 (C)
Lab Code	DVE-5636	
Date Collected	8/15/2006	
Sample Type	Broad Leaf	
K-40	6.29 ± 0.88	
Mn-54	< 0.030	
Co-58	< 0.043	
Co-60	< 0.057	
Nb-95	< 0.039	
Zr-95	< 0.11	
Ru-103	< 0.039	
Ru-106	< 0.21	
I-131	< 0.060	
Cs-134	< 0.027	
Cs-137	< 0.030	
Ce-141	< 0.074	
Ce-144	< 0.24	

^a No sample; see Table 2.0, "Listing of Missed Samples."

DUANE ARNOLD

Table 14. Vegetation (hay and grain), analyses for gamma-emitting isotopes.

Collection: Annually

Units: pCi/g wet

Location	D-16	D-16	D-57	D-57	D-58 ^a
Lab Code	DVE-6932	DVE-6936	DVE-6933	DVE-6937	
Date Collected	10/2/2006	10/2/2006	10/2/2006	10/2/2006	
Sample Type	Forage	Soybeans	Forage	Corn	
K-40	2.42 ± 1.53	13.63 ± 0.80	1.97 ± 1.78	3.47 ± 0.36	
Mn-54	< 0.068	< 0.023	< 0.055	< 0.009	
Co-58	< 0.072	< 0.014	< 0.058	< 0.010	
Co-60	< 0.072	< 0.024	< 0.046	< 0.010	
Nb-95	< 0.077	< 0.023	< 0.067	< 0.014	
Zr-95	< 0.10	< 0.041	< 0.17	< 0.013	
Ru-103	< 0.073	< 0.022	< 0.044	< 0.016	
Ru-106	< 0.31	< 0.11	< 0.45	< 0.082	
Cs-134	< 0.046	< 0.018	< 0.057	< 0.010	
Cs-137	< 0.055	< 0.018	< 0.057	< 0.013	
Ce-141	< 0.13	< 0.034	< 0.084	< 0.027	
Ce-144	< 0.40	< 0.12	< 0.30	< 0.10	

Location	D-58	D-72	D-72	D-96 ^a	D-96 ^a
Lab Code	DVE-6938	DVE-6934	DVE-6939		
Date Collected	10/2/2006	10/2/2006	10/2/2006		
Sample Type	Corn	Forage	Corn		
K-40	2.71 ± 0.25	2.04 ± 0.89	3.37 ± 0.41		
Mn-54	< 0.007	< 0.035	< 0.010		
Co-58	< 0.006	< 0.029	< 0.010		
Co-60	< 0.008	< 0.039	< 0.010		
Nb-95	< 0.008	< 0.032	< 0.019		
Zr-95	< 0.015	< 0.091	< 0.018		
Ru-103	< 0.008	< 0.034	< 0.016		
Ru-106	< 0.052	< 0.37	< 0.080		
Cs-134	< 0.007	< 0.033	< 0.010		
Cs-137	< 0.008	< 0.042	< 0.011		
Ce-141	< 0.017	< 0.051	< 0.029		
Ce-144	< 0.049	< 0.20	< 0.075		

^a "NS" = No sample; see Table 2.0, "Listing of Missed Samples."

DUANE ARNOLD

Table 14. Vegetation (hay and grain), analyses for gamma-emitting isotopes.

Collection: Annually

Units: pCi/g wet

Location	Control			
	D-109	D-109	D-108	D-108
Lab Code	DVE-6935	DVE-6941	DVE-5637	DVE-6940
Date Collected	10/2/2006	10/2/2006	8/15/2006	10/2/2006
Sample Type	Forage	Corn	Hay	Corn
K-40	5.94 ± 0.52	2.94 ± 0.28	2.46 ± 0.35	3.32 ± 0.40
Mn-54	< 0.023	< 0.009	< 0.036	< 0.012
Co-58	< 0.023	< 0.009	< 0.027	< 0.008
Co-60	< 0.018	< 0.004	< 0.034	< 0.011
Nb-95	< 0.023	< 0.010	< 0.031	< 0.015
Zr-95	< 0.056	< 0.017	< 0.036	< 0.028
Ru-103	< 0.029	< 0.012	< 0.030	< 0.015
Ru-106	< 0.20	< 0.060	< 0.33	< 0.082
Cs-134	< 0.024	< 0.010	< 0.021	< 0.015
Cs-137	< 0.024	< 0.008	< 0.030	< 0.014
Ce-141	< 0.037	< 0.017	< 0.065	< 0.024
Ce-144	< 0.17	< 0.069	< 0.21	< 0.086

DUANE ARNOLD

Table 15. Surface water samples, analyses for iodine-131, tritium and gamma-emitting isotopes.

Collection Monthly

Units: pCi/L

Location: D-50

Date Collected	01-30-06	02-14-06	03-14-06	04-19-06	05-26-06	06-21-06
Lab Code	DSW-526	DSW-792	DSW-1498	DSW-2650	DSW-3525	DSW-4148
H-3	< 167	< 167	< 166	< 165	< 133	< 141
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15
Date Collected	07-20-06	08-15-06	09-18-06	10-30-06	11-08-06	12-14-06
Lab Code	DSW-5002	DSW-5638	DSW-6515	DSW-8019	DSW-8264	DSW-9139
H-3	< 143	< 135	< 193	< 163	< 145	< 173
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15

DUANE ARNOLD

Table 15. Surface water samples, analyses for iodine-131, tritium and gamma-emitting isotopes.

Collection Monthly

Units: pCi/L

Location: D-51

Date Collected	01-30-06	02-14-06	03-14-06	04-19-06	05-26-06	06-21-06
Lab Code	DSW-527	DSW-793	DSW-1499	DSW-2651	DSW-3526	DSW-4149
H-3	< 167	< 167	< 166	< 165	< 133	< 141
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15
Date Collected	07-20-06	08-15-06	09-18-06	10-30-06	11-08-06	12-14-06
Lab Code	DSW-5003	DSW-5639	DSW-6516	DSW-8020	DSW-8265	DSW-9140
H-3	< 159	< 135	< 193	< 163	< 145	< 173
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15

DUANE ARNOLD

Table 15. Surface water, analyses for iodine-131, tritium and gamma-emitting isotopes.

Collection: Monthly

Units: pCi/L

Location: D-107

Date Collected Lab Code	01-30-06 DSW-528	02-14-06 DSW-794	03-14-06 DSW-1500	04-19-06 DSW-2652	05-26-06 DSW-3527	06-21-06 DSW-4150
H-3	< 167	< 167	< 166	< 165	< 133	179 ± 78
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15

Date Collected Lab Code	07-20-06 DSW-5004	08-15-06 DSW-5640	09-18-06 DSW-6517	10-30-06 DSW-8021	11-08-06 DSW-8266	12-14-06 DSW-9142
H-3	173 ± 91	287 ± 81	< 193	< 163	< 145	< 173
Mn-54	< 10	< 10	< 10	< 10	< 10	< 10
Fe-59	< 30	< 30	< 30	< 30	< 30	< 30
Co-58	< 10	< 10	< 10	< 10	< 10	< 10
Co-60	< 10	< 10	< 10	< 10	< 10	< 10
Zn-65	< 30	< 30	< 30	< 30	< 30	< 30
Nb-95	< 15	< 15	< 15	< 15	< 15	< 15
Zr-95	< 30	< 30	< 30	< 30	< 30	< 30
I-131	< 15	< 15	< 15	< 15	< 15	< 15
Cs-134	< 10	< 10	< 10	< 10	< 10	< 10
Cs-137	< 10	< 10	< 10	< 10	< 10	< 10
Ba-140	< 60	< 60	< 60	< 60	< 60	< 60
La-140	< 15	< 15	< 15	< 15	< 15	< 15

DUANE ARNOLD

Table 15. Surface water, analyses for iodine-131, tritium and gamma-emitting isotopes.

Collection: Monthly

Units: pCi/L

Location: D-61

Date Collected	11-27-06	12-14-06
Lab Code	DSW-8781 ^a	DSW-9141
H-3	< 143	< 173
Mn-54	< 10	< 10
Fe-59	< 30	< 30
Co-58	< 10	< 10
Co-60	< 10	< 10
Zn-65	< 30	< 30
Nb-95	< 15	< 15
Zr-95	< 30	< 30
I-131	< 15	< 15
Cs-134	< 10	< 10
Cs-137	< 10	< 10
Ba-140	< 60	< 60
La-140	< 15	< 15

Date Collected	
Lab Code	
H-3	
Mn-54	
Fe-59	
Co-58	
Co-60	
Zn-65	
Nb-95	
Zr-95	
I-131	
Cs-134	
Cs-137	
Ba-140	
La-140	

^a New location.

DUANE ARNOLD

Table 16. Surface water, analysis for tritium. ^a
Collection: Quarterly composites of monthly samples.
Units: pCi/L

Location	D-50
Period	1st Qtr.
Lab Code	DSW-1508
H-3	< 151
Location	D-51
Period	1st Qtr.
Lab Code	DSW-1509
H-3	< 151
Location	D-107
Period	1st Qtr.
Lab Code	DSW-1510
H-3	< 151

^a Quarterly composites discontinued, tritium analysis is done on the individual monthly samples.

DUANE ARNOLD

Table 17. Fish, analyses of edible portion for gamma-emitting isotopes.
 Collection: Semiannually
 Units: pCi/g wet

Location		Upstream, D-49			
Lab Code	DF-3942	DF-3943	DF-6785	DF-6786	
Date Collected	6/9/2006	6/9/2006	9/21/2006	9/21/2006	
Sample Type	Carp	Carpoidies sp.	Carp	Carp sucker	
K-40	3.42 ± 0.35	2.93 ± 0.41	3.27 ± 0.38	3.45 ± 0.43	
Mn-54	< 0.011	< 0.007	< 0.012	< 0.017	
Fe-59	< 0.018	< 0.009	< 0.024	< 0.049	
Co-58	< 0.006	< 0.009	< 0.015	< 0.018	
Co-60	< 0.008	< 0.012	< 0.013	< 0.018	
Zn-65	< 0.027	< 0.025	< 0.022	< 0.031	
Nb-95	< 0.019	< 0.019	< 0.025	< 0.025	
Zr-95	< 0.028	< 0.041	< 0.022	< 0.048	
Ru-103	< 0.013	< 0.024	< 0.020	< 0.014	
Ru-106	< 0.084	< 0.11	< 0.11	< 0.14	
Cs-134	< 0.012	< 0.013	< 0.006	< 0.011	
Cs-137	< 0.013	< 0.016	< 0.014	< 0.017	
Ce-141	< 0.018	< 0.032	< 0.035	< 0.045	
Ce-144	< 0.051	< 0.11	< 0.066	< 0.084	

Location		Downstream, D-61			
Lab Code	DF-3944	DF-3945	DF-6787	DF-6788	
Date Collected	6/9/2006	6/9/2006	9/21/2006	9/21/2006	
Sample Type	Carp	Moxostoma sp.	Carp	Carp sucker	
K-40	2.92 ± 0.37	3.50 ± 0.51	3.31 ± 0.41	3.04 ± 0.43	
Mn-54	< 0.009	< 0.012	< 0.013	< 0.014	
Fe-59	< 0.011	< 0.035	< 0.023	< 0.037	
Co-58	< 0.013	< 0.017	< 0.019	< 0.015	
Co-60	< 0.020	< 0.016	< 0.009	< 0.015	
Zn-65	< 0.026	< 0.018	< 0.042	< 0.028	
Nb-95	< 0.024	< 0.022	< 0.011	< 0.022	
Zr-95	< 0.028	< 0.026	< 0.030	< 0.047	
Ru-103	< 0.021	< 0.013	< 0.027	< 0.028	
Ru-106	< 0.10	< 0.16	< 0.085	< 0.15	
Cs-134	< 0.017	< 0.014	< 0.015	< 0.012	
Cs-137	< 0.021	< 0.022	< 0.012	< 0.024	
Ce-141	< 0.045	< 0.025	< 0.041	< 0.061	
Ce-144	< 0.12	< 0.15	< 0.096	< 0.13	

DUANE ARNOLD

Table 18. River sediment, analysis for gamma-emitting isotopes.

Collection: Semiannually

Units: pCi/g dry

Location		D-50	
Lab Code	DBS-5024	DBS-6412	
Date Collected	7/19/2006	9/18/2006	
K-40	8.60 ± 0.62	9.68 ± 0.50	
Mn-54	< 0.015	< 0.014	
Fe-59	< 0.038	< 0.028	
Co-58	< 0.019	< 0.012	
Co-60	< 0.012	< 0.015	
Zn-65	< 0.038	< 0.041	
Nb-95	< 0.017	< 0.017	
Zr-95	< 0.025	< 0.016	
Ru-103	< 0.024	< 0.010	
Ru-106	< 0.11	< 0.12	
Cs-134	< 0.013	< 0.021	
Cs-137	0.033 ± 0.019	< 0.015	
Ce-141	< 0.045	< 0.018	
Ce-144	< 0.12	< 0.049	

Location		D-51	
Lab Code	DBS-5025	DBS-6413	
Date Collected	7/19/2006	9/18/2006	
K-40	8.73 ± 0.58	8.89 ± 0.53	
Mn-54	< 0.012	< 0.017	
Fe-59	< 0.032	< 0.019	
Co-58	< 0.015	< 0.017	
Co-60	< 0.008	< 0.019	
Zn-65	< 0.037	< 0.036	
Nb-95	< 0.015	< 0.017	
Zr-95	< 0.020	< 0.032	
Ru-103	< 0.013	< 0.013	
Ru-106	< 0.12	< 0.17	
Cs-134	< 0.011	< 0.025	
Cs-137	< 0.021	< 0.019	
Ce-141	< 0.020	< 0.030	
Ce-144	< 0.12	< 0.066	

DUANE ARNOLD

Table 18. River sediment, analysis for gamma-emitting isotopes.

Collection: Semiannually

Units: pCi/g dry

Location	D-107	
Lab Code	DBS-5026	DBS-6414
Date Collected	7/19/2006	9/18/2006
K-40	5.51 ± 0.45	4.86 ± 0.35
Mn-54	< 0.008	< 0.010
Fe-59	< 0.018	< 0.019
Co-58	< 0.019	< 0.012
Co-60	< 0.009	< 0.014
Zn-65	< 0.026	< 0.028
Nb-95	< 0.027	< 0.011
Zr-95	< 0.022	< 0.021
Ru-103	< 0.013	< 0.011
Ru-106	< 0.065	< 0.12
Cs-134	< 0.009	< 0.015
Cs-137	< 0.016	< 0.013
Ce-141	< 0.037	< 0.018
Ce-144	< 0.063	< 0.072

DUANE ARNOLD

Table 19. Precipitation, analyses for gamma emitting isotopes.

Collection:	Monthly					
Units:	pCi/L					
Location:	DAEC					
Date Collected	01-26-06	02-14-06	03-16-06	04-28-06	05-26-06	06-21-06
Lab Code	DP-529 ^a	DP-795	DP-1501	DP-2907 ^a	DP-3528	DP-4151, 2
Mn-54	< 15.7	< 11.2	< 3.1	< 12.4	< 4.1	< 3.0
Fe-59	< 20.8	< 18.2	< 4.1	< 26.2	< 4.4	< 3.2
Co-58	< 12.2	< 7.0	< 4.3	< 12.2	< 3.5	< 3.1
Co-60	< 16.9	< 13.4	< 3.8	< 14.1	< 4.4	< 2.8
Zn-65	< 23.8	< 22.0	< 6.3	< 30.3	< 6.4	< 4.9
Nb-95	< 13.5	< 11.4	< 4.9	< 19.2	< 3.8	< 3.0
Zr-95	< 31.8	< 10.7	< 9.7	< 33.5	< 7.1	< 4.3
I-131	< 29.3	< 13.5	< 8.5	< 35.7	< 6.4	< 5.0
Cs-134	< 22.5	< 16.8	< 3.9	< 13.9	< 3.6	< 3.0
Cs-137	< 16.5	< 10.2	< 3.7	< 15.2	< 3.3	< 2.9
Ba-140	< 98.3	< 58.4	< 24.7	< 105.2	< 13.8	< 10.1
La-140	< 12.4	< 8.4	< 2.8	< 25.6	< 4.8	< 2.1
Date Collected	07-20-06	08-17-06	09-21-06	10-27-06	11-09-06	12-14-06
Lab Code	DP-5005	DP-5641	DP-6518	DP-8022	DP-8267	DP-9143,4
Mn-54	< 4.2	< 1.8	< 5.1	< 9.8	< 5.0	< 5.9
Fe-59	< 5.4	< 3.9	< 12.1	< 14.0	< 10.1	< 7.2
Co-58	< 2.0	< 2.4	< 5.3	< 4.6	< 3.3	< 3.2
Co-60	< 3.2	< 2.8	< 5.6	< 7.0	< 5.1	< 5.6
Zn-65	< 2.5	< 9.2	< 10.0	< 9.7	< 6.7	< 4.6
Nb-95	< 3.8	< 5.1	< 6.9	< 9.4	< 5.6	< 4.4
Zr-95	< 5.4	< 10.0	< 15.9	< 14.2	< 14.4	< 7.5
I-131	< 4.2	< 5.0	< 12.4	< 25.4	< 16.2	< 8.7
Cs-134	< 1.8	< 3.9	< 5.5	< 7.0	< 6.9	< 4.4
Cs-137	< 3.9	< 4.1	< 5.8	< 7.7	< 7.4	< 5.2
Ba-140	< 13.7	< 14.2	< 33.1	< 48.8	< 22.2	< 23.6
La-140	< 1.6	< 3.1	< 6.3	< 8.0	< 8.6	< 3.7

^a LLDs not reached due to small sample size (100 mL.); sample counted 120,000 sec.

DUANE ARNOLD

Table 20. Precipitation, analysis for tritium.
Collection: Quarterly composites of monthly samples.
Units: pCi/L

Location	Duane Arnold			
Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	DP-1511	DP-4532	DP-7422	DP-9508
H-3	< 182	< 131	< 161	< 152

DUANE ARNOLD

Table 21. Soil, analysis for strontium-90 and gamma-emitting isotopes.
Collection: Annually
Units: pCi/g dry

Location	D-15	D-16
Lab Code	DSO-8779	DSO-8780
Date Collected	12/5/2006	12/5/2006
Sr-90	< 0.013	< 0.016
K-40	9.83 ± 0.75	14.63 ± 1.00
Mn-54	< 0.016	< 0.035
Fe-59	< 0.050	< 0.046
Co-58	< 0.026	< 0.038
Co-60	< 0.009	< 0.025
Zn-65	< 0.064	< 0.082
Nb-95	< 0.020	< 0.034
Zr-95	< 0.021	< 0.037
Ru-103	< 0.013	< 0.034
Ru-106	< 0.14	< 0.31
Cs-134	< 0.031	< 0.049
Cs-137	0.13 ± 0.028	< 0.037
Ce-141	< 0.033	< 0.053
Ce-144	< 0.12	< 0.23

APPENDIX A
SUPPLEMENTAL ANALYSES

A-1. Supplemental Analyses, Precipitation, analysis for tritium.

Sample Description	Collection Date	Concentration (pCi/L) H-3
Petroleum Pad	10/11/2006	181 ± 98
NE Corner of Pumphouse	10/11/2006	674 ± 115
East of Transformer Pit	10/11/2006	759 ± 117
SE of Diesel Fuel Drive Thru	10/11/2006	787 ± 118
South of CST Pit @ Fire Hydrant	10/11/2006	475 ± 108
SW Corner of LLRW@Fire Hydrant	10/11/2006	< 173
North of Rx Building	10/11/2006	< 173
West of DAC Parking Lot	10/11/2006	< 161
Sewage Plant	10/11/2006	< 161
Cooling Tower Monitoring	10/11/2006	< 161
MW-02 B (Hydrogen Pad)	10/11/2006	435 ± 113
Chainlink Fence	10/11/2006	< 162
Overflow Parking Lot	10/11/2006	< 162
Rain #1	10/19/2006	< 138
Rain #2	10/19/2006	375 ± 86
Rain #3	10/19/2006	716 ± 99
Rain #4	10/19/2006	2666 ± 154
Rain #5	10/19/2006	1482 ± 123
Rain #6	10/19/2006	< 138
Rain #7	10/19/2006	1334 ± 119
Rain #8	10/19/2006	716 ± 99
Rain #9	10/19/2006	158 ± 76
Rain #10	10/19/2006	< 138
Rain #11	10/19/2006	471 ± 90
Rain #12	10/19/2006	359 ± 85
Rain #13	10/19/2006	< 138
Rain #14	10/19/2006	< 138