REVISION 0

ST. LOUIS DOWNTOWN SITE ANNUAL ENVIRONMENTAL MONITORING DATA AND ANALYSIS REPORT FOR CALENDAR YEAR 2011

ST. LOUIS, MISSOURI

JULY 13, 2012

U.S. Army Corps of Engineers
St. Louis District Office
Formerly Utilized Sites Remedial Action Program

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prepared by:
U.S. Army Corps of Engineers, St. Louis District Office,
Formerly Utilized Sites Remedial Action Program

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LIST OF ACRONYMS AND ABBREVIATIONS

°C	Celsius
µCi/mL	microcurie per milliliter
µg/L	microgram per liter
BTOC	below top of casing
AEC	U.S. Atomic Energy Commission
amsl	above mean sea level
ARAR	applicable or relevant and appropriate requirement
ATD	alpha track detector
BNSF	Burlington Northern Santa Fe
BTOC	below top of casing
CEDE	committed effective dose equivalent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	*Code of Federal Regulations*
Ci	curies
COC	contaminant of concern
CY	calendar year
DL	detection limit
DO	dissolved oxygen
DOD	U.S. Department of Defense
DOD-QSM	*DOD Quality Systems Manual for Environmental Laboratories*
DQO	data quality objective
EDE	effective dose equivalent
ELAP	Environmental Laboratory Accreditation Program
EM	Engineer Manual
EMDAR	Environmental Monitoring Data and Analysis Report
EMG	*Environmental Monitoring Guide for the St. Louis Sites*
EMICY	Environmental Monitoring Implementation for Calendar Year
EMICY11	*Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2011*
EMP	Environmental Monitoring Program
ER	Engineer Regulation
FFA	Federal Facility Agreement
ft	feet
FUSRAP	Formerly Utilized Sites Remedial Action Program
FWV	Field Work Variance
GRAAA	Ground-Water Remedial Action Alternative Assessment
HU	hydrostratigraphic unit
ICP	inductively coupled plasma
IL	investigative limit
K	potassium
KPA	kinetic phosphorescence analysis
m	meters
MARSSIM	*Multi-Agency Radiation Survey and Site Investigation Manual*
MDNR	Missouri Department of Natural Resources
MDA	minimum detectable activity
MDC	minimum detectable concentration
MDL	method detection limit

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

MED	Manhattan Engineer District
mg/L	milligram(s) per Liter
mL	milliliter(s)
mL/min	milliliter(s) per minute
mrem	millirem
mrem/hr	millirem per hr
mrem/qtr	millirem per quarter
mrem/yr	millirem per year
MSD	Metropolitan St. Louis Sewer District
mSv/yr	milliSeivert per year
mV	millivolt(s)
NAD	normalized absolute difference
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
pCi/L	picocurie per liter
QA	quality assurance
QAPP	Quality Assurance Program Plan
QC	quality control
RA	remedial action
Ra	radium
Rn	radon
ROD	*Record of Decision for the St. Louis Downtown Site*
RPD	relative percent difference
SAG	*Sampling and Analysis Guide for the St. Louis Sites*
SAIC	Science Applications International Incorporation
SLDS	St. Louis Downtown Site
SLS	St. Louis Sites
SOP	standard operating procedure
SOR	sum of ratios
SU	survey unit
TEDE	total effective dose equivalent
Th	thorium
TLD	thermoluminescent dosimeter
U	uranium
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
USACE	U.S. Army Corps of Engineers
uS/cm	microSiemen(s) per centimeter
USCS	Unified Soil Classification System
USEPA	U.S. Environmental Protection Agency
VP	vicinity property
µCi/mL	microcurie per milliliter
µg/L	microgram per liter

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EXECUTIVE SUMMARY

This Annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2011 applies to the St. Louis Downtown Site (SLDS) within the Formerly Utilized Sites Remedial Action Program (FUSRAP) (Figure 1-1). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the SLDS within the FUSRAP. The SLDS consists of the Mallinckrodt Inc. plant and vicinity properties (VPs) (Figure 1-2). Mallinckrodt is now owned and operated by Covidien. For the purpose of this document, the property will be referred to as the "Mallinckrodt" plant. Environmental monitoring of various media at SLDS is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a commitment outlined in the Federal Facility Agreement (FFA), and under the commitments in the *Record of Decision for the St. Louis Downtown Site* (ROD) (USACE 1998a).

The purpose of this report is:

1) to document the environmental monitoring activities, and
2) to assess whether the remedial actions (RAs) had a measurable environmental impact by:
    a) summarizing the data collection effort for CY 2011,
    b) reporting the current condition of the SLDS, and
    c) providing an analysis of the environmental monitoring data to date.

The U.S. Army Corps of Engineers (USACE), St. Louis District, collects comprehensive environmental data for decision-making and planning purposes. Environmental monitoring, performed as a Best Management Practice or as a component of RA, serves as a critical component in the evaluation of the current status of residual contaminants and assessment of the potential future migration of residual contaminants.

All environmental monitoring required through implementation of the *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2011* (EMICY11) (USACE 2011) was conducted as planned during CY 2011. The evaluation of environmental monitoring data for SLDS demonstrates compliance with applicable or relevant and appropriate requirements (ARARs).

RADIOLOGICAL AIR MONITORING

Radiological air data was collected and evaluated at the SLDS through airborne radioactive particulate, outdoor radon (Rn), and gamma radiation monitoring, as required in the EMICY11. In addition to environmental monitoring purposes, radiological air data was also used as inputs to calculate total effective dose equivalent (TEDE) to the hypothetical maximally exposed individual at the SLDS.

The TEDE calculated for the hypothetical maximally exposed individual at the SLDS was 0.2 millirem per year (mrem/yr) (0.002 milliseivert per year [mSv/yr]). The results of the radiological air monitoring conducted at the SLDS demonstrated compliance with ARARs for the SLDS.

EXCAVATION-WATER DISCHARGE MONITORING AT THE SLDS

CY 2011 was the thirteenth year that excavation-water discharge from the SLDS was monitored and reported. Excavation water from the SLDS was discharged to the St. Louis sanitary sewer system in compliance with the requirements stated in the July 23, 2001, Metropolitan St. Louis

Sewer District (MSD) authorization letter (MSD 2001) and amended in the October 13, 2004, MSD letter (MSD 2004). This authorization was extended through the issuance of letters dated June 19, 2006, May 22, 2008, and May 10, 2010 (MSD 2006, 2008, 2010). This authorization expires July 23, 2012 (MSD 2010). During CY 2011, no exceedances of the MSD limits occurred at the SLDS.

GROUND-WATER MONITORING

Ground water was sampled during CY 2011 at the SLDS following a protocol for individual wells and analytes, and analyzed for various radiological constituents and inorganic parameters. Static ground-water elevations for all SLDS wells were measured quarterly.

The environmental sampling requirements and ground-water criteria for each analyte are consistent with the EMICY11. The ground-water criteria are used for comparison and discussion purposes. The criteria for assessing ground-water sampling data at the SLDS include the investigative limits (ILs) as identified in the ROD (USACE 1998a) and the combined radium (Ra)-226/Ra-228 concentration limit from 40 *Code of Federal Regulations* (*CFR*) 192.02 (Table 1 to Subpart A). The ground-water criteria are presented in Table 2-6 of the EMICY11 and in Section 4.0 of this report. For those stations where an analyte exceeded the ground-water criteria at least once during CY 2011 and sufficient data were available to evaluate trends, Mann-Kendall statistical trend analyses were completed to assess whether analyte concentrations were increasing or decreasing through time.

During CY 2011, two hydrostratigraphic unit (HU)-A monitoring wells (B16W06S and DW21) were sampled (Figure 4-3). B16W06S was sampled for arsenic and cadmium during the fourth quarter. DW21 was sampled once for arsenic and cadmium during the first quarter and once for Ra-226, Ra-228, thorium (Th)-228, Th-230, Th-232, uranium (U)-234, U-235, and U-238 during the fourth quarter. Because the historical results for these contaminants of concern (COCs) were generally below or only slightly above their detection limits, a trend analysis was not conducted for cadmium, Th-228, or Th-230. Trend analysis was conducted for arsenic in B16W06S and DW21. Based on the graph and a quantitative evaluation of the trend using the Mann-Kendall trend test (presented in Section 4.2.3), there is a downward trend in arsenic concentrations in B16W06S and DW21. The remaining SLDS COCs (Ra-226, Ra-228, Th-232, U-234, U-235, and U-238) were not detected in HU-A ground water during CY 2011.

During CY 2011, seven SLDS wells completed in the Mississippi Alluvial Aquifer (HU-B) were sampled. Mann-Kendall trend testing was conducted for the two COCs that exceeded the ILs in HU-B wells during CY 2011: arsenic in DW14 and DW18, and total U in DW19. The results of the tests indicate DW14 exhibits a statistically significant downward trend and DW18 exhibits a statistically significant upward trend for arsenic. However, the time-versus-concentration plot indicates that arsenic concentrations at DW18 have been relatively stable since 2007. The Mann-Kendall trend test results indicate that there is no statistically significant trend for total U in HU-B well DW19, but levels have remained above the IL since 1999.

Potentiometric surface maps were created from ground-water elevations measured in June and November to illustrate ground-water flow conditions in wet and dry seasons, respectively. The ground-water surface in HU-A under the eastern portion of the Mallinckrodt plant is generally sloping toward the Mississippi River. Both the June and November 2011 potentiometric surface maps indicate the presence of relatively low hydraulic gradients in the vicinity of DW19 and Building 101. The potentiometric surface maps for HU-B at the SLDS indicate flow direction at the site is generally northeastward toward the Mississippi River.

1.0 HISTORICAL SITE BACKGROUND AND CURRENT SITE STATUS

1.1 INTRODUCTION

This Annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2011 applies to the St. Louis Downtown Site (SLDS) within the Formerly Utilized Sites Remedial Action Program (FUSRAP) (Figure 1-1). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the SLDS within the FUSRAP. The SLDS comprises a large chemical manufacturing complex formerly owned and operated by Mallinckrodt Inc., and adjacent commercial and city-owned vicinity properties (VPs) (Figure 1-2). The chemical manufacturing complex is now owned and operated by Covidien. For the purpose of this document, the property will be referred to as the "Mallinckrodt" plant. Environmental monitoring of various media at SLDS is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a commitment outlined in the Federal Facility Agreement (FFA), and under the commitments in the *Record of Decision for the St. Louis Downtown Site* (ROD) (USACE 1998a).

1.2 PURPOSE

The purpose of this report is to document the environmental monitoring activities and to assess whether the remedial actions (RAs) being performed at the SLDS could be having a measurable environmental impact. In addition, this report serves to enhance the reader's awareness of the current condition of the SLDS, summarizes the data collection efforts for CY 2011, and provides analysis of the CY 2011 environmental monitoring data results. This document presents the following information:

- Sample collection data for various media at SLDS and interpretation of CY 2011 EMP results;
- The status of SLDS regarding compliance with federal and state applicable or relevant and appropriate requirements (ARARs) or other benchmarks;
- Dose assessments for radiological contaminants as appropriate at SLDS;
- A summary of trends based on changes in contaminant concentrations to support RAs, public safety, and maintain surveillance monitoring requirements at SLDS; and
- The identification of data gaps and future EMP needs.

1.3 ST. LOUIS SITE PROGRAM AND SITE BACKGROUND

FUSRAP was executed by the U.S. Atomic Energy Commission (AEC) in 1974 to identify, remediate, or otherwise control sites where residual radioactivity remains from operations conducted for the Manhattan Engineer District (MED) and AEC during the early years of the nation's atomic energy program. FUSRAP was continued by the follow-on agencies to the AEC until 1997, when the U.S. Congress transferred responsibility for FUSRAP to the U.S. Army Corps of Engineers (USACE).

The SLDS properties were involved with some of the following operations: refining of uranium (U) ores, production of uranium metal and compounds, uranium recovery from residues and scrap, and the storage and disposal of associated process byproducts. The processing activities

were conducted in parts of the SLDS under contract to the MED/AEC between the early 1940s and the 1950s.

Detailed descriptions and histories for SLDS can be found in the *Remedial Investigation Report for the St. Louis Site* (DOE 1994); *Remedial Investigation Addendum for the St. Louis Site* (DOE 1995); *Record of Decision for the St. Louis Downtown Site* (USACE 1998a); and the *Environmental Monitoring Guide for the St. Louis Sites* (EMG) (USACE 1999a).

During CY 2011, the following documents were finalized:

- *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2011*, (EMICY 11) St. Louis, Missouri (January 11);
- *City Property Vicinity Property (DT-2) Phase 2 - East of Mississippi River Flood Protection Levee, Remedial Action Work Area-Specific Description and Design Package, FUSRAP St. Louis Downtown Site,* St. Louis, Missouri (February 9);
- *Covidien Plant 7 West - 700 Pad Area Remediation Activity Work Description, Appendix A.14.1 of the Small Area Remediation Work Area-Specific Description, FUSRAP St. Louis Downtown Site,* St. Louis, Missouri (March 24);
- *Appendix B.10, Pre-Design Investigation Work Scope for Destrehan Street* of the *Pre-Design Investigation Work Description, FUSRAP St. Louis Downtown Site,* St. Louis Missouri (April 12);
- Field Work Variance (FWV)-153: Removal of the upper portion of the abandoned gate well structure in the *City Property Vicinity Property (DT-2) Phase 2 – East of Mississippi River Flood Protection Levee, Remedial Action Work Area-Specific Description and Design Package, FUSRAP St. Louis Downtown Site,* St. Louis, Missouri (June 20);
- *St. Louis Downtown Site (SLDS) Annual Environmental Monitoring Data and Analysis Report for Calendar Year 2010,* St. Louis, Missouri (July 8);
- FWV-152: Removal of the contaminated soil around the Destrehan Street 30-inch Metropolitan St. Lewis Sewer District (MSD) sewer where it crosses the DT-12 property in the *Burlington Northern Santa Fe Railroad Vicinity Property (DT-12) Remediation Activity Work Description, FUSRAP St. Louis Downtown Site,* St. Louis, Missouri *(Appendix A.13.1 of the Small Area Remediation Work Area-Specific Description)* (July 19); and
- FWV-154: Excavation to remove the contaminated soil around the Destrehan Street 30-inch MSD sewer from the excavation slope west to the DT-12 property line (modified the *City Property Vicinity Property (DT-2), Phase 1 – West of Mississippi River Flood Protection Levee, Remedial Action Work Area-Specific Description and Design Package, FUSRAP St. Louis Downtown Site,* St. Louis, Missouri*)* (October 4).

1.3.1 St. Louis Downtown Site CY 2011 Remedial Actions

During CY 2011, RAs were performed at the following SLDS sites (Figure 1-2): Plant 6 West Half Phase 2B, Plant 7 North Hazardous Waste Storage Area, Plant 7 West 700 Pad, City Property VP (DT-2) Phase 2 East of the Levee, and Burlington Northern Santa Fe (BNSF) Railroad VP (DT-12). The restoration activities at Plant 6 West Half Phase 2B have been on hold throughout the year pending removal of the loadout stockpile. Excavation activities continued at Plant 7 North Hazardous Waste Storage Area throughout the first and second quarters, and restoration activities were completed in the third quarter. Excavation activities began at the Plant

7 West 700 Pad in the second quarter and continued into the fourth quarter. Excavation activities began at DT-2 Phase 2 East of the Levee in the first quarter and continued into the fourth quarter. Excavation and restoration activities at DT-12 began in the third quarter and were completed in the fourth quarter. A total of 22,317 cubic yards of contaminated material were excavated from the SLDS. All of the contaminated material was shipped via railcar to U.S. Ecology in Idaho for proper disposal.

During CY 2011, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)* (DOD 2000) Class 1 verifications were performed at the following SLDS sites: Plant 7 North Hazardous Waste Storage Area (survey unit [SU]-9), DT-2 Phase 2 East of the Levee (SU-2 and SU-3a), and DT-12 (SU-3). No MARSSIM Class 2 or 3 verifications were performed. Verifications at SLDS were performed to confirm that the remediation goals of the ROD were achieved. SLDS and related VPs are shown on Figure 1-2.

In accordance with the MSD authorization letter for SLDS, 1,286,137 gallons of excavation water were discharged in CY 2011. Since the beginning of the project, 13,761,958 gallons have been treated and released to MSD at the SLDS.

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2.0 EVALUATION OF RADIOLOGICAL AIR MONITORING DATA

This section documents environmental monitoring activities related to radiological air data. The radiological air measurements taken at the SLDS are conducted as part of the EMP. Radiological air data is collected to evaluate the compliance status of each site with respect to ARARs, to evaluate trends, and to perform dose assessments for radiological contaminants, as appropriate, at each site. Section 2.1 includes a description of the types of radiological measurements conducted at the SLDS, potential sources of the contaminants to be measured (including natural background), and measurement techniques employed during CY 2011.

All radiological air monitoring required through implementation of the EMICY11 (USACE 2011) was conducted as planned during CY 2011. The evaluations of radiological air monitoring data for all SLDS demonstrate compliance with ARARs.

A total effective dose equivalent (TEDE) for the reasonably maximally exposed member of the public was calculated for the SLDS by summing the dose due to gamma radiation, radiological air particulates, and radon (Rn). The TEDE for the reasonably maximally exposed individual at the SLDS was 0.2 millirem per year (mrem/yr) (0.002 millisievert per year [mSv/yr]). The TEDE for the SLDS was below the 10 *Code of Federal Regulations* (*CFR)* 20.1301 limit for members of the public, which is 100 mrem/yr (1 mSv/yr). Details of the radiological dose assessment (TEDE calculation) are presented in Section 6.0.

2.1 RADIOLOGICAL AIR MEASUREMENTS

The three types of radiological air monitoring that were conducted at the St. Louis Sites (SLS) during CY 2011 are gamma radiation, airborne radioactive particulates, and airborne radon. Section 2.2 provides details of the monitoring conducted at the SLDS.

2.1.1 Gamma Radiation

Gamma radiation is emitted from natural, cosmic, and manmade sources. The earth naturally contains gamma radiation-emitting substances, such as U decay series, thorium (Th) decay series, and potassium (K)-40. Cosmic radiation originates in outer space and filters through the atmosphere to the earth. Together, these two sources make up the majority of natural gamma background radiation. The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) estimates that the total naturally occurring background radiation dose equivalent due to gamma exposure is 65 mrem/yr (0.65 mSv/yr), 35 mrem/yr (0.35 mSv/yr) of which originates from sources on earth and 30 mrem/yr (0.3 mSv/yr) of which originates from cosmic sources (UNSCEAR 1982). The background monitoring locations for the SLS (Figure 2-1) are reasonably representative of background gamma radiation for the St. Louis Metropolitan Area.

Gamma radiation was measured at the SLDS during CY 2011 using thermoluminescent dosimeters (TLDs). TLDs were located at locations representative of areas accessible to the public in order to provide input for calculation of TEDE.

The TLDs were placed at the monitoring location approximately three feet (ft) above the ground surface inside a housing shelter. The TLDs were collected quarterly and sent to a properly certified, off-site laboratory for analysis.

2.1.2 Airborne Radioactive Particulates

2.1.2.1 Air Sampling

Airborne radioactive particulates result from radionuclides in soils that become suspended in the air. The radionuclides in soil normally become airborne as a result of wind erosion of the surface soil or as a result of the soil being disturbed (e.g., excavation). This airborne radioactive material includes naturally occurring background concentrations, as well as above background concentrations of radioactive materials present at the SLDS.

Airborne radioactive particulates were measured at the SLDS by drawing air through a filter membrane with an air sampling pump placed approximately 3 ft above the ground, and then analyzing the material contained on the filter. The results of the analysis, when compared to the amount of air drawn through the filter, were reported as radioactive contaminant concentrations (i.e., microcurie per milliliter [µCi/mL]). Particulate air monitors were located in predominant wind directions at excavation and loadout area perimeter locations, as appropriate, to provide input for the National Emissions Standard for Hazardous Air Pollutants (NESHAP) Report and calculation of TEDE to the critical receptor. Air particulate samples were typically collected weekly or more frequently.

2.1.2.2 Estimation of Emissions in Accordance with the National Emissions Standard for Hazardous Air Pollutants

The SLDS CY 2011 NESHAP Report (provided as Appendix A) presents the calculation of the effective dose equivalent (EDE) from radionuclide emissions to critical receptors in accordance with the NESHAP. The report is prepared in accordance with the requirements and procedures contained in 40 *CFR* 61, Subpart I.

Emission rates calculated using air sampling data, activity fractions, and other site-specific information were used for the SLDS as inputs to the U.S. Environmental Protection Agency (USEPA) CAP88-PC Version 3.0 modeling code (USEPA 2007) to demonstrate compliance with the 10 mrem/yr ARAR in 40 *CFR* 61, Subpart I.

The SLDS was in compliance with the 10 mrem/yr ARAR in 40 *CFR* 61, Subpart I. Results from CY 2011 demonstrating compliance are discussed in Section 2.2.1.

2.1.3 Airborne Radon

U-238 is a naturally occurring radionuclide that is commonly found in soil and rock. Rn-222 is a naturally occurring radioactive gas found in the U decay series. A fraction of the radon produced from the radioactive decay of naturally occurring U-238 diffuses from soil and rock into the atmosphere, accounting for natural background airborne radon concentrations. In addition to this natural source, radon is produced from the above background concentrations of radioactive materials present at the SLDS.

Outdoor airborne radon concentration is governed by the emission rate and dilution factors, both of which are strongly affected by meteorological conditions. Surface soil is the largest source of radon. Secondary contributors include oceans, natural gas, geothermal fluids, volcanic gases, ventilation from caves and mines, and coal combustion. Radon levels in the atmosphere have been observed to vary with height above the ground, season, time of day, and location. The chief meteorological parameter governing airborne radon concentration is atmospheric stability; however, the largest variations in atmospheric radon occur spatially (USEPA 1987).

Radon alpha track detectors (ATDs) were used at the SLDS to measure alpha particles emitted from radon and its associated decay products. Radon ATDs were co-located with environmental TLDs 3 ft above the ground surface in housing shelters at locations representative of areas accessible to the public. Outdoor ATDs were collected approximately every six months and sent to an off-site laboratory for analysis. Recorded radon concentrations are listed in picocurie per liter (pCi/L), and are compared to the value of 0.5 pCi/L average annual concentration above background as listed in 40 *CFR* 192.02(b).

The SLDS was in compliance with the 0.5 pCi/L ARAR in 40 *CFR* 192.02(b). Results from CY 2011 demonstrating compliance are discussed in Section 2.2.3.

2.2 EVALUATION OF RADIOLOGICAL AIR MONITORING DATA

2.2.1 Evaluation of Gamma Radiation Data

Gamma radiation monitoring was performed at the SLDS during CY 2011 at four locations that were representative of areas accessible to the public (see Figure 2-1) and at the background location to compare on-site/off-site exposure and to provide input for calculation of TEDE to the critical receptor. The EMP uses two TLDs at Monitoring Station DA-1 (for each monitoring period) to provide additional quality control (QC) of monitoring data (Figure 2-2). A summary of TLD monitoring results for CY 2011 at the SLDS is shown in Table 2-1. TLD data is located in Appendix B of this report.

Table 2-1. Summary of SLDS Gamma Radiation Data for CY 2011

Monitoring Location	Monitoring Station	First Quarter TLD Data (mrem/qtr) Reported/ Corrected		Second Quarter TLD Data (mrem/qtr) Reported/ Corrected		Third Quarter TLD Data (mrem/qtr) Reported/ Corrected		Fourth Quarter TLD Data (mrem/qtr) Reported/ Corrected		CY 2011 Net TLD Data (mrem/yr)
		Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	
SLDS Perimeter	DA-1	18.4	0.6	19.7	0.1	18.4	0.3	16.2	0.0	1.0
	DA-1[c]	18.0	0.2	16.4	0.0	20.1	2.2	17.7	0.0	---
	DA-2	19.7	2.0	20.5	1.0	20.0	2.1	21.7	0.7	6.0
	DA-3	18.6	0.9	18.4	0.0	17.9	0.0	18.8	0.0	1.0
	DA-6	17.7	0.0	18.3	0.0	18.3	0.2	19.3	0.0	0.0
Background	BA-1	17.8	---	19.6	---	18.1	---	21	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure above background.
[b] CY 2011 net TLD data are corrected for background, shelter absorption (s/a = 1.075), and fade.
[c] A QC duplicate is collected at the same time and location and is analyzed by the same method for evaluating precision in sampling and analysis. Duplicate sample results were not included in calculations.
--- Result calculation not required.
mrem/qtr = millirem per quarter

2.2.2 Evaluation of Airborne Radioactive Particulate Data

Air sampling for radiological particulates was not conducted at the SLDS perimeter locations during CY 2011 due to the insignificant potential for material to become airborne at the site. The ground surface at the SLDS is generally covered with asphalt or concrete, which limits the potential for material to become airborne. Air sampling for radiological particulates during CY 2011 was conducted by the RA contractor at the perimeter of each active excavation and loadout area within the SLDS. Air particulate data were used as inputs to the NESHAP Report (Appendix A) and calculation of TEDE to the critical receptor (Section 6.0). A summary of air particulate monitoring data from excavation perimeters is shown in Table 2-2. Airborne radioactive particulate data is located in Appendix B of this report.

Table 2-2. Summary of SLDS Airborne Radioactive Particulate Data for CY 2011

Monitoring Location	Average Concentration (µCi/mL)	
	Gross Alpha	Gross Beta
DT-2	3.54E-15	2.49E-14
DT-12	7.34E-15	4.86E-14
Plant 7	2.93E-15	2.43E-14
Plant 6 Loadout	3.79E-15	3.07E-14
Background Concentration[a]	3.37E-15	1.97E-14

[a] These concentrations are only provided for informational purposes.

2.2.3 Evaluation of Outdoor Airborne Radon Data

Outdoor airborne radon monitoring was performed at the SLDS using ATDs to measure radon emissions. Four detectors were co-located with the TLDs at locations shown in Figure 2-2. One additional detector was located at Monitoring Station DA-1 as a QC duplicate. A background ATD, co-located with the background TLD (see Section 2.2.1), was used to compare on-site exposure and off-site background exposure. In accordance with 40 *CFR* 192.02(b)(2), control of residual radioactive materials from a uranium mill tailings pile must be designed to provide reasonable assurance that releases of radon to the atmosphere will not increase the annual average concentration of radon outside the disposal site by more than 0.5 pCi/L. Although a uranium mill tailings pile is not associated with any of the SLS, these standards are used for comparative purposes. Outdoor airborne radon data was used as an input for calculation of TEDE to the critical receptor (Section 6) and compared to the 0.5 pCi/L average annual concentration above background value as listed in 40 *CFR* 192.02(b)(2). The average annual radon concentration above background of 0.0 pCi/L at the SLDS monitoring stations met the 40 *CFR* 192.02(b)(2) limit of 0.5 pCi/L. A summary of outdoor airborne radon data is shown in Table 2-3. Outdoor ATD data is located in Appendix B of this report.

Table 2-3. Summary of SLDS Outdoor Airborne Radon (Rn-222) Data for CY 2011

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/04/11 to 07/06/11 [a] (uncorrected)	07/06/11 to 01/10/12[a] (uncorrected)	Average Annual Concentration[b]
SLDS	DA-1	0.2	0.2	0.0
	DA-1[c]	0.2	0.2	0.0
	DA-2	0.2	0.2	0.0
	DA-3	0.2	0.2	0.0
	DA-6	0.2	0.2	0.0
Background	BA-1	0.2	0.2	0.0

[a] Detectors were installed and removed on the dates listed. Data are as reported from the vendor (gross data including background).
[b] Results reported from vendor for two periods are time-weighted and averaged to estimate an annual average radon concentration (pCi/L) above background.
[c] A QC duplicate is collected at the same time and location and is analyzed by the same method for evaluating precision in sampling and analysis.

3.0 EXCAVATION-WATER MONITORING DATA

This section provides a description of the excavation-water discharge monitoring activities conducted at the SLDS during CY 2011. Excavation water is storm water and ground water that accumulates in excavations that are present at the SLDS as a result of RAs. Excavation-water effluent from the SLDS is discharged to a combined (sanitary and storm) MSD sewer inlet located at the SLDS and flows to the Bissell Point Sewage Treatment Plant under a special discharge authorization. This excavation water is collected, treated, and tested before being discharged to MSD inlets 17D4-353C and 17D3-022C. These MSD inlets are depicted on Figure 3-1.

The purpose of excavation-water discharge sampling at the SLDS is to maintain compliance with specific discharge limits to ensure protection of human health and the environment. The MSD is the regulatory authority for water discharges and has issued authorization letters for the SLDS that allow discharges of excavation water that meet discharge-limit-based criteria (MSD 1998, 2001, 2004, 2006, 2008, 2010). On October 30, 1998, the USACE received an MSD conditional authorization letter to discharge the excavation water collected at the SLDS resulting from USACE RAs (MSD 1998). On July 23, 2001, the MSD issued a separate conditional discharge authorization letter for discharges of excavation water that result from USACE RAs (MSD 2001). The MSD issued a change to the self-monitoring and special discharge authorization for the SLDS on October 13, 2004, and issued a two-year extension to that authorization dated June 19, 2006 (MSD 2004, 2006). On May 22, 2008, the MSD issued an extension to the special discharge authorization for the SLDS that remained in effect until July 23, 2010 (MSD 2008). On May 10, 2010, the MSD issued an extension to the special discharge authorization for the SLDS that remains in effect until July 23, 2012 (MSD 2010). The results obtained from these monitoring activities are presented and evaluated with respect to the discharge limits as described in the EMICY11 (USACE 2011).

Section 2.2.2 of the EMICY11 outlines the parameters and annual average discharge limits for the excavation-water discharges at the site (USACE 2011). For cases where the local regulatory authorities have not provided discharge limits for the SLDS radiological contaminants of concern (COCs), parameters from 10 *CFR* 20 Appendix B water effluent values were used.

3.1 EVALUATION OF EXCAVATION-WATER DISCHARGE MONITORING RESULTS AT THE SLDS

During CY 2011, approximately 1,286,137 gallons of excavation water from 16 batches were discharged to MSD inlets 17D4-353C and 17D3-022C. The analytical results for all measured parameters by batch, along with the total activity discharged for each parameter, are included in Appendix C, Table C-1. A summary of the number of discharges, gallons of water discharged, and total radiological activity for the CY 2011 excavation-water discharges is provided in Table 3-1. All excavation-water monitoring required through implementation of the EMICY11 was conducted as planned during CY 2011. The evaluation of monitoring data demonstrated compliance with all MSD criteria.

Table 3-1. Excavation Water Discharged at the SLDS During CY 2011

Quarter	Number of Discharges	Number of Gallons Discharged [a]	Total Activity (Curies [Ci])		
			Th[b]	U (KPA) [c]	Ra[d]
1	2	123,100	2.2E-06	5.6E-06	2.1E-06
2	4	463,046	3.0E-06	1.6E-05	3.0E-06
3	5	441,705	3.3E-06	1.3E-05	1.3E-06
4	5	258,286	2.1E-05	1.0E-05	1.6E-06
Annual Totals	16	1,286,137	2.9E-05	4.5E-05	8.1E-06

[a] Quantities based on actual quarterly discharges from SLDS.
[b] Calculated value based on the addition of isotopic analyses: Th-228, Th-230, and Th-232.
[c] Activity based on total U results (kinetic phosphorescence analysis [KPA]).
[d] Calculated value based on the addition of isotopic analyses: Radium (Ra)-226 and Ra-228.

4.0 GROUND-WATER MONITORING DATA

Nine ground-water monitoring wells were sampled at the SLDS during CY 2011. Ground water was sampled following a protocol for individual wells and analytes, and was analyzed for various radiological constituents and inorganic analytes. Static water levels were measured quarterly at the SLDS. In addition, field parameters were measured continuously during purging of the wells prior to sampling. The ground-water field parameter results for CY 2011 sampling at the SLDS are presented in Appendix D, Table D-1. Summary tables providing the SLDS ground-water analytical sampling results for CY 2011 are found in Appendix D, Table D-2.

Stratigraphy at the SLDS

Ground water at the SLDS is found within three hydrostratigraphic units (HUs). These units are, in order of increasing depth, the Upper HU (HU-A), which consists of fill overlying clay and silt; the Lower HU (HU-B), also referred to as the Mississippi Alluvial Aquifer, consisting of sandy silts and silty sands; and the Limestone Bedrock Unit, referred to as HU-C (Figures 4-1 and 4-2). The upper unit, HU-A, is not an aquifer and is not considered a potential source of drinking water because it has insufficient yield and poor natural water quality. HU-B is one of the principal aquifers in the St. Louis area, but expected future use as drinking water at the SLDS is minimal because the Mississippi and Missouri Rivers provide a readily available source and the water from the aquifer is of poor quality due to elevated concentrations of iron and manganese. HU-C would be an unlikely water supply source, as it is a deeper and less productive HU. There are no known drinking water wells in the vicinity of the SLDS. The City of St. Louis has Ordinance 66777 which explicitly forbids the installation of wells into the subsurface for the purposes of using the ground water as a potable water supply (City of St. Louis 2005). The expected future use of SLDS ground water is not anticipated to change from its current use.

As shown in the geologic cross-section of the SLDS (Figure 4-2), the erosional surface of the bedrock dips eastward toward the river. HU-A overlies HU-B on the eastern side of the SLDS and overlies bedrock on the western side of the SLDS. HU-B thins westerly along the bedrock surface until it becomes absent beneath the SLDS. HU-C underlies the unconsolidated sediments at depths ranging from 6 meters (m) (19 ft) on the western side of SLDS to 24 m (80 ft) near the Mississippi River.

Ground-Water Criteria

The CY 2011 monitoring data for HU-B ground water at the SLDS are compared to the following ground-water criteria established in the ROD: 50 micrograms per liter (µg/L) arsenic, 5 µg/L cadmium, 20 µg/L total U, and 5 pCi/L combined radium (Ra)-226 and Ra-228. The ROD did not establish ground-water criteria for HU-A ground water. An evaluation of concentration trends is conducted for COCs detected in HU-A.

Summary of CY 2011 Ground-Water Monitoring Results for the SLDS

Decreasing arsenic concentration trends were observed in three wells (B16W06S, DW14, and DW21) and an increasing arsenic concentration trend was observed in one well (DW18) at the SLDS during CY 2011. No other significant changes in the concentrations of the COCs occurred in shallow or deep ground water during CY 2011. Trend analysis of the COCs detected in HU-A ground water indicates continued improvement in HU-A ground-water quality, as reflected in the decreasing trends in arsenic concentrations observed in HU-A wells B16W06S and DW21.

Two COCs (arsenic and total U) were detected at concentrations above the ROD ground-water criteria in HU-B ground water during CY 2011. Concentrations of arsenic exceeded the investigative limit (IL) (50 µg/L) in HU-B wells DW14 (124 µg/L) and DW18 (74 µg/L). The Mann-Kendall trend test results indicate that there is a statistically significant downward trend in arsenic concentrations in DW14 and a statistically significant upward trend in DW18. Although the Mann-Kendall trend test results indicate an increasing trend in arsenic concentrations in DW18 over the CY 1999 through CY 2011 period, the time-versus-concentration plot indicates that arsenic concentrations in this well have been relatively stable since 2007. Concentrations of total U exceeded the IL (20 µg/L) in the fourth quarter sample from DW19 (118.3 µg/L). No trend was observed in total U concentrations in DW19.

4.1 GROUND-WATER MONITORING AT THE SLDS

The selected remedy presented in the 1998 SLDS ROD involves excavation and disposal of radiologically contaminated accessible soils and ground-water monitoring. The goal of the ground-water portion of the SLDS remedy is to maintain protection of the Mississippi Alluvial Aquifer (HU-B) and to establish the effectiveness of the source removal action. This goal is achieved by monitoring perimeter wells on a routine basis to ensure that there are no significant impacts from COCs on HU-B. The HU-B ground-water results for the SLDS COCs are compared to the following ROD ground-water criteria (USACE 1998a):

1) The ILs: 50 µg/L arsenic, 5 µg/L cadmium, and 20 µg/L total U; and
2) The concentration limits from the Uranium Mill Tailings Radiation Control Act regulations listed in 40 *CFR* 192.02, Table 1 to Subpart A: 5 pCi/L combined Ra-226 and Ra-228.

The concentration limits for other SLDS COCs listed in 40 *CFR* 192.02, Table 1 to Subpart A (50 µg/L arsenic, 10 µg/L cadmium, and 30 pCi/L combined U-234 and U-238) are not relevant or appropriate because these limits are equal to or less stringent than the ILs.

If monitoring of HU-B indicates that the concentrations of the SLDS COCs significantly exceed the above criteria, the ROD requires that a Ground-Water Remedial Action Alternative Assessment (GRAAA) be initiated to further assess the fate and transport of the COCs in HU-B and to determine if additional RAs are necessary. Total U concentrations were above the IL in HU-B well DW19 over an extended period, initiating Phase 1 of the GRAAA. The first phase of the GRAAA was completed in CY 2003 (USACE 2003). Phase 1 summarized the sampling data available for each of the monitoring wells completed in HU-B and provided recommendations for further investigation of HU-B. This EMDAR carefully reviews the HU-B data to provide additional information for future phases of the GRAAA. The ROD also specifies that a ground-water monitoring plan will be developed to assess the fate and transport of MED/AEC residual contaminants through and following the RA.

In addition to the above, an evaluation of concentration trends is conducted for the COCs detected above ROD ground-water criteria to support evaluation of the effectiveness of the RA in the CERCLA five-year reviews. The results of the trend analysis are presented in Section 4.2.3.

Because HU-A is not considered a potential source of drinking water, the ROD did not establish ground-water criteria for HU-A ground water. An evaluation of concentration trends is conducted for the COCs detected in HU-A ground water to support assessment of the effectiveness of the RA in the CERCLA five-year reviews.

4.2 EVALUATION OF GROUND-WATER MONITORING DATA

SLDS Monitoring Well Network

The EMP monitoring well network for the SLDS is shown on Figure 4-3. The screened HUs for the SLDS ground-water monitoring wells are identified in Table 4-1. Prior to initiating long-term monitoring of the HU-B aquifer, as specified by the ROD (USACE 1998a), there was no EMP sampling performed at the SLDS. In CY 2011, nine monitoring wells (two HU-A and seven HU-B) were sampled for radionuclides and inorganic COCs at the SLDS. No new ground-water monitoring wells were installed or transferred at the SLDS in CY 2011. In CY 2011, ground-water sampling at the SLDS was conducted on March 23 (first quarter); June 6 (second quarter); and November 17, 18, and 21 (fourth quarter). No sampling was conducted at SLDS during the third quarter of CY 2011. The CY 2011 analytical results for the SLDS are presented in Appendix D, Table D-2. For discussion purposes, the ground-water analytical data acquired from the CY 2011 sampling events at the SLDS are presented separately for HU-A and HU-B.

Table 4-1. Screened HUs for SLDS Ground-Water Monitoring Wells During CY 2011

Well ID	Screened HU
B16W06D	HU-B
B16W06S	HU-A
B16W07D	HU-B
B16W08D	HU-B
B16W08S	HU-A
B16W09D	HU-B
B16W12S	HU-A
DW14	HU-B
DW15	HU-B
DW16	HU-B
DW17	HU-B
DW18	HU-B
DW19	HU-B
DW21	HU-A
DW22R	HU-B

4.2.1 Evaluation of HU-A Ground-Water Monitoring Data

The results of the CY 2011 ground-water sampling of HU-A ground water at the SLDS are summarized in Table 4-2. During CY 2011, two HU-A monitoring wells (B16W06S and DW21) were sampled. B16W06S was sampled for arsenic and cadmium during the fourth quarter. DW21 was sampled for arsenic and cadmium during the first quarter, and for Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238 during the fourth quarter.

Table 4-2. Analytes Detected in HU-A Ground Water at the SLDS During CY 2011

Analyte	Units	Station	Minimum Detected	Maximum Detected	Mean Detected	Frequency of Detection
Arsenic	µg/L	B16W06S	146	146	146	1/1
		DW21	104	104	104	1/1
Cadmium	µg/L	DW21	5.3	5.3	5.3	1/1
Th-228	pCi/L	DW21	0.69 J	0.69 J	0.69 J	1/1
Th-230	pCi/L	DW21	0.57 J	0.57 J	0.57 J	1/1

J = Validation qualifier (VQ) indicating the analyte was identified as estimated quantity.

The analytes detected in HU-A ground water are listed in Table 4-2. Because the historical results for these COCs were generally below or only slightly above their detection limits (DLs), a trend analysis was not conducted for cadmium, Th-228, or Th-230. Trend analysis was conducted for arsenic in B16W06S and DW21. Based on the graphs and quantitative evaluation of trends using the Mann-Kendall trend test (presented in Section 4.2.3), there is a statistically significant downward trend in arsenic concentrations in B16W06S and DW21. Figures 4-4 and 4-5 provide the time-versus-concentration plots for arsenic and total U, respectively, at SLDS. Figure 4-6 provides an expanded version of the time-versus-concentration plots for arsenic in B16W06S and DW21. The remaining SLDS COCs (Ra-226, Ra-228, Th-232, U-234, U-235 and U-238) were not detected in the two HU-A ground-water wells monitored during CY 2011.

4.2.2 Evaluation of HU-B Ground-Water Monitoring Data

During CY 2011, seven SLDS wells completed in the Mississippi Alluvial Aquifer (HU-B) were monitored for various parameters, including the COCs arsenic, cadmium, Ra-226, Ra-228, Th-228,Th-230, Th-232, U-234, U-235, and U-238. Detected concentrations were compared to the respective ROD ground-water criteria. Table 4-3 lists the analytes that were detected in HU-B ground water during CY 2011 and compares the results with the ROD ground-water criteria.

Table 4-3. Analytes Detected in HU-B Ground Water at the SLDS During CY 2011

Analyte	ROD Ground-Water Criteria		Units	Station[b]	Minimum Detected	Maximum Detected	Mean Detected	# Detects > ROD Ground-Water Criteria	Frequency of Detection
	IL[a]	40 *CFR* 192.02 Table 1, Subpart A							
Arsenic	50	NA	µg/L	B16W07D	23.1	23.1	23.1	0	1/1
				B16W08D	25.5	25.5	25.5	0	1/1
				B16W09D	7.1	7.1	7.1	0	1/1
				DW14	124	124	124	1	1/1
				DW18	74	74	74	1	1/1
				DW19	17.1	17.1	17.1	0	1/1
Cadmium	5	NA	µg/L	B16W07D	1.3	1.3	1.3	0	1/1
				B16W09D	1.1	1.1	1.1	0	1/1
				DW14	1.4	1.4	1.4	0	1/1
				DW19	4.3	4.3	4.3	0	1/1
Ra-226	---[c]	5[d]	pCi/L	B16W09D	2.9 J	2.9 J	2.9 J	0	1/1
				DW14	3.3 J	3.3 J	3.3 J	0	1/1
				DW16	0.9 J	0.9 J	0.9 J	0	1/1
Total U[e]	20	NA	µg/L	B16W08D	0.8	0.8	0.8	0	1/1
				DW14	0.6	0.6	0.6	0	1/1
				DW16	1.3	1.3	1.3	0	1/1
				DW18	1.4	1.4	1.4	0	1/2
				DW19	118.3	118.3	118.3	1	1/1

[a] USACE 1998a.
[b] Table lists only those stations at which the analyte was detected in HU-B ground water and lists only those analytes having ROD ground-water criteria.
[c] Although the ROD does not reference an IL for Ra-226, it does reference the maximum constituent concentration listed in 40 *CFR* 192.02, Table 1, Subpart A.
[d] Concentration limit for combined Ra-226 and Ra-228.
[e] Total U values were calculated from isotopic concentrations in pCi/L and converted to µg/L using radionuclide-specific activities and assuming secular equilibrium.
J Validation qualifier (VQ) indicating the analyte was identified as estimated quantity.
NA Not appropriate. No IL is specified or the concentration limits specified in Table 1 are the same or less stringent than the IL and thus are not relevant or appropriate.

Two SLDS COCs (total U and arsenic) were detected at concentrations above the ROD ground-water criteria in HU-B ground water during CY 2011. Concentrations of total U exceeded the IL (20 µg/L) in the November 2011 sample from DW19 (118.3 µg/L). Concentrations of arsenic exceeded the IL (50 µg/L) in DW14 (124 µg/L) and DW18 (74 µg/L). Figure 4-6 provides an expanded version of the time-versus-concentration plots for arsenic in DW14 and DW18.

4.2.3 Comparison of Historical Ground-Water Data at the SLDS

A quantitative evaluation of COC concentration trends in SLDS ground water was conducted based on available sampling data for the period from January 1999 through December 2011. Mann-Kendall trend testing is used to evaluate possible trends for those COCs that are detected in HU-A and for those COCs that exceed ROD ground-water criteria in HU-B during CY 2011. Mann-Kendall trend testing was not conducted for those COCs that have insufficient sampling data (fewer than six sampling results for the period January 1999 to December 2011), a detection frequency less than 50 percent, or historical results that were generally within the range of measurement error of their DLs. For HU-A, a trend analysis was not conducted for cadmium, Th-228, or Th-230 because their detection frequencies were less than 50 percent or their historical results were generally below or only slightly above their DLs. Trend analysis was conducted for arsenic in HU-A wells B16W06S and DW21. Mann-Kendall trend testing was also conducted for the two COCs that exceeded the ILs in HU-B wells during CY 2011: arsenic in DW14 and DW18, and total U in DW19.

Statistical Method and Trend Analysis

Several statistical methods are available to evaluate contaminant trends in ground water. These include the Mann-Kendall trend test, the Wilcoxon Rank Sum test, and the Seasonal Kendall test (USEPA 2000). The latter two tests are applicable to data that may or may not exhibit seasonal behavior, but generally require larger sample sizes than the Mann-Kendall trend test. The Mann-Kendall trend test was selected for this project because this test can be used with small sample sizes (as few as four data points) and because a seasonal variation in concentrations was not indicated by the time-versus-concentration plots at the SLDS. The Mann-Kendall trend test is a non-parametric test and, as such, is not dependent upon assumptions of distribution, missing data, or irregularly-spaced monitoring periods. In addition, data reported as being less than the DL can be used (Gibbons 1994). The test can assess whether a time-ordered dataset exhibits an increasing or decreasing trend, within a predetermined level of significance. While the Mann-Kendall trend test can use as few as four data points, often this is not enough data to detect a trend. Therefore, the test was performed only at those monitoring stations where data have been collected for at least six sampling events.

A customized Microsoft Excel spreadsheet was used to perform the Mann-Kendall trend test. The test involves listing the sampling results in chronological order and computing all differences that may be formed between current measurements and earlier measurements. The value of the test statistic (S) is the difference between the number of strictly positive differences and the number of strictly negative differences. If S is a large positive value, then there is evidence of an increasing trend in the data. If S is a large negative value, then there is evidence of a decreasing trend in the data. If there is no trend and all observations are independent, then all rank orderings of the annual statistics are equally likely (USEPA 2000). The results of the Mann-Kendall trend test are reported in terms of a p-value or Z-score, depending on sample size, N. If the sample size is ≤ 10, then the p-value is computed. If the p value ≤ 0.05, the test concludes that the trend is statistically significant. If the p value > 0.05, the test concludes there is no

evidence of a significant trend. For dataset sizes larger than 10, the Z-score is compared to ±1.64, which is the comparison level at a 95 percent confidence level. If the Z-score is greater than +1.64, the test concludes that a significant upward trend exists. If the Z-score is less than -1.64, the test concludes that a significant downward trend exists. For Z-scores between -1.64 and +1.64, there is no evidence of a significant trend.

The results of the Mann-Kendall trend test are less reliable for datasets containing high numbers of non-detects, particularly if the DL changes over time. For that reason, for data sets where more than 50 percent of the time-series data are non-detect, the Mann-Kendall trend test was not conducted. There is no general consensus regarding the percentage of non-detects that can be handled by the Mann-Kendall trend test. However, because the Mann-Kendall trend test is a nonparametric test that uses relative magnitudes, not actual values, it is generally valid even in cases where there are large numbers of non-detects.

Only unfiltered data were used, and split sample and QC sample results were not included in the database for the Mann-Kendall trend test. The Mann-Kendall trend test is used to evaluate the data and determine trends without regard to isotopic analysis. In addition, for monitoring wells where the Mann-Kendall trend test has indicated a trend (either upward or downward), another analysis is performed to determine if the trend is due to inherent error associated with the analytical test method for each sample analysis. For each specific constituent, graphs are generated to depict the trends, if present, and the associated error bars.

Results of Trend Analysis for Ground Water at the SLDS

The Mann-Kendall trend test results are provided in Table 4-4. Figure 4-6 provides time-versus-concentration plots for those wells and analytes exhibiting a statistically significant trend based on the Mann-Kendall trend test results (i.e., arsenic in B16W06S, DW14, DW18, and DW21).

Table 4-4. Results of Mann-Kendall Trend Test[a] for SLDS Ground Water During CY 2011

Analyte	Station	Hydrogeologic Unit	N[b]	Test Statistics[c]		Trend[d]
				S	Z	
Arsenic	B16W06S	HU-A	14	-43	-2.3	Downward Trend
	DW14	HU-B	16	-60	-2.7	Downward Trend
	DW18	HU-B	22	96	2.7	Upward Trend
	DW21	HU-A	22	-136	-3.8	Downward Trend
Total U	DW19	HU-B	24	-4	-0.1	No Trend

[a] One-tailed Mann-Kendall trend tests were performed at a 95 percent level of confidence. For non-radiological data, non-detected results were replaced with one half of the lowest DL.

[b] N is the number of unfiltered ground-water sample results for a particular analyte at the well for the period between January 1999 and December 2011.

[c] Test Statistics: S = the S-Statistic; Z = Z- score, or normalized test statistic (used if N>10).

[d] Trend: The Z-score is compared to ±1.64 to determine trend significance.

Inorganics

Based on the results of the Mann-Kendall trend test, three wells exhibit a downward trend for arsenic (HU-A wells B16W06S and DW21, and HU-B well DW14), and one well exhibits an upward trend for arsenic (HU-B well DW18). Because the Mann-Kendall trend test does not consider the effects of measurement error and does not provide any information concerning the magnitude of the trend, time-versus-concentration plots of arsenic in B16W06S, DW14, DW18, and DW21 were used to evaluate these factors (Figure 4-6). The plots also show the best-fit trend lines based on the data scatter. Although the Mann-Kendall trend test results indicate an increasing trend in arsenic concentrations over the CY 1999 through CY 2011 period in DW18, the time-versus-concentration plot in Figure 4-6 indicates that concentrations have been

relatively stable since 2007. No other significant changes in the concentrations of the inorganic COCs occurred in shallow or deep ground water during CY 2011.

Radionuclides

The Mann-Kendall trend test results indicate that there is no trend for total U in HU-B well DW19. As shown in the time-versus-concentration plots on Figure 4-5, concentrations of total U have not shown significant increases since 1999; however, they have remained above the IL in DW19 since 1999.

4.2.4 Evaluation of Potentiometric Surface at the SLDS

Ground-water elevations were measured in monitoring wells at the SLDS in March, June, August, and November of CY 2011. Potentiometric surface maps were created from the June and November measurements to illustrate ground-water flow conditions in wet and dry seasons, respectively. The potentiometric maps for both HU-A and HU-B are presented on Figures 4-7 through 4-10.

The ground-water surface in HU-A under the eastern portion of the Mallinckrodt plant is generally sloping northeastward toward the Mississippi River (Figures 4-7 and 4-9). The ground water may be present in separate lenses or subunits of the heterogeneous HU-A. Comparison of Figure 4-7 (June) with Figure 4-9 (November) indicates ground-water flow direction patterns in HU-A are similar for the wet and dry season conditions, but the flow gradient is higher (steeper) during the dry season. During CY 2011, the HU-A potentiometric surface elevations showed some seasonal fluctuation in ground-water elevations, with elevations averaging approximately 12.4 ft higher during the wet season (June) than during the dry season (November). A larger difference between the dry and wet season elevations is observed in the two wells located near the river (B16W06S and B16W08S), with the November elevations averaging 20.8 ft lower than the June elevations. The effects of seasonal fluctuations in river stage on the HU-A ground-water levels are generally limited to the area nearest to the river.

As shown in Figures 4-8 and 4-10, the ground-water flow direction and gradient in HU-B are strongly influenced by river stage. This indicates that ground water in HU-B is hydraulically connected to the Mississippi River. The water levels measured at the SLDS indicate that HU-B ground-water elevations averaged approximately 24.7 ft higher on June 6 than on November 17; this generally corresponds to the difference in the daily river stage, which was approximately 25 ft higher on June 6 (413 ft above mean sea level [amsl]) than on November 17 (388 ft amsl). Both the June and November 2011 potentiometric surface maps indicate the presence of relatively low hydraulic gradients in the vicinity of DW19 and Building 101. The potentiometric surface maps for HU-B indicate flow direction at the site is generally northeastward toward the Mississippi River.

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5.0 ENVIRONMENTAL QUALITY ASSURANCE PROGRAM

5.1 PROGRAM OVERVIEW

The environmental quality assurance (QA) program includes management of the QA and QC programs, plans, and procedures governing environmental monitoring activities at the SLDS and at subcontracted vendor laboratories. This section discusses the environmental monitoring standards at FUSRAP and the goals for these programs, plans, and procedures.

The environmental QA program provides FUSRAP with reliable, accurate, and precise monitoring data. The program furnishes guidance and directives to detect and prevent problems from the time a sample is collected until the associated data are evaluated. The Missouri Department of Natural Resources (MDNR) conducted site visits to observe and participate in the environmental monitoring activities. USEPA and MDNR regulatory oversight of sampling activities provided an additional level of QA/QC.

Key elements in achieving the goals of this program are maintaining compliance with the QA program, personnel training, compliance assessments, use of QC samples, documentation of field activities and laboratory analyses, and a review of data documents for precision, accuracy, and completeness.

General objectives are as follows:

- To provide data of sufficient quality and quantity to support ongoing remedial efforts, to aid in defining potential COCs, to meet the requirements of the EMG (USACE 1999a) and the *Sampling and Analysis Guide for the St. Louis Sites* (SAG) (USACE 2000), and to support the ROD (USACE 1998a).
- To provide data of sufficient quality to meet applicable State of Missouri and federal concerns (e.g., reporting requirements).
- To ensure samples were collected using approved techniques and are representative of existing site conditions.

5.2 QUALITY ASSURANCE PROGRAM PLAN

The Quality Assurance Program Plan (QAPP) for activities performed at the SLS is described within Section 3.0 of the SAG. The QAPP provides the organization, objectives, functional activities, and specific QA/QC activities associated with investigations and sampling activities at the SLS.

QA/QC procedures are performed in accordance with applicable professional technical standards, USEPA requirements, government regulations and guidelines, and specific project goals and requirements. The QAPP was prepared in accordance with USEPA and USACE guidance documents, including *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans* (USEPA 1991), *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations* (USEPA 1994), and *Requirements for the Preparation of Sampling and Analysis Plans* (USACE 2001).

5.3 SAMPLING AND ANALYSIS GUIDE

The SAG summarizes standard operating procedures (SOPs) and data quality requirements for collecting and analyzing environmental data. The SAG integrates protocols and methodologies

identified under various USACE and regulatory guidance. It describes administrative procedures for managing environmental data and governs sampling plan preparation, data review, evaluation and validation, database administration, and data archiving. The structure for identified sampling/monitoring was delineated through programmatic documents such as the EMG (USACE 1999a), which is an upper tier companion document to the SAG (USACE 2000). The EMICY11 document outlines the analyses to be performed at each site for various media (USACE 2011).

Flexibility to address non-periodic environmental sampling, such as specific studies regarding environmental impacts, well installations, and/or in-situ waste characterizations, was accomplished by the issuance of work descriptions. Environmental monitoring data obtained during these sampling activities were reported to USEPA Region VII on a quarterly basis, per the requirements of the FFA.

5.4 FIELD SAMPLE COLLECTION AND MEASUREMENT

Prior to beginning field sampling, field personnel were trained, as necessary, and participated in a project-specific readiness review. These activities ensured that standard procedures were followed in sample collection and in completing field logbooks, chain-of-custody forms, labels, and custody seals. Documentation of training and readiness was submitted to the project file.

The master field investigation documents are the site field logbooks. The primary purpose of these documents is to record each day's field activities; personnel on each sampling team; and any administrative occurrences, conditions, or activities that may have affected the fieldwork or data quality of any environmental samples for any given day. Guidance for documenting specific types of field sampling activities in field logbooks or log sheets is provided in Appendix C of Engineer Manual (EM)-200-1-3 (USACE 2001).

At any point in the process of sample collection or data and document review, a non-conformance report may be initiated if non-conformances are identified (SAIC 2002). Data entered into the database may be flagged accordingly.

5.5 PERFORMANCE AND SYSTEM AUDITS

Performance and system audits of both field and laboratory activities are conducted to verify that sampling and analysis activities were performed in accordance with the procedures established in the SAG and activity-specific work description or EMICY documents.

5.5.1 Field Assessments

Internal assessments (audit or surveillance) of field activities (sampling and measurements) are conducted by the QA/QC Officer (or designee). Assessments include an examination of field sampling records, field instrument operating records, sample collection, handling and packaging procedures, maintenance of QA procedures, and chain-of-custody forms. These assessments occurred at the onset of the project to verify that all established procedures were followed (systems audit).

Performance assessments followed the systems audit to ensure that deficiencies had been corrected and to verify that QA practices/procedures were being maintained throughout the duration of the project. These assessments involved reviewing field measurement records, instrumentation calibration records, and sample documentation.

External assessments may be conducted at the discretion of the USACE, USEPA Region VII, or the State of Missouri.

5.5.2 Laboratory Audits

The on-site laboratories are subject to USACE periodic review(s) by the local USACE Chemist to demonstrate compliance with the *DOD Quality Systems Manual for Environmental Laboratories* (DOD-QSM) Version 4.2 (DOD 2010). In conjunction, blind third-party performance evaluation studies (performance audits) are participated in at least twice per year, and results are reported to the local USACE point(s) of contact. In addition, contract laboratories are required to be accredited under the U.S. Department of Defense (DOD) Environmental Laboratory Accreditation Program (ELAP). The DOD ELAP requires an annual audit and re-accreditation every three years.

These system audits include examining laboratory documentation of sample receipt, sample log-in, sample storage, chain-of-custody procedures, sample preparation and analysis, and instrument operating records. Performance audits consist of USACE laboratories receiving performance evaluation samples from an outside vendor for an ongoing assessment of laboratory precision and accuracy. The analytical results of the analysis of performance evaluation samples are evaluated by USACE Hazardous, Toxic and Radioactive Waste – Center of Expertise and/or the local oversight chemist to ensure that laboratories maintain acceptable performance.

Internal performance and system audits of laboratories were conducted by the Laboratory QA Manager as directed in the Laboratory QA Plan. These system audits included an examination of laboratory documentation of sample receipt, sample log-in, sample storage, chain-of-custody procedures, sample preparation and analysis, and instrument operating records against the requirements of the laboratory's SOPs. Internal performance audits were also conducted on a regular basis. Single-blind performance samples were prepared and submitted along with project samples to the laboratory for analysis. The Laboratory QA Manager evaluated the analytical results of these single-blind performance samples to ensure that the laboratory maintained acceptable performance. Quarterly QA/QC reports are generated and provided to the local USACE authority – the reports document the ongoing QC elements and provide for further monitoring of quality processes/status. Also, QA Plans and methodology are to follow the guidance as presented in the DOD-QSM (DOD 2010).

5.6 SUBCONTRACTED LABORATORY PROGRAMS

All samples collected during environmental monitoring activities were analyzed by USACE-approved laboratories. QA samples were collected for ground water and soil and were analyzed by the designated USACE QA laboratory. Each laboratory supporting this work maintained statements of qualifications, including organizational structure, QA Manual, and SOPs. Additionally, subcontracted laboratories are also required to be an accredited laboratory under the DOD ELAP.

Samples collected during these investigations were analyzed by USEPA SW-846 methods and by other documented USEPA or nationally recognized methods. Laboratory SOPs are based on the USEPA methods contained in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, Third Edition (USEPA 1993).

5.7 QUALITY ASSURANCE AND QUALITY CONTROL SAMPLES

QA/QC samples were collected and analyzed for the purpose of assessing the quality of the sampling effort and the reported analytical data. QA/QC samples include duplicate samples (-1) and split samples (-2). The equation utilized for accuracy and precision can be found in Section 5.9.

5.7.1 Duplicate Samples

Duplicate samples measure precision and were collected by the sampling teams. Samples were submitted for analysis to the on-site laboratory or contract laboratories. The identity of duplicate samples is held blind to the analysts, and the purpose of these samples is to provide activity-specific, field-originated information regarding the homogeneity of the sampled matrix and the consistency of the sampling effort. These samples were collected concurrently with the primary environmental samples and equally represent the medium at a given time and location. Duplicate samples were collected from each medium addressed by this project and were submitted to the contracted laboratories for analysis. Approximately one duplicate sample was collected for every 20 field samples of each matrix and analyte. Precision is measured by the relative percent difference (RPD) for radiological and non-radiological analyses or by the normalized absolute difference (NAD) for radiological analyses.

The non-radiological analyses RPDs are presented in Table 5-1. The radiological analyses RPDs and NADs are presented in Table 5-2. The overall precision for the CY 2011 environmental monitoring sampling activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-1. Non-radiological Duplicate Sample Analysis for CY 2011

Ground-water Sample Name	Arsenic	Cadmium
	RPD	RPD
SLD139801 / SLD139801-1	4.60	NC

NC Not calculated due to one or both concentrations being below DLs.
-1 Sample Duplicate

Table 5-2. Radiological Duplicate Sample Analysis for CY 2011

Ground-water Sample Name	Radium-226		Radium-228		Thorium-228		Thorium-230	
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD
SLD139801/SLD139801-1	NC	NA	*	*	30.59	0.19	NC	NA
	Thorium-232		Uranium-234		Uranium-235		Uranium-238	
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD
	NC	NA	NC	NA	NC	NA	NC	NA

NC Not calculated due to one or both concentrations being below DLs.
NA Not applicable; see RPD.
* Not calculated because either the parent or duplicate sample was not analyzed.
-1 Sample Duplicate

5.7.2 Split Samples

Split samples measure accuracy and were collected by the sampling team and sent to a USACE QA laboratory for analysis to provide an independent assessment of contractor and subcontractor laboratory performance. Approximately one split sample was collected for every 20 field samples of each matrix for non-radiological and radiological analytes. The non-radiological

analyses RPDs are presented in Table 5-3. The radiological analyses RPDs and NADs are presented in Table 5-4. See Section 5.9 for the evaluation process.

Table 5-3. Non-radiological Split Sample Analysis for CY 2011

Ground-water Sample Name	Arsenic	Cadmium
	RPD	RPD
SLD139801 / SLD139801-2	1.98	NC

NC Not calculated due to one or both concentrations being below DLs.
-2 Sample Split

Table 5-4. Radiological Split Sample Analysis for CY 2011

Ground-water Sample Name	Radium-226		Radium-228		Thorium-228		Thorium-230	
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD
SLD139801 / SLD139801-2	NC	NA	*	*	NC	NA	NC	NA
	Thorium-232		Uranium-234		Uranium-235		Uranium-238	
	RPD	NAD	RPD	NAD	RPD	NAD	RPD	NAD
	NC	NA	NC	NA	NC	NA	34.10	0.26

NC Not calculated due to one or both concentrations being below DLs.
NA Not applicable; see RPD.
* Not calculated because either the parent or duplicate sample was not analyzed.
-2 Sample Split

5.7.3 Equipment Rinsate Blanks

These samples are typically taken from the water rinsate collected from equipment decontamination activities and comprise samples of analyte-free water, which has been rinsed over sampling equipment for the purposes of decontamination, collected, and submitted for analysis of the parameters of interest. All of the monitoring wells have dedicated sampling equipment; therefore, equipment rinsate blanks were not employed to assess the effectiveness of the decontamination process because it does not apply.

5.8 DATA REVIEW, EVALUATION AND VALIDATION

All data packages received from the analytical laboratory were reviewed and either evaluated or validated by data management personnel. Data validation is the systematic process of ensuring that the precision and accuracy of the analytical data are adequate for their intended use. Validation was performed in accordance with USEPA regional or National Functional Guidelines or with project-specific guidelines. General chemical data quality management guidance found in Engineer Regulation (ER)-1110-1-263 (USACE 1998b) was also used when planning for chemical data management and evaluation. Additional details of data review, evaluation, and validation are provided in the *FUSRAP Laboratory Data Management Process for the St. Louis Site* (USACE 1999b). Data assessment guidance, to determine the usability of data from Hazardous, Toxic and Radioactive Waste projects, was provided in EM-200-1-6 (USACE 1997).

One hundred percent of the data generated from all analytical laboratories was independently reviewed and either evaluated or validated. The data review process documents the possible effects on the data that result from various QC failures; it does not determine data usability, nor does it include assignment of data qualifier flags. The data evaluation process uses the results of the data review to determine the usability of the data. The process of data evaluation summarizes the potential effects of QA/QC failures on the data, and the USACE District Chemist or District

Health Physicist assesses their impact on the attainment of the project-specific data quality objectives (DQOs). Consistent with the data quality requirements, as defined in the DQOs, approximately 10 percent of all project data was validated.

5.9 PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS, AND SENSITIVITY

The data evaluation process considers precision, accuracy, representativeness, completeness, comparability, and sensitivity. The following subsections will provide detail to the particular parameters and to how the data was evaluated for each with discussion and tables to present the associated data.

Accuracy and precision can be measured by the RPD or the NAD using the following equations:

$$RPD = \left(\frac{|S - D|}{\frac{S + D}{2}} \right) \times 100$$

$$NAD = \frac{|S - D|}{\sqrt{U_S^2 + U_D^2}}$$

Where:
- S = Parent Sample Result
- D = Duplicate/Split Sample Result
- U_S = Parent Sample Uncertainty
- U_D = Duplicate/Split Sample Uncertainty

The RPD is calculated for all samples if a detectable result is reported for both the parent and the QA field split or field duplicate. For radiological samples, when the RPD is greater than 30 percent, the NAD is used to determine the accuracy or precision of the method. NAD accounts for uncertainty in the results, RPD does not. The NAD should be equal to or less than a value of 1.96. Neither equation is used when the analyte in one or both of the samples is not detected. In cases where neither equation can be used, the comparison is counted as acceptable in the overall number of comparisons.

Precision is a measure of mutual agreement among individual measurements performed under the same laboratory controls. To evaluate for precision, a field duplicate is submitted to the same laboratory as the original sample to be analyzed under the same laboratory conditions. The RPD and NAD between the two results was calculated and used as an indication of the precision of the analyses performed (Tables 5-1 and 5-2). Sample collection precision was measured in the laboratory by the analyses of duplicates. The overall precision for the CY 2011 environmental monitoring sampling activities was acceptable.

Accuracy provides a gauge or measure of the agreement between an observed result and the true value for an analysis. The RPD and NAD between the two results was calculated and used as an indication of the accuracy of the analyses performed (Tables 5-2 and 5-4). For this report, accuracy is measured through the use of the field split samples through a comparison of the prime laboratory results versus the results of an independent laboratory. Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness is a qualitative parameter that depends upon the proper design of the sampling program and proper laboratory protocols. Representativeness is satisfied through proper design of the sampling network, use of proper sampling techniques, following proper analytical procedures, and not exceeding holding times of the samples. Representativeness was

determined by assessing the combined aspects of the QA program, QC measures, and data evaluations. The network design was developed from the EMICY11; the sampling protocols from the SAG have been followed; and, analytical procedures were conducted within the bounds of the QAPP. The overall representativeness of the CY 2011 environmental monitoring sampling activities was acceptable for the media and the media's sampling previously listed in this document.

Comparability expresses the confidence with which one data set can be compared to another. The extent to which analytical data will be comparable depends upon the similarity of sampling and analytical methods, as well as sample-to-sample and historical comparability. Standardized and consistent procedures used to obtain analytical data are expected to provide comparable results. These most recent (post CY 1997) analytical data, however, may not be directly comparable to data collected before CY 1997 because of differences in DQOs. Some media, such as storm-water, and radiological monitoring have values that are primarily useful in the present and the comparison to historic data is not as relevant.

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under normal conditions. It is expected that laboratories will provide data meeting QC acceptance criteria for all samples tested. For the CY 2011 environmental monitoring sampling activities, the data completeness was 100 percent (FUSRAP DQO for completeness is 90 percent).

Sensitivity is the determination of minimum detectable concentration (MDC) values that allows the investigation to assess the relative confidence that can be placed in a value in comparison to the magnitude or level of analyte concentration observed. For this report, MDC is a term generically used to represent both the method detection limit (MDL) for non-radiological analytes and the minimum detectable activity (MDA) for radiological analytes. The closer a measured value comes to the MDC, the less confidence and more variation the measurement will have. Project sensitivity goals were expressed as quantitation level goals in the SAG. These levels were achieved or exceeded throughout the analytical process.

The MDC is reported for each result obtained by laboratory analysis. These very low MDCs are achieved through the use of gamma spectroscopy for all radionuclides of concern, with additional analyses from alpha spectroscopy for thorium, and inductively coupled plasma (ICP) for metals. Variations in MDCs for the same radiological analyte reflects variability in the detection efficiencies and conversion factors due to factors such as individual sample aliquot, sample density, and variations in analyte background radioactivity for gamma and alpha spec, at the laboratory. Variations in MDLs for the same non-radiological analyte reflect variability in calibrations between laboratories, dilutions, and analytical methods. In order to complete the Data Evaluation (i.e. precision, accuracy, representativeness, and comparability), analytical results are desired that exceed the MDC of the analyte.

5.10 DATA QUALITY ASSESSMENT SUMMARY

The overall quality of the data meets the established project objectives. Through proper implementation of the project data review, evaluation, validation, and assessment process, project information has been determined to be acceptable for use.

Data, as presented, have been qualified as usable, but estimated when necessary. Data that have been estimated have concentrations/activities that are below the quantitation limit or are indicative of accuracy, precision, or sensitivity being less than desired but adequate for interpretation.

These data can withstand scientific scrutiny, are appropriate for their intended purpose, are technically defensible, and are of known and acceptable precision and accuracy. Data integrity has been documented through proper implementation of QA/QC measures. The environmental information presented has an established confidence, which allows utilization for the project objectives and provides data for future needs.

5.11 RESULTS FOR PARENT SAMPLES AND THE ASSOCIATED DUPLICATE AND SPLIT SAMPLES

Summaries of the QA parent sample results and associated duplicate and/or split sample results are presented in Tables 5-5 and 5-6.

Table 5-5. Non-Radiological Parent Samples and Associated Duplicate and Split Samples for CY 2011

Ground-water Sample Name	Arsenic[a]			Cadmium[a]		
	Result	MDC	VQ	Result	MDC	VQ
SLD139801	25.50	2.70	=	0.91	0.91	U
SLD139801-1[b]	26.70	2.70	=	0.91	0.91	U
SLD139801-2[b]	25.00	1.50	=	1.30	0.27	=

[a] Results are expressed in µg/L.
[b] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
Validation Qualifier (VQ) symbols indicate: "=" for positively identified results and "U" for not detected.
MDC Minimum detectable concentration.

Table 5-6. Radiological Parent Samples and Associated Duplicate and Split Samples for CY 2011

Ground-water Sample Name	Radium-226[a]				Radium-228[a]				Thorium-228[a]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
SLD139801	1.13	1.03	1.23	U	*	*	*	*	0.34	0.40	0.31	J
SLD139801-1[b]	1.93	1.49	1.77	J	*	*	*	*	0.25	0.25	0.17	J
SLD139801-2[b]	0.40	0.16	0.17	=	*	*	*	*	0.05	0.12	0.23	UJ
	Thorium-230[a]				Thorium-232[a]				Uranium-234[a]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
SLD139801	0.40	0.48	0.69	UJ	0.06	0.26	0.69	UJ	0.13	0.18	0.17	UJ
SLD139801-1[b]	0.16	0.23	0.38	UJ	0.13	0.18	0.17	UJ	0.13	0.25	0.49	UJ
SLD139801-2[b]	0.12	0.12	0.12	=	0.01	0.05	0.13	UJ	0.16	0.13	0.15	J
	Uranium-235[a]				Uranium-238[a]							
	Result	Error	MDC	VQ	Result	Error	MDC	VQ				
SLD139801	0.00	0.00	0.21	U	0.25	0.26	0.17	J				
SLD139801-1[b]	0.00	0.00	0.22	U	0.10	0.20	0.40	UJ				
SLD139801-2[b]	0.08	0.10	0.13	UJ	0.18	0.13	0.11	J				

[a] Results are expressed in pCi/l. Negative results are less than the laboratory system's background level.
[b] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
* Data for analyte not available from laboratory analysis. Ra-228 assumed to be in equilibrium with Th-228.
Validation Qualifier (VQ) symbols indicate: "=" for positively identified results, "U" for not detected, "J" analyte was identified as estimated quantity, and "UJ" analyte was not detected and had QC deficiencies.
MDC Minimum detectable concentration.

6.0 RADIOLOGICAL DOSE ASSESSMENT

This section evaluates the cumulative dose to a hypothetically impacted individual from exposure to radiological contaminants at the SLDS and documents dose trends. The regulatory dose limit for members of the public is 100 mrem/yr as stated in 10 *CFR* 20.1301. Although 10 *CFR* 20.1301 is not an ARAR for the SLDS, the USACE has provided this evaluation to evaluate public exposures from FUSRAP cleanup operations. Compliance with the dose limit in §20.1301 can be demonstrated in one of the two following ways [§20.1302(b)(1) and (2)]:

1) Demonstrating by measurement or calculation that the TEDE to the individual likely to receive the highest dose from SLDS operations does not exceed the annual dose limit (i.e., 100 mrem/yr); or
2) Demonstrating that: (*i*) the annual average concentration of radioactive material released in gaseous and liquid effluents at the boundary of the unrestricted area does not exceed the values specified in Table 2 of Appendix B to Part 20; and (*ii*) if an individual were continuously present in an unrestricted area, the dose from external sources would not exceed 2 millirem per hour (mrem/hr).

USACE has elected to demonstrate compliance by calculation of the TEDE to a hypothetical individual likely to receive the highest dose from the SLDS operations (method 1, above). This section describes the methodology employed for this evaluation.

Dose calculations are presented for a hypothetical maximally exposed individual at the SLDS. The monitoring data used in the dose calculations are reported in the respective environmental monitoring sections of this report.

Dose calculations related to airborne emissions, as required by 40 *CFR* 61, Subpart I (*National Emission Standards for Emissions of Radionuclides Other Than Radon From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered By Subpart H*), are presented in Appendix A, the SLDS FUSRAP CY 2011 Radionuclide Emissions NESHAP Report.

6.1 SUMMARY OF ASSESSMENT RESULTS

The TEDE from the SLDS to the receptor from all complete/applicable pathways combined was 0.2 mrem/yr, estimated for an individual who works full-time at Thomas & Proetz Lumber Company (DT-10).

Figure 6-1 documents annual dose trends from CY 2000 to CY 2011 at the SLDS. Figure 6-2 provides a comparison of the maximum annual dose from CY 2000 to CY 2011 at the SLDS to the annual average background dose of 300 mrem/yr.

6.2 PATHWAY ANALYSIS

Table 6-1 lists the four complete pathways for exposure from radiological contaminants evaluated by the St. Louis FUSRAP EMP. These pathways are used to identify data gaps in the EMP and to estimate potential radiological exposures from the site. Of the four complete pathways, three were applicable in CY 2011, and were thus incorporated into radiological dose estimates.

Table 6-1. Complete Radiological Exposure Pathways for the SLDS

Exposure Pathway	Pathway Description	Applicable to CY 2011 Dose Estimate
Liquid A	Ingestion of ground water from local wells downgradient from the site.	N
Airborne A	Inhalation of particulates dispersed through wind erosion and RAs.	Y
Airborne B	Inhalation of Rn-222 and decay products emitted from contaminated soils/wastes.	Y
External	Direct gamma radiation from contaminated soils/wastes.	Y

Data from SLDS storm-water discharges and MSD discharges are not applicable to the hypothesized recreational receptor; therefore, that data is not evaluated in this section.
N Not applicable for the site.
Y Applicable for the site.

In developing specific elements of the St. Louis FUSRAP EMP, potential exposure pathways of the radioactive materials present on-site are reviewed to determine which pathways are complete. Evaluation of each exposure pathway is based on hypothesized sources, release mechanisms, types, probable environmental fates of contaminants, and the locations and activities of potential receptors. Pathways are then reviewed to determine whether a link exists between one or more radiological contaminant sources, or between one or more environmental transport processes, to an exposure point where human receptors are present. If it is determined that a link exists, the pathway is termed complete. Each complete pathway is reviewed to determine whether a potential for exposure was present during CY 2011. If this is the case, the pathway is termed applicable. Only applicable pathways are considered in estimates of dose.

Table 6-1 shows the pathways that are applicable to the CY 2011 dose estimates for the SLDS. The pathway listed as not applicable was not applicable in CY 2011 because Liquid A, the aquifer, is of naturally low quality and it is not known to be used for any domestic purpose in the vicinity of the SLDS (DOE 1994).

6.3 EXPOSURE SCENARIOS

Dose calculations were performed for a maximally exposed individual at a critical receptor location for applicable exposure pathways (see Table 6-1) to assess dose due to radiological releases from the SLDS. A second set of dose equivalent calculations were performed to meet NESHAP requirements (Appendix A), which were also used for purposes of TEDE calculation.

The scenarios and models used to evaluate these radiological exposures are conservative, but appropriate. Although radiation doses can be calculated or measured for individuals, it is not appropriate to predict the health risk to a single individual using the methods prescribed here. Dose equivalents to a single individual are estimated by hypothesizing a maximally exposed individual and placing this individual in a reasonable, but conservative scenario. This method is acceptable when the magnitude of the dose to a hypothetical maximally exposed individual is small, as is the case for the SLDS. This methodology provides for reasonable estimates of potential exposure to the public and maintains a conservative approach. The scenarios and resulting estimated doses are outlined in Section 6.4.

6.4 DETERMINATION OF TOTAL EFFECTIVE DOSE EQUIVALENT FOR EXPOSURE SCENARIOS

The TEDE for the exposure scenario was calculated using CY 2011 monitoring data. Calculations for dose scenarios are provided in Appendix E. Dose equivalent estimates are well below the standards set by the NRC for annual public exposure and USEPA NESHAP limits.

The CY 2011 TEDE for a hypothetical maximally exposed individual near the SLDS is 0.2 mrem/yr.

This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to frequent the perimeter of the SLDS and receive a radiation dose by the exposure pathways identified above. No private residences are adjacent to the site. Therefore, all calculations of dose equivalent due to the applicable pathway assume a realistic residence time that is less than 100 percent. A full-time employee business receptor was considered to be the maximally exposed individual from the SLDS.

The exposure scenario assumptions are as follows:

- Exposure to radiation from all SLDS sources occurs to the maximally exposed individual while working full-time outside at the receptor location facility located approximately 50 m from the assumed line source. Exposure time is 2,000 hours per year (SAIC 2012).
- Exposure from external gamma radiation was calculated using environmental TLD monitoring data at the site locations representative of areas accessible to the public between the source and the receptor. The site is assumed to represent a line-source to the receptor.
- Exposure from airborne radioactive particulates was estimated using soil concentration data and air particulate monitoring data to determine a source term and then running the CAP-88 PC modeling code to estimate dose to the receptor (SAIC 2012).
- Exposure from Rn-222 (and progeny) was calculated using a dispersion factor and Rn-222 (alpha track) monitoring data at the site locations representative of areas accessible to the public between the source and receptor (SAIC 2012).

Based on the exposure scenario and assumptions described above, a maximally exposed individual working outside at the receptor location facility received less than 0.1 mrem/yr from external gamma, 0.2 mrem/yr from airborne radioactive particulates, and 0.0 mrem/yr from Rn-222, for a TEDE of 0.2 mrem/yr (SAIC 2012). In comparison, the annual average exposure to natural background radiation in the United States results in a TEDE of approximately 300 millirem (Beir 1990).

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USEPA 2007. CAP88-PC Version 3.0 Modeling Code, EPA, December 9.

10 *CFR* 20, *Standards for Protection Against Radiation.*

10 *CFR* 20.1301, *Dose Limits for Individual Members of the Public*.

40 *CFR* 61, Subpart I, *National Emission Standards for Radionuclide Emissions from Federal Facilities Other than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H.*

40 *CFR* 192, *Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings.*

FIGURES

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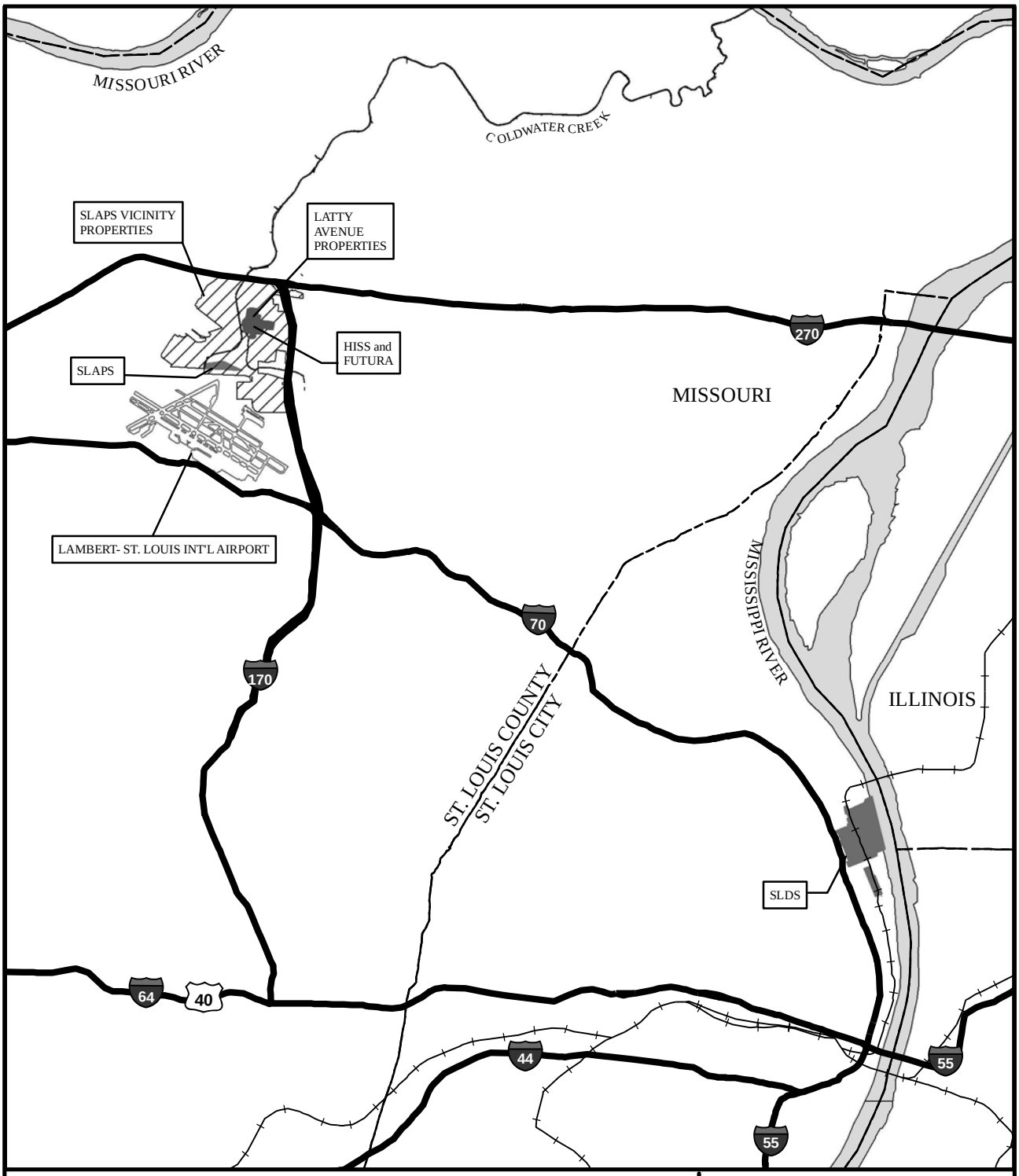


LEGEND:

- Interstate
- US Highway
- Railroad
- North St. Louis County Sites
- Airfield
- SLDS ROD Boundary
- River/Stream

N
W E
S

MO-East State Plane
(NAD 83, Feet)

0 5,500 11,000 Feet

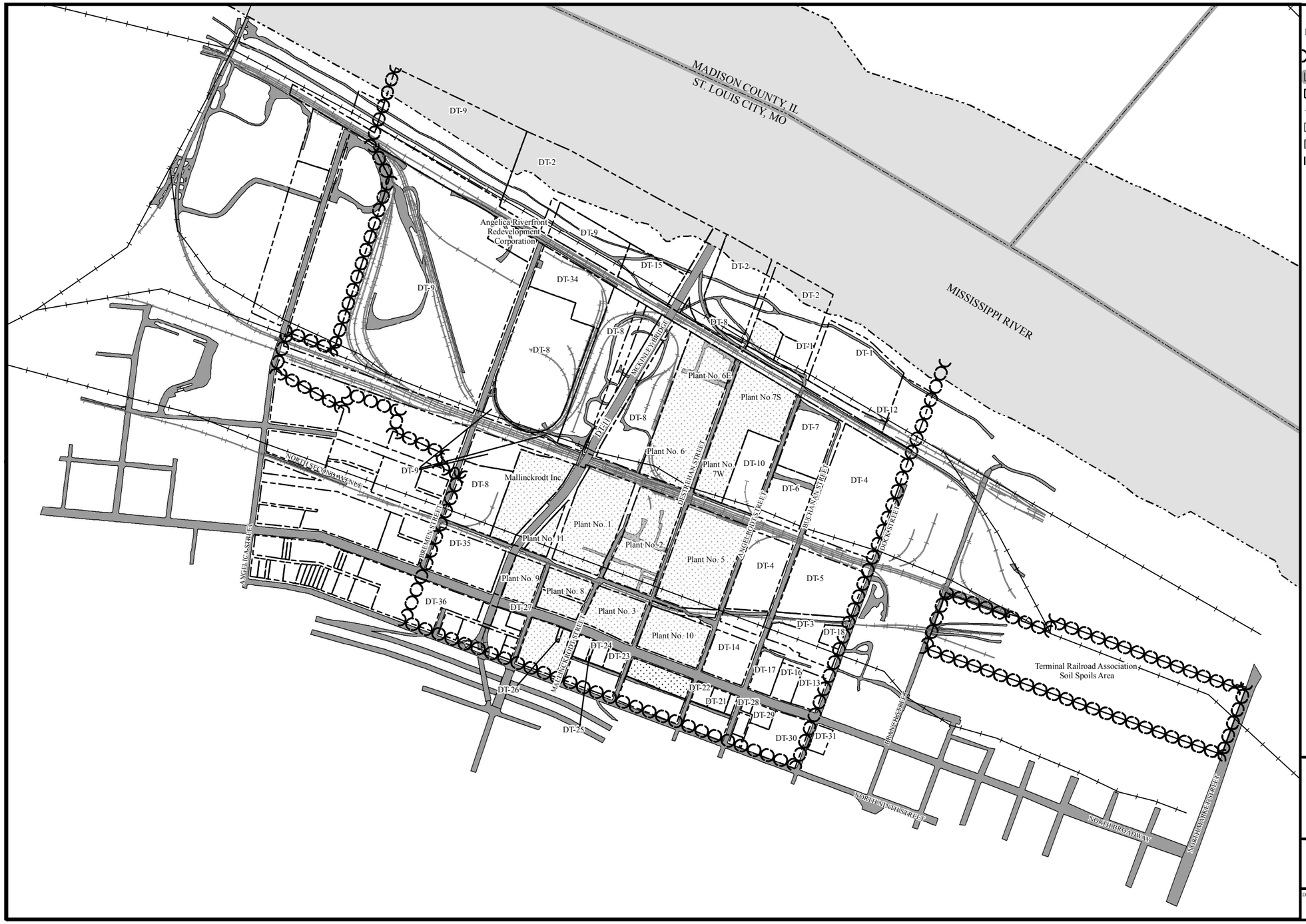
Figure 1-1.
Location Map of the
St. Louis Sites

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	7-10-2012

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 1-1 Location Map of the St Louis Site.mxd

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 1-2 Plan View of the SLDS.mxd



Legend

- ROD Boundary
- State/County Boundary
- Vicinity Properties
- Railroad
- Mallinckrodt Property
- Road
- River/Stream

Map Rotated 48 Degrees

MO-East State Plane
(NAD 83, Feet)

0 325 650 Feet

Figure 1-2. Plan View of the SLDS

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	6-19-2012

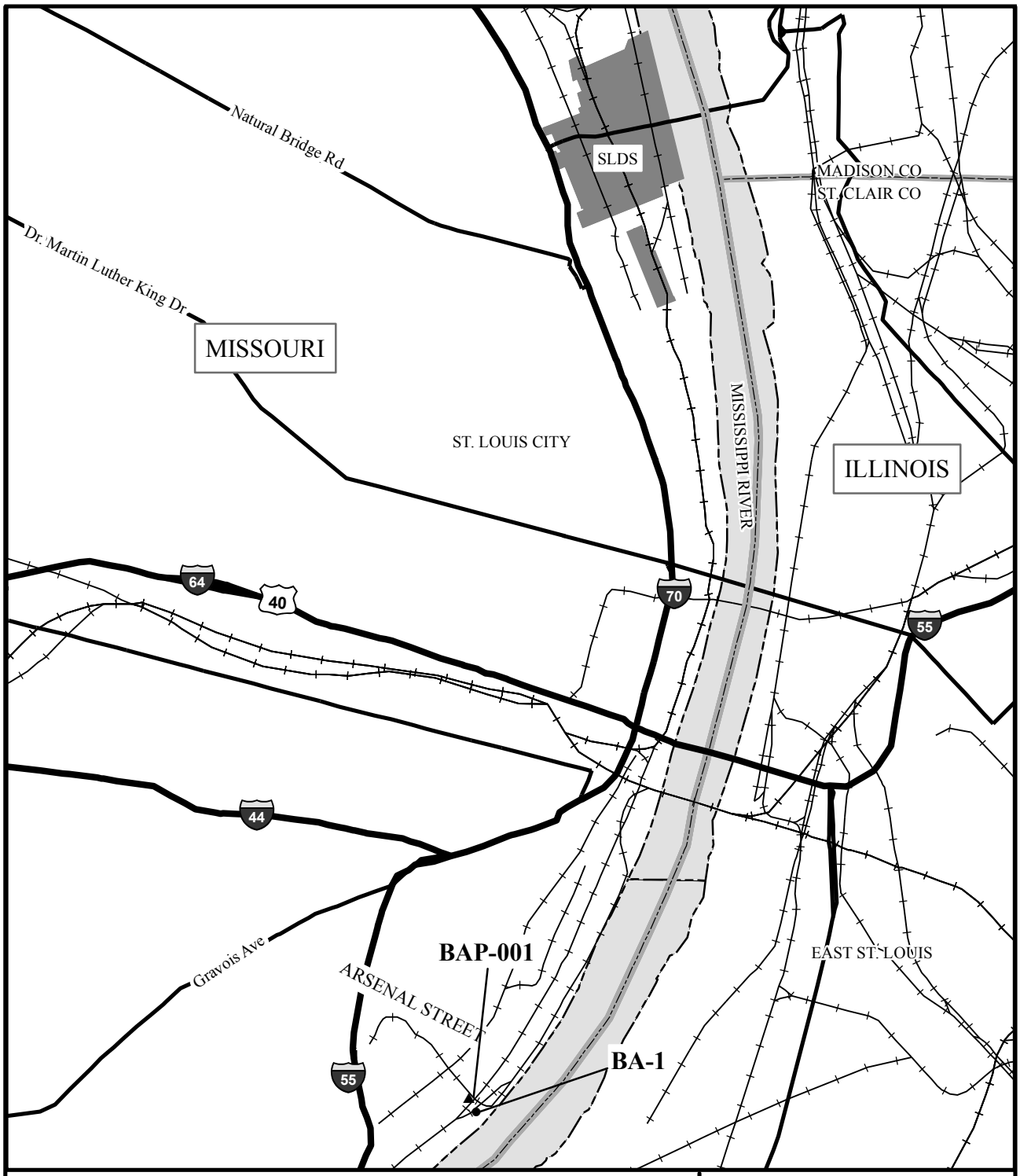


Figure 2-1. Gamma Radiation, Rn, and Particulate Air Monitoring at St. Louis Background Location - USACE Service Base

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	7-10-2012

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 2-1 Gamma Radiation, Rn, and Particulate Air Monitoring at St Louis Background Location.mxd

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 2-2 Gamma Radiation and Rn Monitoring Locations at the SLDS.mxd

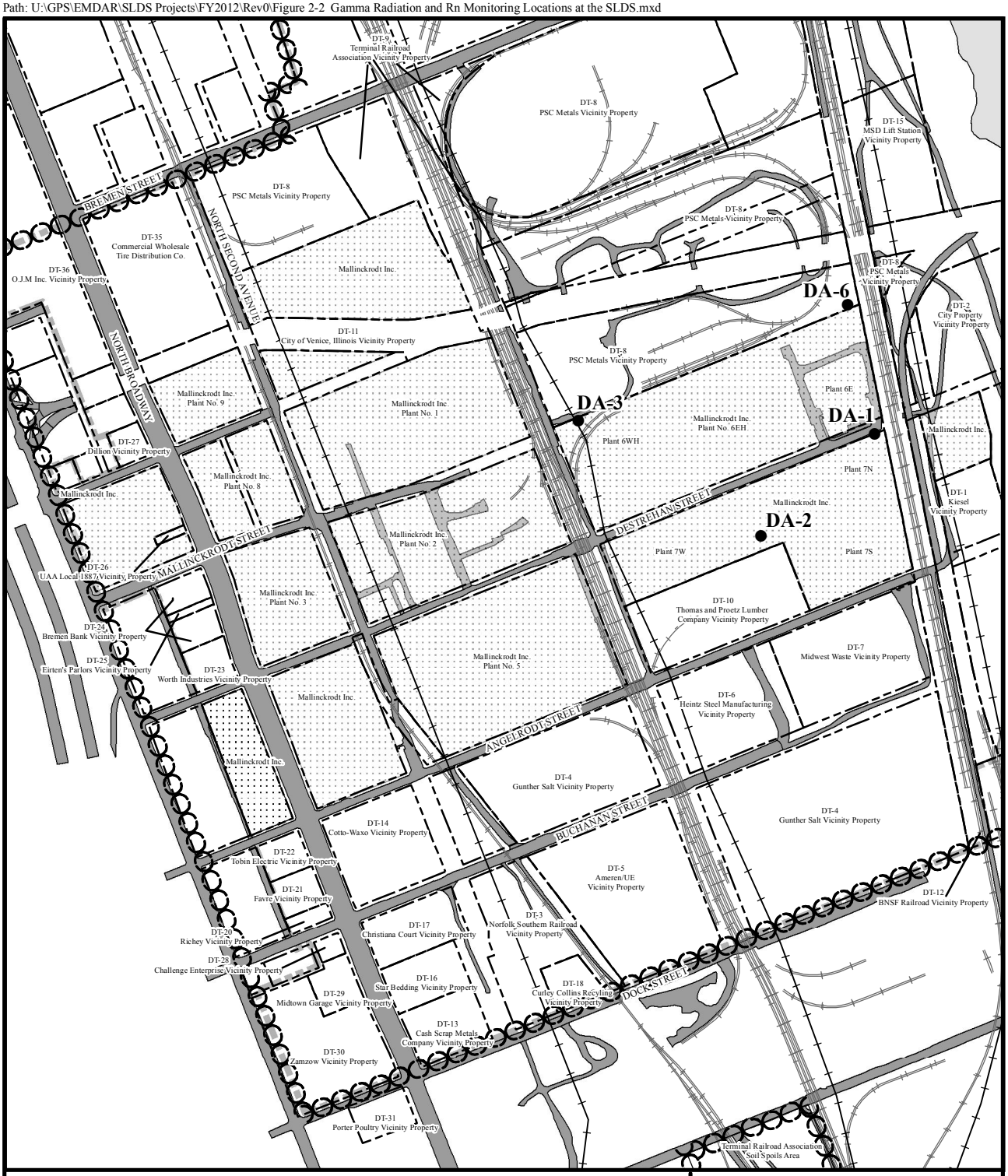
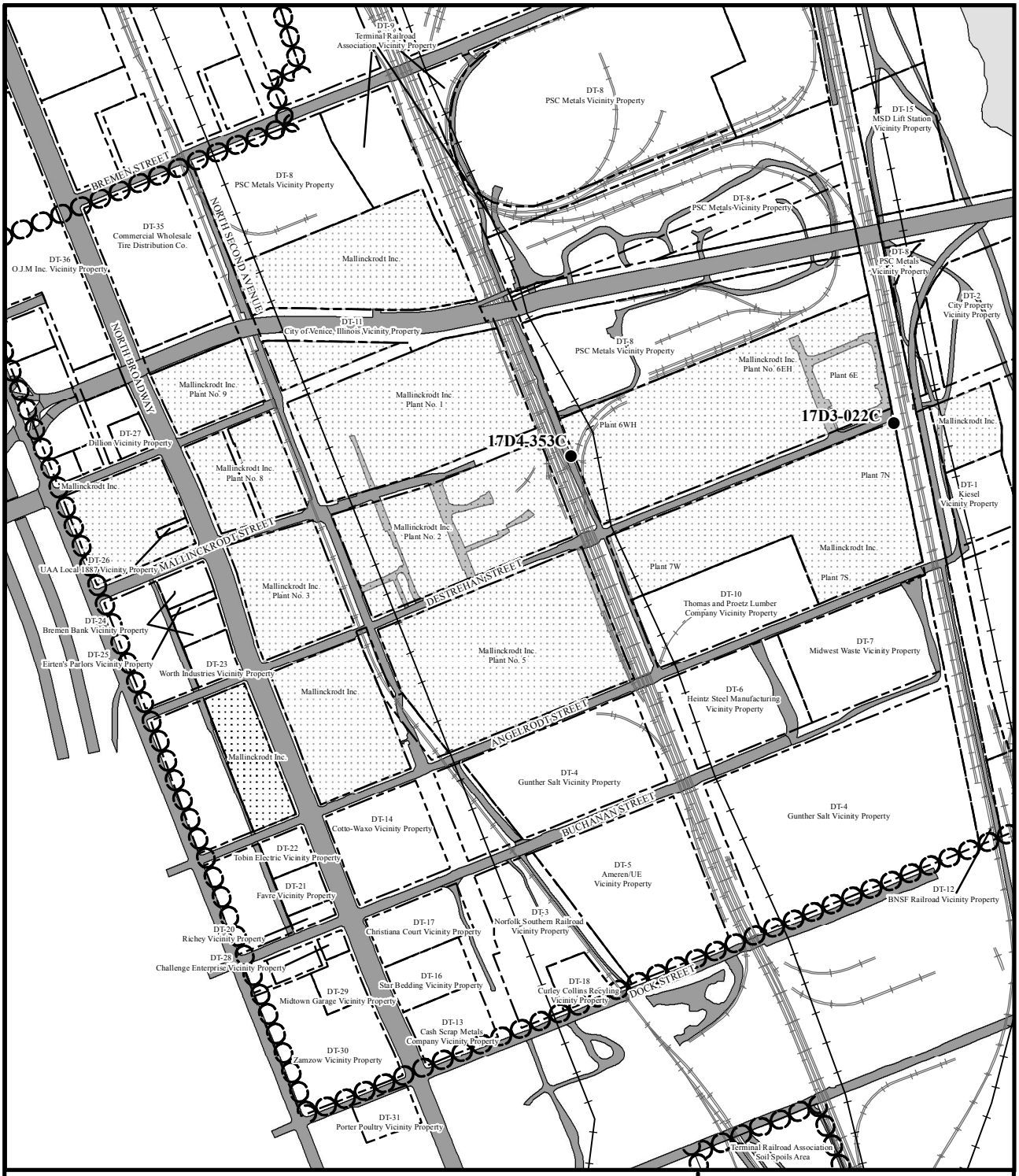


Figure 2-2. Gamma Radiation and Radon Monitoring Locations at the SLDS.

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	6-19-2012



Legend

- ROD Boundary
- Vicinity Properties
- Mallinckrodt Property
- River/Stream
- Railroad
- Road
- Metropolitan St. Louis Sewer District (MSD) Excavation Water Discharge Location

N
W E
S

MO-East State Plane (NAD 83, Feet)

0 230 460 Feet

Figure 3-1. Excavation-Water Discharge MSD Stations at the SLDS

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	6-19-2012

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 3-1 Excavation-Water Discharge Stations at the SLDS.mxd

Unit Designation	Approximate Thickness (ft)	Description
Upper Hydrostratigraphic Unit (HU-A)	0-25	**RUBBLE and FILL** Grayish black (N2) to brownish black (5YR2/1). Dry to slightly moist, generally becoming moist at 5-6 ft and saturated at 10-12 ft. Slight cohesion, variable with depth, moisture content and percentage of fines present. Consistency of relative density is unrepresentative due to large rubble fragments. Rubble is concrete, brick, glass, and coal slag. Percentage of fines as silt or clay increases with depth from 5 to 30 percent. Some weakly cemented aggregations of soil particles. Adhesion of fines to rubble increases with depth and higher moisture content. Degree of compaction is slight to moderate with frequent large voids.
	0-10	**Silty CLAY (CH)** Layers are mostly olive gray (5Y2/1), with some olive black (5Y2/1). Predominantly occurs at contact of undisturbed material, or at boundary of material with elevated activity. Abundant dark, decomposed organics. Variable percentages of silt and clay composition.
	0-5	**CLAY (CL)** Layers are light olive gray (5Y5/2), or dark greenish gray (5GY4/1). Slightly moist to moist, moderate cohesion, medium stiff consistency. Tends to have lowest moisture content. Slight to moderate plasticity.
	0-2.5	**Interbedded CLAY, silty CLAY, SILT and Sandy SILT (CL, ML, SM)** Dark greenish gray (5GY4/1) to light olive gray (5Y6/1). Moist to saturated, dependent on percentage of particle size. Contacts are sharp, with structure normal to sampler axis to less than 15 degrees downdip. Layer thicknesses are variable, random in alternation with no predictable vertical gradation or lateral continuity. Some very fine-grained, rounded silica sand as stringers. Silt in dark mafic, biotite flakes. Some decomposed organics.
Lower Hydrostratigraphic Unit (HU-B)	0-10	**Sandy SILT (ML)** Olive gray (5Y4/1). Moist with zones of higher sand content saturated. Slight to moderate cohesion, moderate compaction. Stiff to very stiff consistency, rapid dilatancy, nonplastic. Sand is well sorted, very fine and fine-grained rounded quartz particles.
	0-50	**Silty SAND and SAND (SM, SP, SW)** Olive gray (5Y4/1). Saturated, slight cohesion, becoming noncohesive with decrease of silt particles with depth. Dense, moderate compaction. Moderate to well-graded, mostly fine- and medium-grained, with some fine- and coarse-grained particles. Mostly rounded with coarse grains slightly subrounded. Gradual gradation from upper unit, silty sand has abundant dark mafic/biotite flakes. Sand is well-graded, fine gravel to fine sand. Mostly medium-grained, with some fine-grained and few coarse-grained and fine gravel.
Limestone Bedrock Unit (HU-C)	Total thickness not penetrated during drilling	**LIMESTONE** Light olive gray (5Y4/1) with interbedded chert nodules. Generally hard to very hard; difficult to scratch with knife. Slightly weathered, moderately fresh with little to no discoloration or staining. Top 5 ft is moderately fractured, with 99 percent of joints normal to the core axis. Joints are open, planar, and smooth. Some are slightly discolored with trace of hematite staining.

SOURCE: MODIFIED FROM DOE 1994.
NOTE: THE CODES IN PARENTHESES FOLLOWING THE LITHOLOGIES ARE THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) CODES.

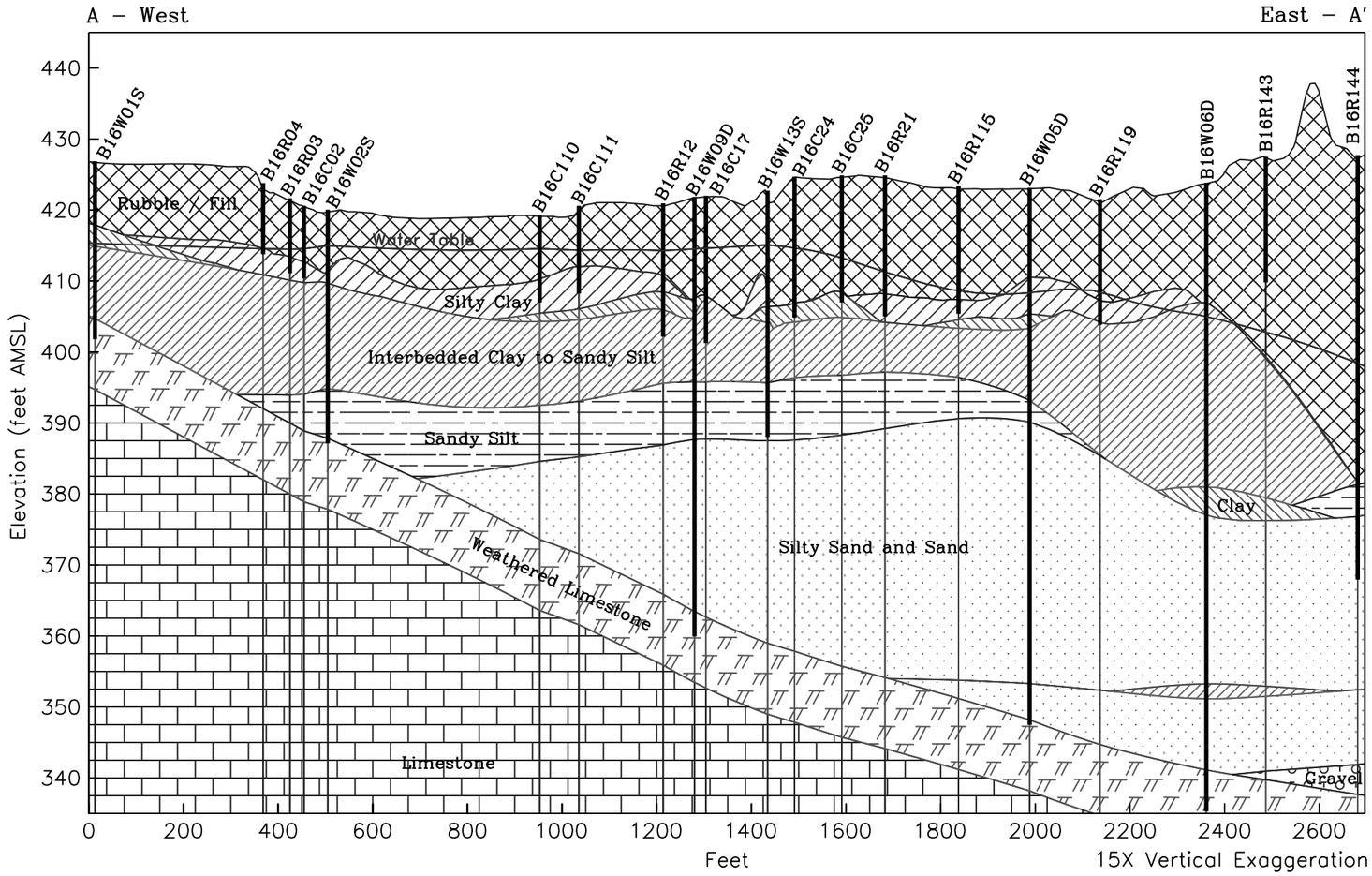
THE CODES IN PARENTHESES FOLLOWING THE COLORS REPRESENT CHROMA, HUE, AND VALUE FROM THE MUNSELL SOIL COLOR CHARTS.

NOT TO SCALE

FUSRAP

Figure 4-1. Generalized Stratigraphic Column for the SLDS

DRAWN BY:	REV. NO./DATE:	CAD FILE:
C.Kaple	0 - 06/01/00	



Geologic data used in the cross section collected prior to 1998.

Cross Section Location Map

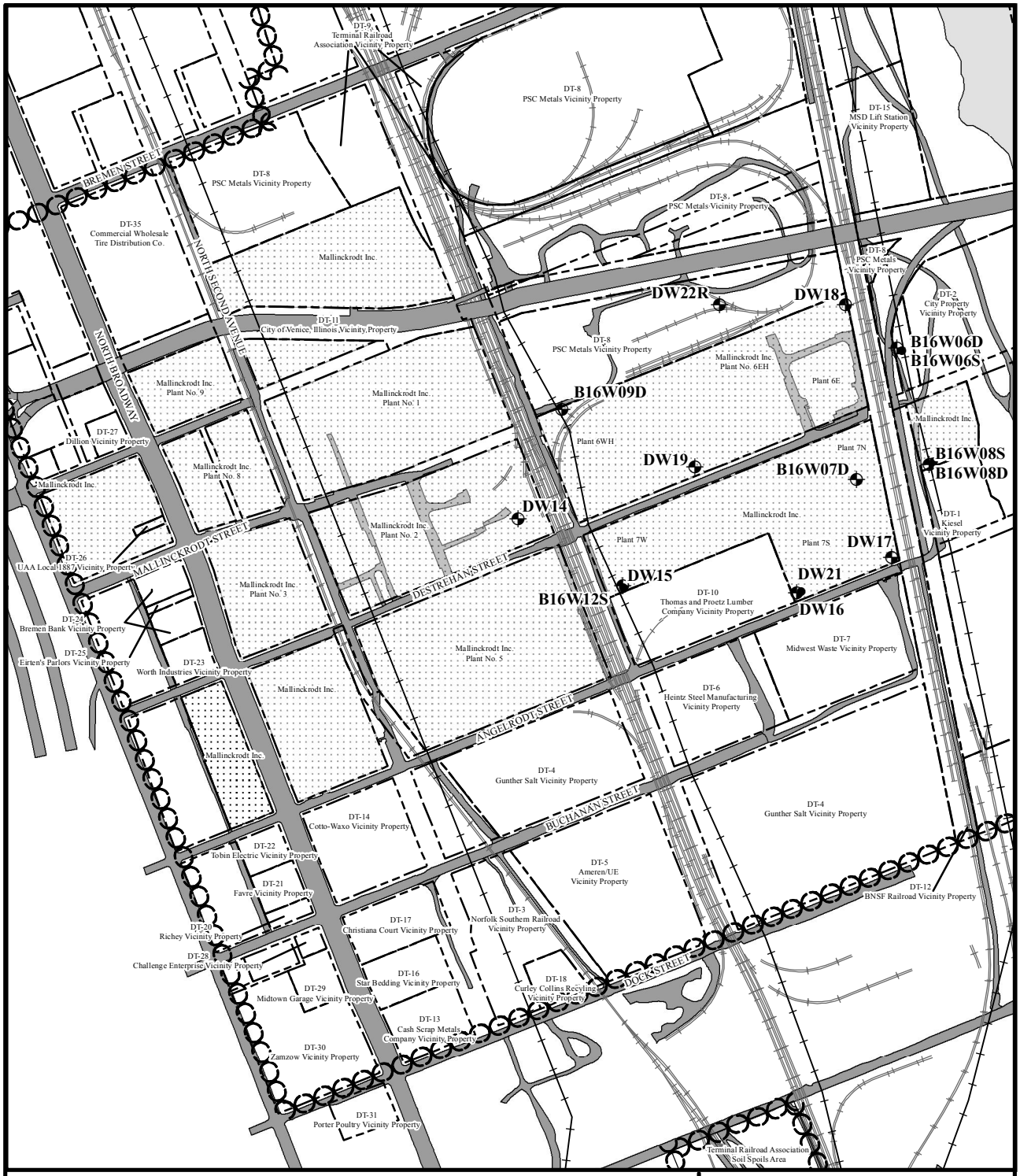
FUSRAP

Figure 4-2. SLDS Geologic Cross-Section A-A'

Drawn By: R. Smith

Rev. No. - Date: 0 - 03/24/99

File: SLDSGlg01XSectA.sho



Legend

- HU-A
- HU-B
- ROD Boundary
- Mallinckrodt Property
- Vicinity Properties
- Railroad
- Road

N
W
E
S

MO-East State Plane
(NAD 83, Feet)

0 120 240 Feet

Figure 4-3.
Ground-Water Monitoring Well Locations at the SLDS

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	6-19-2012

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 4-3 Ground-Water Monitoring Well Locations at the SLDS.mxd

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 4-4 Arsenic Concentration Trends in Unfiltered Ground WAter at the SLDS.mxd

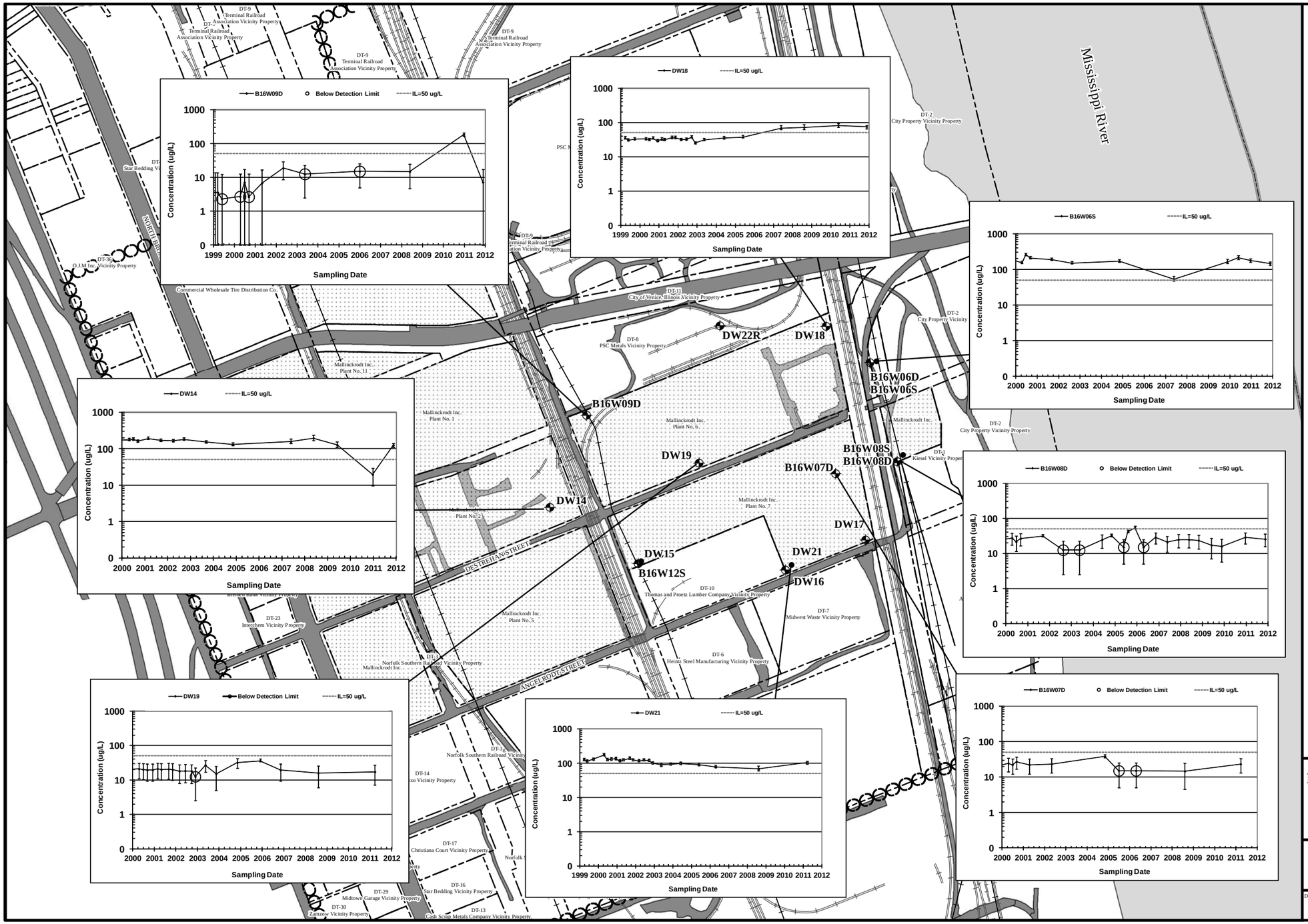
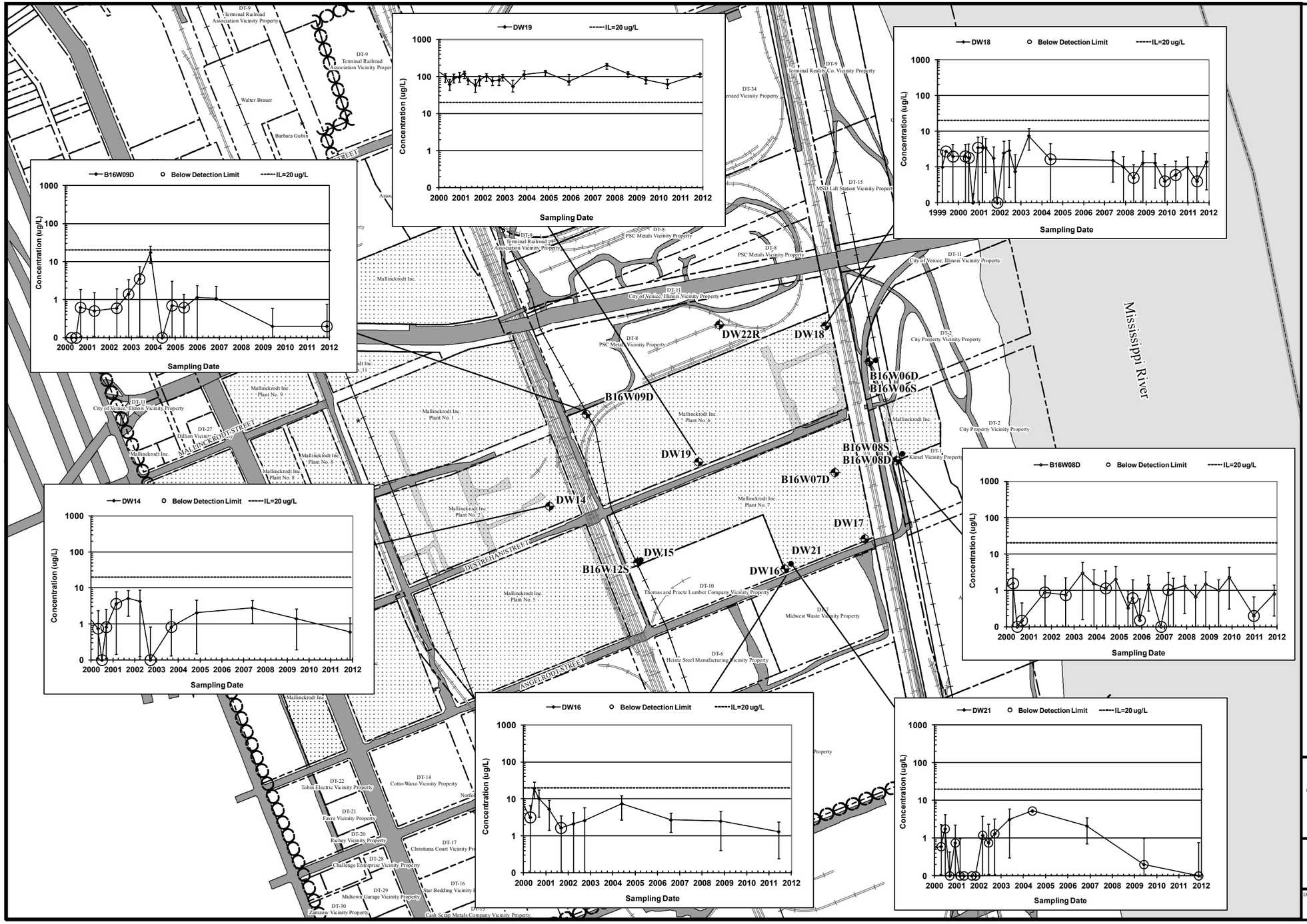


Figure 4-4. Arsenic Concentration Trends in Unfiltered Ground Water at the SLDS

FUSRAP

DRAWN BY:	REV:	DATE:
TDC, KLP	0	6-19-2012

Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure 4-5 Total Uranium Concentrations in Unfiltered HZ-A Ground Water at the Latty Avenue Properties.mxd



Legend

- ROD Boundary
- Vicinity Properties
- Road
- Mallinckrodt Property
- Railroad
- River/Stream
- Existing HU-A Monitoring Well
- Existing HU-B Monitoring Well
- Error Bars are depicted on this chart but may not be visible due to the logarithmic scale.

N
W E
S

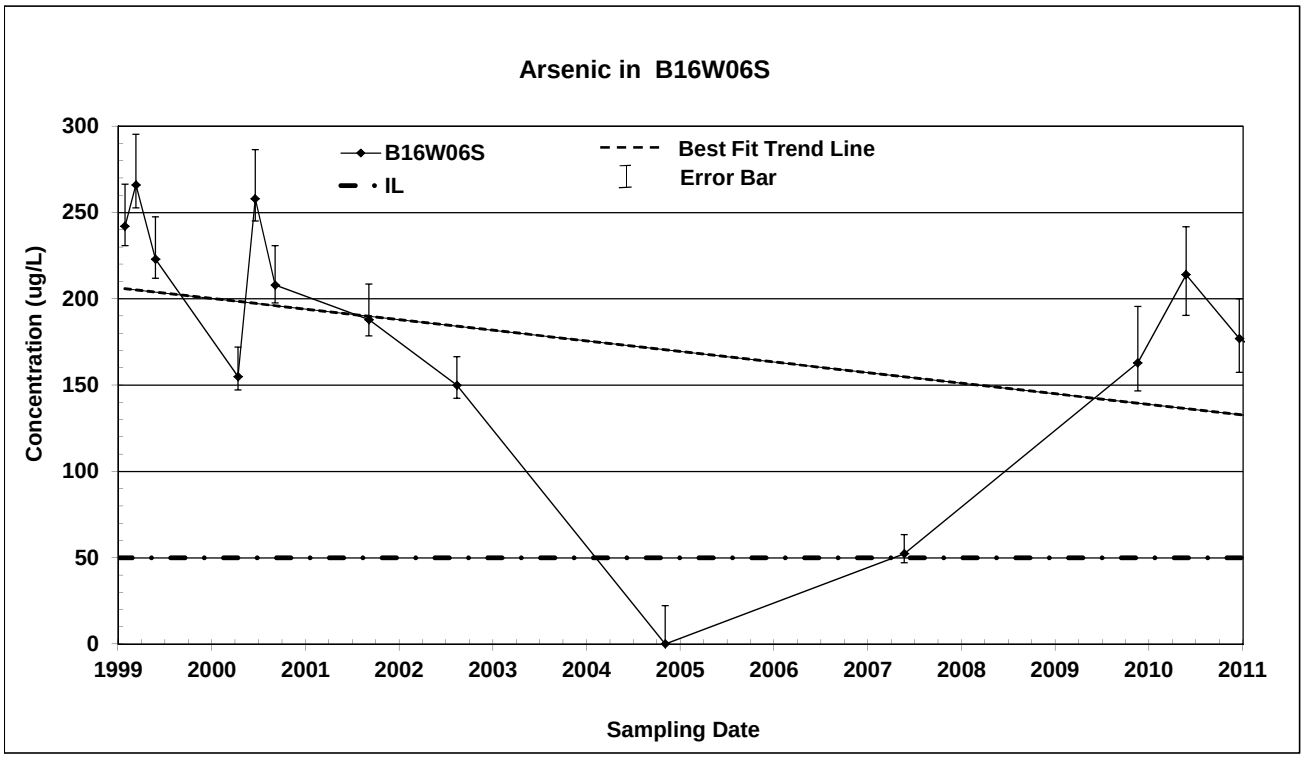
MO-East State Plane
(NAD 83, Feet)

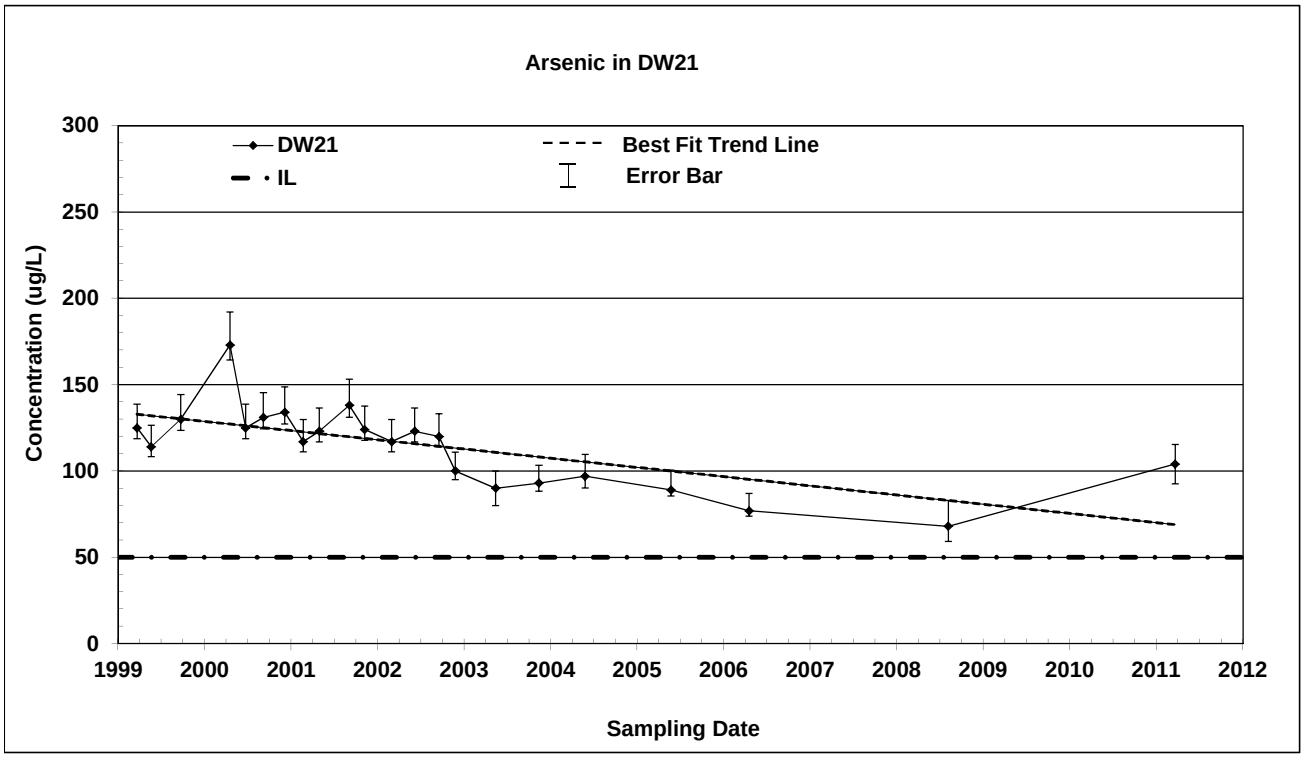
0 87.5 175 Feet

Figure 4-5. Total Uranium Concentration Trends in Unfiltered Ground Water at the SLDS

FUSRAP

DRAWN BY:	REV:	DATE:
KLP	0	6-19-2012

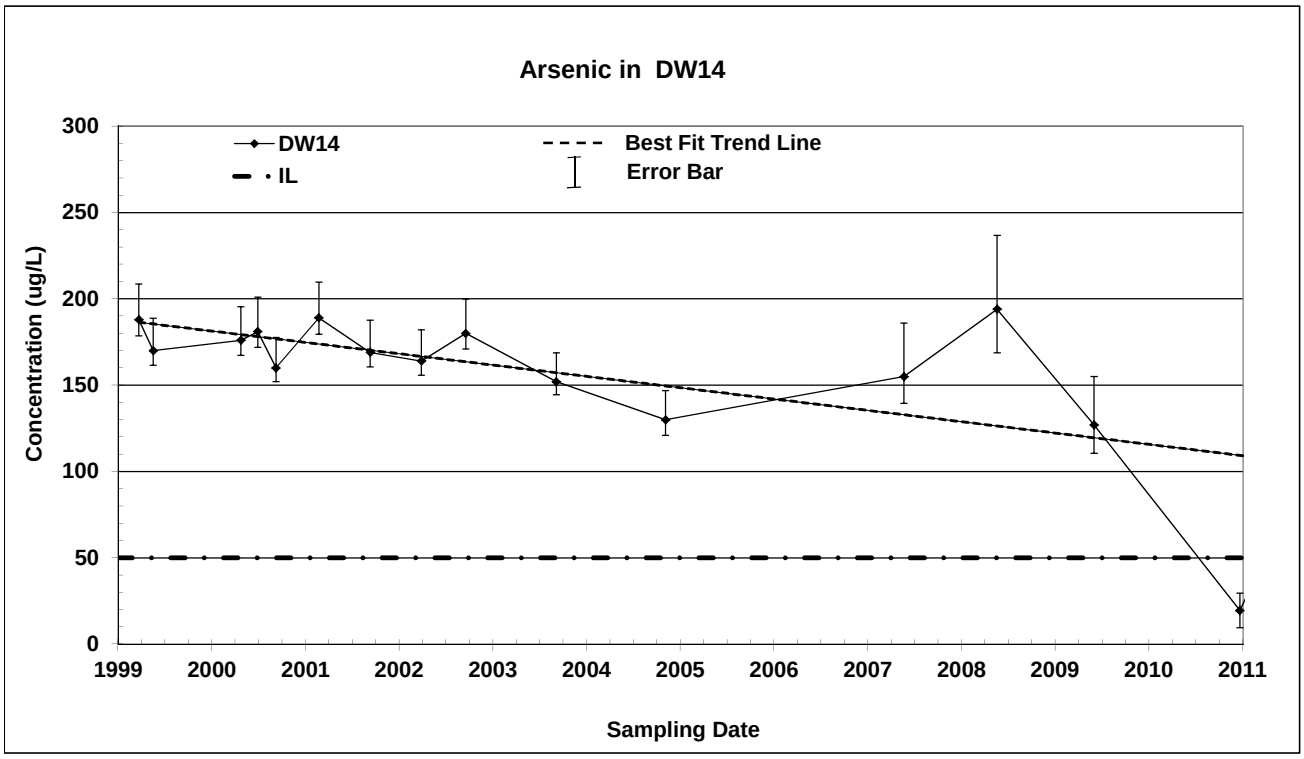


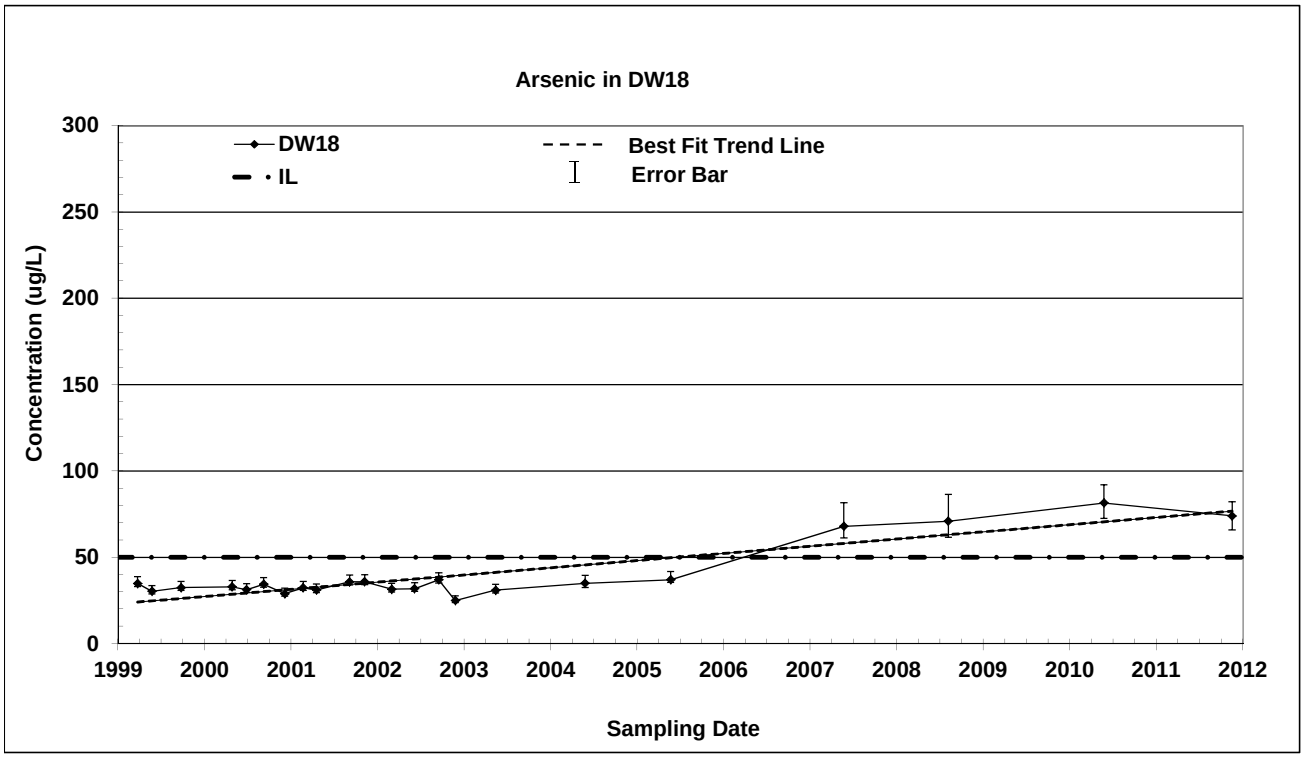


Notes:

For arsenic results less than 3 times the reporting limit (RL), the error bar represents ± RL.
For arsenic results exceeding 3 times the RL, the error bar represents the Upper and Lower Control Limits on the Control Spike Samples.
Arsenic error bars for 2003 and earlier are based on laboratory control limits for 2003. Error bars for 2004 and later are based on laboratory control limits reported for the respective years.

Figure 4-6. Time-Versus-Concentration Plots for SLDS

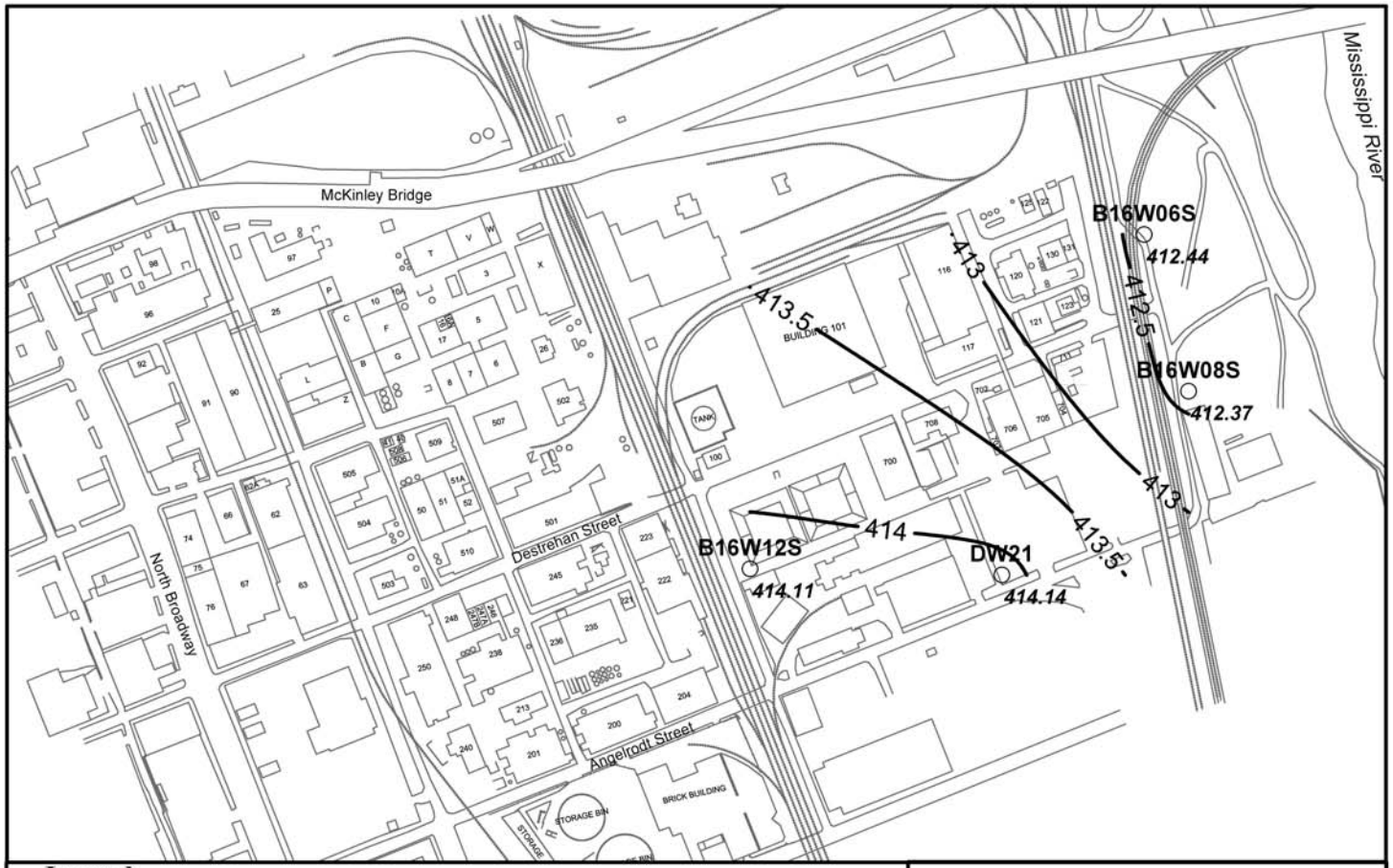




Notes:

For arsenic results less than 3 times the reporting limit (RL), the error bar represents ± RL.
For arsenic results exceeding 3 times the RL, the error bar represents the Upper and Lower Control Limits on the Control Spike Samples.
Arsenic error bars for 2003 and earlier are based on laboratory control limits for 2003. Error bars for 2004 and later are based on laboratory control limits reported for the respective years.

Figure 4-6. Time-Versus-Concentration Plots for SLDS (Continued)



Legend:

——— **HU-A Ground-Water Elevation Contours**

○ **HU-A Monitoring Well Locations**

Ground-water elevations in feet above mean sea level (amsl)
0.5 - foot contour interval; contours dashed where inferred.

SCALE: 1 inch = 400 ft

0 200 400 600 800

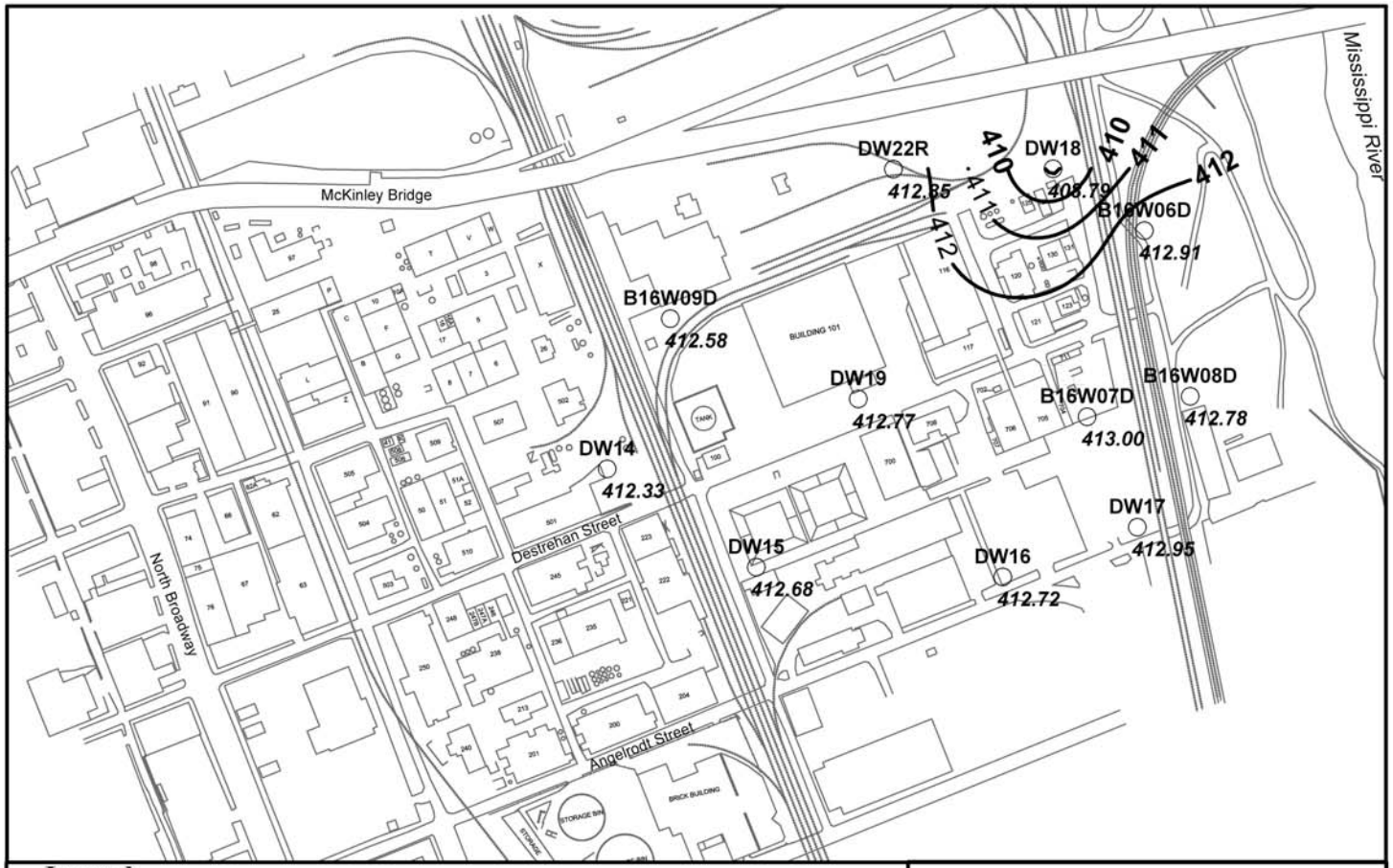
N

MO - East State Plane Coordinate System (NAD83, Feet)

FUSRAP

Figure 4-7. HU-A Potentiometric Surface at the SLDS (June 6, 2011)

DRAWN BY:	REV. - DATE:
C. Woehr	0 - 1/18/11



Legend:

——— **HU-B Ground-Water Elevation Contours**

○ **HU-B Monitoring Well Locations**

Ground-water elevations in feet above mean sea level (amsl)
1.0 - foot contour interval; contours dashed where inferred.

SCALE: 1 inch = 400 ft

0 200 400 600 800

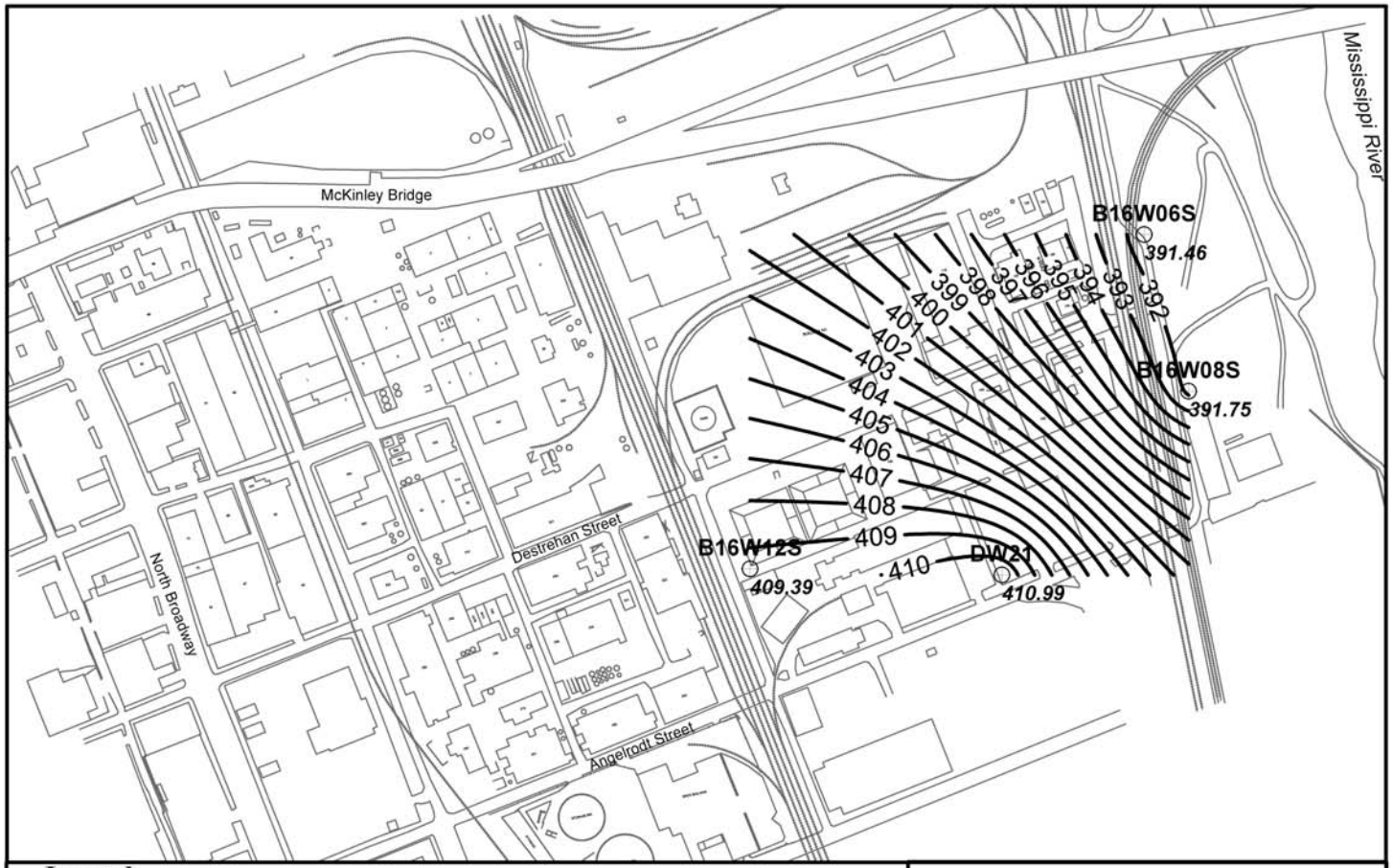
N

MO - East State Plane Coordinate System (NAD83, Feet)

FUSRAP

Figure 4-8. HU-B Potentiometric Surface at the SLDS (June 6, 2011)

DRAWN BY:	REV. - DATE:
C. Woehr	1 - 4/24/12



Legend:

——— **HU-A Ground-Water Elevation Contours**

○ **HU-A Monitoring Well Locations**

Ground-water elevations in feet above mean sea level (amsl)
1.0 - foot contour interval; contours dashed where inferred.

SCALE: 1 inch = 400 ft

0 200 400 600 800

N

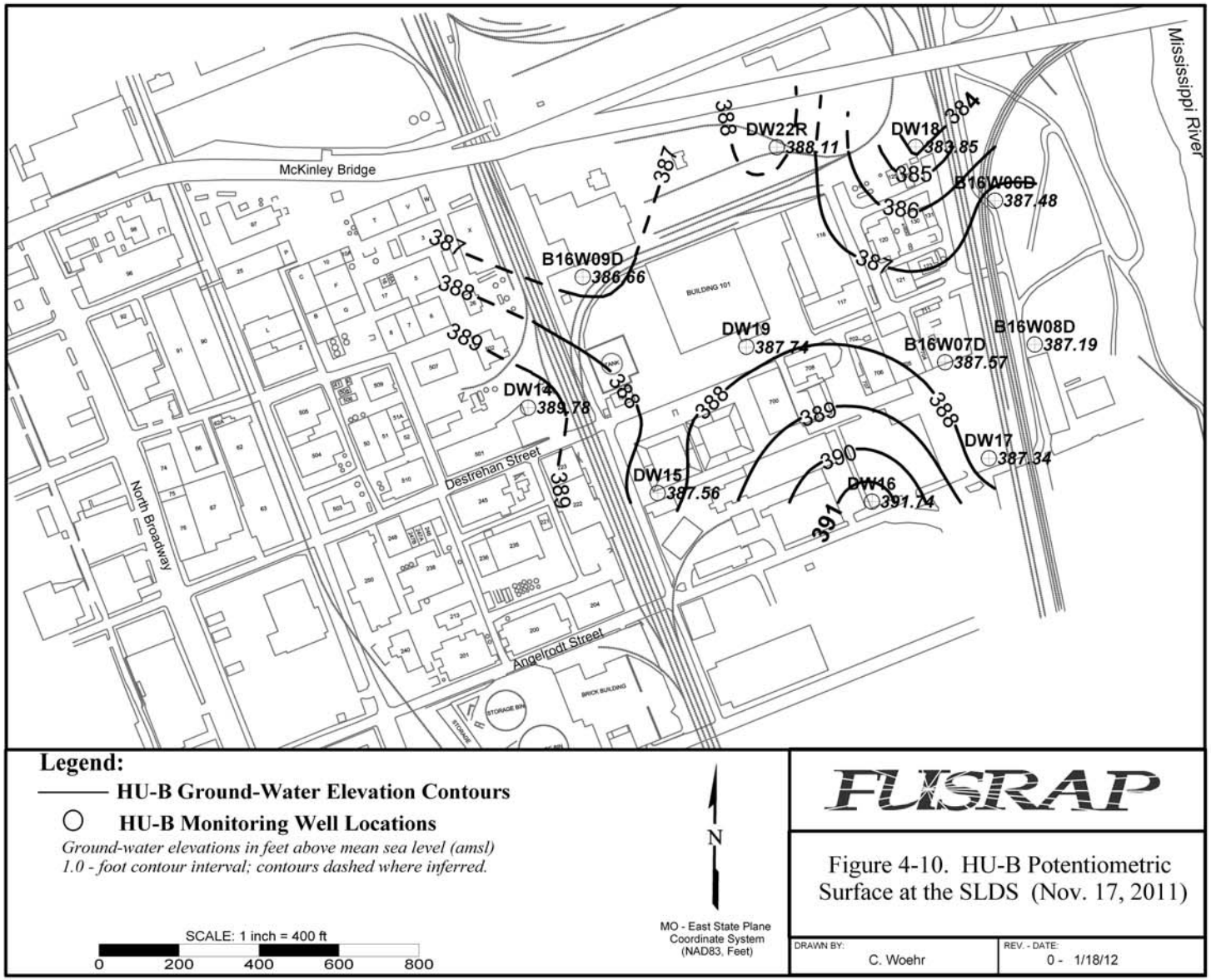
MO - East State Plane Coordinate System (NAD83, Feet)

FUSRAP

Figure 4-9. HU-A Potentiometric Surface at the SLDS (Nov. 17, 2011)

DRAWN BY: C. Woehr

REV. - DATE: 0 - 01/18/12


McKinley Bridge
Mississippi River
North Broadway
Destrehan Street
Angelrodt Street
DW22R
388.11
DW18
383.85
B16W06D
387.48
B16W09D
386.66
DW19
387.74
B16W08D
387.19
B16W07D
387.57
DW14
389.78
DW15
387.56
DW16
391.74
DW17
387.34
384
385
386
387
388
389
390
391
Legend:
HU-B Ground-Water Elevation Contours
HU-B Monitoring Well Locations
Ground-water elevations in feet above mean sea level (amsl)
1.0 - foot contour interval; contours dashed where inferred.
SCALE: 1 inch = 400 ft
0
200
400
600
800
N
MO - East State Plane Coordinate System (NAD83, Feet)
FUSRAP
Figure 4-10. HU-B Potentiometric Surface at the SLDS (Nov. 17, 2011)
DRAWN BY:
C. Woehr
REV. - DATE:
0 - 1/18/12

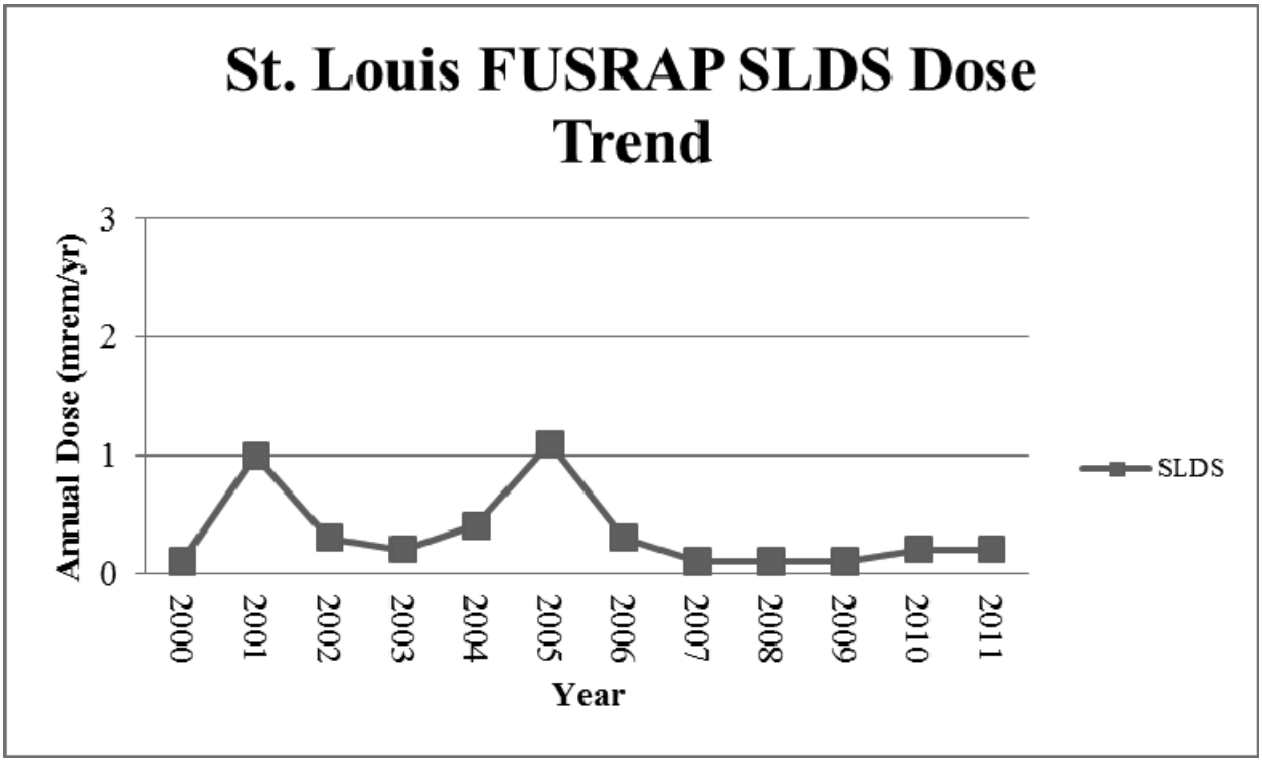


Figure 6-1. St. Louis FUSRAP SLDS Dose Trends

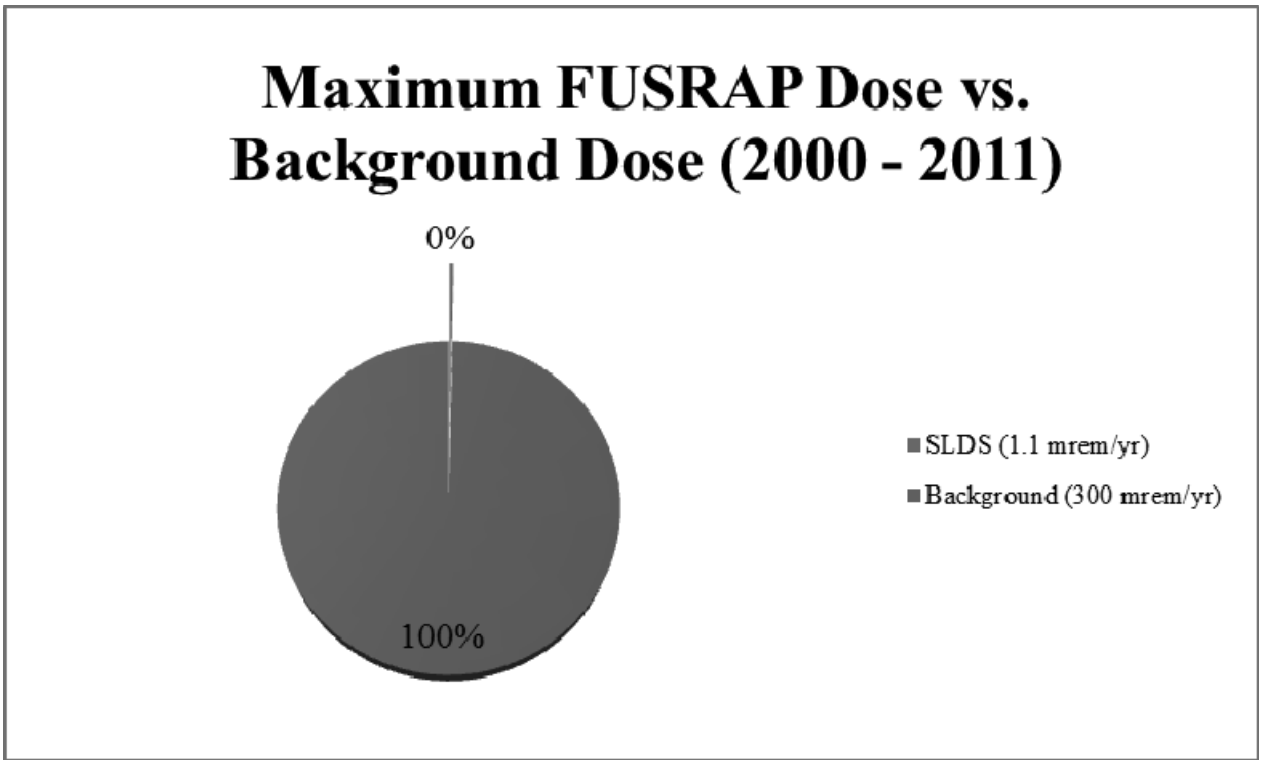


Figure 6-2. St. Louis FUSRAP SLDS Maximum Dose vs. Background Dose

APPENDIX A

ST. LOUIS DOWNTOWN SITE 2011 RADIONUCLIDE EMISSIONS NESHAP REPORT SUBMITTED IN ACCORDANCE WITH REQUIREMENTS OF 40 *CFR* 61, SUBPART I

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TABLE OF CONTENTS

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ACRONYMS AND ABBREVIATIONS

µCi/cm^3	microcurie per cubic centimeter
µCi/mL	microcurie per milliliter
AEC	U.S. Atomic Energy Commission
BNSF	Burlington Northern Santa Fe
° C	degree(s) Celsius (centigrade)
CFR	*Code of Federal Regulations*
Ci/yr	curie per year
cm/yr	centimeter per year
CY	calendar year
EDE	effective dose equivalent
FUSRAP	Formerly Utilized Sites Remedial Action Program
GIS	geographic information system
m	meter(s)
m^2	square meter
Mallinckrodt	Mallinckrodt Chemical Works
MED	Manhattan Engineer District
m/min	meters per minute
m^3/min	cubic meter(s) per minute
mrem/yr	millirem per year
mSv/yr	Milliseivert per year
NESHAP	National Emission Standard for Hazardous Air Pollutants
SLAPS	St. Louis Airport Site
SLDS	St. Louis Downtown Site
USEPA	U.S. Environmental Protection Agency
VP	vicinity property

EXECUTIVE SUMMARY AND DECLARATION STATEMENT

This report presents the results of National Emission Standard for Hazardous Air Pollutants (NESHAP) calculations for the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) St. Louis Downtown Site (SLDS) for calendar year (CY) 2011. NESHAP requires the calculation of the effective dose equivalent (EDE) from radionuclide emissions to critical receptors. The report follows the requirements and procedures contained in 40 *Code of Federal Regulations* (*CFR*) 61, Subpart I, *National Emission Standards for Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H.*

This report evaluates the SLDS properties where there was a reasonable potential for radionuclide emissions due to St. Louis FUSRAP activities. These sites include: City Property Vicinity Property (VP) (DT-2), Burlington Northern Santa Fe (BNSF) Railroad VP (DT-12), Plant 7, and Plant 6 Loadout.

Emissions from the SLDS were evaluated for the entire CY 2011 to provide a conservative estimate of total emissions.

The NESHAP standard of EDE to a critical receptor from radionuclide emissions is 10 millirem per year (mrem/yr) (0.1 milliseivert per year [mSv/yr]). The SLDS did not exceed this standard. The EDE from radionuclide emissions at the SLDS was calculated using soil characterization data, air particulate monitoring data, and the U.S. Environmental Protection Agency (USEPA) CAP88-PC modeling code, which resulted in an EDE at the SLDS of 0.2 mrem/yr (0.002 mSv/yr).

The evaluation for the SLDS resulted in less than 10 percent of the dose standard in 40 *CFR* 61.102. This site is exempt from the reporting requirements of 40 *CFR* 61.104(a).

DECLARATION STATEMENT – 40 *CFR* 61.104(a)(xvi)

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 *U.S.Code* 1001.

_____ _____

Signature Date

Office: U.S. Army Corps of Engineers, St. Louis District Office
Address: 8945 Latty Ave.
Berkeley, MO 63134
Contact: Jon Rankins

1.0 PURPOSE

This report calculates the EDE from radionuclide emissions (exclusive of radon) to critical receptors from the SLDS where there was a reasonable potential for radionuclide emissions due to St. Louis FUSRAP activities. These sites include: DT-2, DT-12, Plant 7, and Plant 6 Loadout. The air emissions from the SLDS are ground releases of particulate radionuclides in soil as a result of windblown action and remedial activity in the form of excavation and off-site disposal of soil.

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2.0 METHOD

Emission rates for the SLDS were modeled using guidance documents referenced in 40 *CFR* 61, Appendix E, "Compliance Procedures Methods for Determining Compliance with Subpart I" (USEPA 1989), and were measured by collection of environmental air samples. Emission rates were input into the USEPA computer code CAP88-PC, along with appropriate meteorological data and distances to critical receptors[1], to obtain the EDE from the air emissions.

Although 40 *CFR* 61.103 requires the use of the USEPA computer code COMPLY, USEPA no longer supplies technical support for COMPLY. However, the USEPA lists both COMPLY and CAP88-PC as "Atmospheric transport models for assessing dose and risk from radioactive air emissions". The USEPA continues to maintain and update the CAP88-PC modeling program and has updated it as recently as December 9, 2007. In previous FUSRAP NESHAP reports, both COMPLY and CAP88-PC results have been compared. This comparison indicated that CAP88-PC is a comparable and conservative method of demonstrating compliance with 40 *CFR* 61, Subpart I. For these reasons, CAP88-PC was used in this report to demonstrate compliance with the NESHAP standard.

2.1 EMISSION RATE

The method used to determine particulate radionuclide emission rates from the sites was 40 *CFR* 61, Appendix D, "Methods for Estimating Radionuclide Emissions". Emissions during excavations were evaluated using air sampling data at the excavation and loadout perimeters.

2.2 EFFECTIVE DOSE EQUIVALENT

The EDE to critical receptors[1] is obtained using USEPA computer code CAP88-PC, Version 3.0 (USEPA 2007). CAP88-PC uses a Gaussian plume equation to estimate the dispersion of radionuclides and is referenced by the USEPA to demonstrate compliance with the NESHAP emissions criterion in 40 *CFR* 61. An area ground release at a height of one meter (m) is modeled for the SLDS.

The EDE is calculated by combining doses from ingestion, inhalation, air immersion, and external ground surface. CAP88-PC contains historical weather data libraries for major airports across the country, and the results can be modeled for receptors at multiple distances from the emissions source.

[1] "Critical receptors," as used in this report, are the locations for the nearest residence, school, business, and farm.

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3.0 METEOROLOGICAL DATA

Meteorological data was obtained from the CAP88-PC code for the St. Louis Lambert International Airport (wind file 13994.WND). Data in the file was accumulated from 1988 through 1992.

Average Annual Wind Velocity	4.446 meters/second
Average Annual Precipitation Rate	111 centimeters per year (cm/yr)
Average Annual Air Temperature	14.18 degrees Celsius (ºC)

Wind speed frequency data was obtained from St. Louis Lambert International Airport (see Table A.3-1).

Table A.3-1. St. Louis Wind Speed Frequency

Wind Speed Group, Knots[a]	Frequency
0 – 3	0.10
4 – 7	0.29
8 – 12	0.36
13 – 18	0.21
19 – 24	0.03
25 – 31	0.01

[a] knot = 1.151 miles/hour

Wind direction frequency was obtained from the CAP88-PC wind file, 13994.WND (see Table A.3-2).

Table A.3-2. St. Louis Wind Rose Frequency

Wind direction (wind toward)	Wind From	Wind Frequency	Wind direction (wind toward)	Wind From	Wind Frequency
N	S	0.131	S	N	0.056
NNW	SSE	0.074	SSE	NNW	0.043
NW	SE	0.068	SE	NW	0.061
WNW	ESE	0.069	ESE	WNW	0.087
W	E	0.055	E	W	0.090
WSW	ENE	0.028	ENE	WSW	0.068
SW	NE	0.031	NE	SW	0.054
SSW	NNE	0.037	NNE	SSW	0.050

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4.0 SLDS PROPERTIES UNDER ACTIVE REMEDIATION

4.1 SITE HISTORY

From 1942 until 1957, Mallinckrodt Chemical Works (Mallinckrodt) was contracted by the Manhattan Engineer District (MED) and the U.S. Atomic Energy Commission (AEC) to process uranium ore for the production of uranium metal. Residuals of the process, including spent pitchblende ore, process chemicals, and radium, thorium, and uranium, were inadvertently released from the Mallinckrodt Plant into the environment through handling and disposal practices. Residuals from the uranium process had elevated levels of radioactive radium, thorium, and uranium. From 1942 to 1945, Plants 1, 2, 6, 7, and 4 (now Plant 10) were involved in the development of uranium-processing techniques, uranium compounds and metal production, and uranium metal recovery from residues and scrap. Mallinckrodt decontaminated Plants 1 and 2 from 1948 through 1950 to meet the AEC criteria then in effect, and the AEC released these plants for use without radiological restrictions in 1951. Mallinckrodt is now owned and operated by Covidien.

4.2 MATERIAL HANDLING AND PROCESSING FOR CY 2011

Excavation activities were performed at the SLDS areas of DT-2, DT-12, and Plant 7. Additionally, loadout activities were performed at Plant 6. Excavated soils placed in the loadout area remained covered for most of the year, except during normal working hours. The excavated soils were removed from the site by rail. General area air samples were collected around excavation perimeters during CY 2011, with the results used to determine the excavation emissions. *In situ* emissions from inactive areas of SLDS were not calculated because the ground surface soil at SLDS is generally covered with asphalt or concrete that limits the potential for material to become airborne.

4.3 SOURCE DESCRIPTION – RADIONUCLIDE SOIL CONCENTRATIONS

For the SLDS excavation areas, the activity fraction for each radionuclide was determined from radionuclide concentrations listed in the *St. Louis FUSRAP Internal Dosimetry Technical Basis Manual* (USACE 1999) or in property-specific Pre-Design Investigation Reports. Attachment 1 contains summary tables of the radionuclide concentrations for each area or plant and VPs. The averaged total alpha and total beta air particulate concentrations at each SLDS property and the activity fraction for each corresponding property were used to calculate the emission rate for each area.

4.4 LIST OF ASSUMED AIR RELEASES FOR CY 2011

Wind erosion during periods of remedial action excavations and periods where the loadout pile was uncovered is assumed for the particulate radionuclide emission determinations from the SLDS. Unexcavated plants and VPs do not contribute to the emission determinations for periods of inactivity due to the low activity and cover.

4.5 DISTANCES TO CRITICAL RECEPTORS

The distances to critical receptors are shown on Figure A-1 and are listed in Table A.4-1. Distances and directions to critical receptors are determined by using tools in a geographic information system (GIS).

Table A.4-1. SLDS Critical Receptors for CY 2011

Sources	Resident		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction
DT-2	875	SW	2,515	ENE	325	SW	1,165	WSW
DT-12	695	W	2,895	NE	340	NW	1,180	W
Plant 7	615	SW	2,805	NE	75	SW	960	W
Plant 6 Loadout	495	SW	2,915	NE	160	SSE	750	W

4.6 EMISSIONS DETERMINATION

4.6.1 Measured Airborne Radioactive Particulate Emissions

Particulate air samples were collected from several locations around the perimeter of the SLDS excavation and loadout areas to measure the radionuclide emissions from remedial activities. The samplers were established at the start of each remedial activity and provide the basis for determining the radionuclide emission rates during CY 2011. The average gross alpha and beta concentrations in microcuries per milliliter (μCi/mL) are determined for each area or plant location for CY 2011. The area or plant average concentrations are presented in Table A.4-2.

Table A.4-2. SLDS Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2011

Sampler Location	Average Concentration (μCi/mL)	
	Gross Alpha	Gross Beta
DT-2	3.54E-15	2.49E-14
DT-12	7.34E-15	4.86E-14
Plant 7	2.93E-15	2.43E-14
Plant 6 Loadout	3.79E-15	3.07E-14
Background Concentration[a]	3.37E-15	1.97E-14

[a] These concentrations are only provided for informational purposes. However, as a conservative approach, they were not subtracted from the gross average concentration during the determination of the EDE.

The activity fractions for all radionuclides at each SLDS property were determined as discussed in Section 4.3. The product of the radionuclide activity fraction and the gross concentration for each property provides the radionuclide emission concentration in microcuries per cubic centimeter (μCi/cm^3) for that area. The gross average concentration (μCi/cm^3) is converted to a release (emission) rate as measured in curies per year (Ci/yr) using Equations (1) and (2). The emission rates are summarized in Table A.4-5.

USEPA 1989 (page 3-21, [2]) provides Equation (1) for determination of the effective diameter of a non-circular stack or vent.

$$D = (1.3\ A)^{1/2} \qquad \textbf{Equation (1)}$$

where:

D is the effective diameter of the release (m), and

A is the area of the stack, vent or release point in square meters (m^2).

Table A.4-3 provides the effective surface area available for release of airborne radionuclides normalized to one year and the effective diameter for each area or plant of SLDS where excavation or loadout was conducted in CY 2011. Calculation of the effective surface area can be referenced in Attachment 1.

Table A.4-3. SLDS Excavation Effective Areas and Effective Diameters for CY 2011

SLDS Location	Effective Area (m^2)	Effective Diameters (m)
DT-2	1,636	46
DT-12	4	2
Plant 7	942	35
Plant 6 Loadout	460	24

The average annual wind speed for the St. Louis Lambert International Airport is provided in CAP88-PC as 4.446 meters/second. Conversion of this wind speed to a flow rate through stacks with the listed effective diameters for each area is completed using Equation (2).

$$V = (4)\ F / \pi\ (D)^2 \qquad \textbf{Equation (2)}$$

where:

V is the wind velocity (meters per minute [m/min]) = 266.76 m/min,
F is the flow rate (cubic meters per minute [m^3/min]),
π is a mathematical constant, and
D is the effective diameter of the release determined using Equation (1) above (m).

Converting the velocity of emissions from the sites to an effective flow rate results in the following site release flow rates for the SLDS areas, as listed in Table A.4-4. The product of the flow rate, the activity fraction associated with each radionuclide, and the appropriate conversion factors provide the site emission rate for each radionuclide, as illustrated in Table A.4-5. Attachment 1 can be referenced for flow rate and average radionuclide concentration data.

Table A.4-4. SLDS Site Release Flow Rates for CY 2011

SLDS Location	Site Release Flow Rate (m^3/min.)
DT-2	4.5E+05
DT-12	1.0E+03
Plant 7	2.6E+05
Plant 6 Loadout	4.5E+05

4.6.2 SLDS Total Airborne Radioactive Particulate Emission Rates

The CY 2011 emission rates for each excavated SLDS area are presented in Table A.4-5 and are based on the air samples collected from the perimeter of the excavated areas.

Table A.4-5. SLDS Area Airborne Radioactive Particulate Emission Rates Based on Excavation Perimeter Air Samples for CY 2011

Radionuclide	Emission (Ci/yr)[a]			
	DT-2	DT-12	Plant 7	Plant 6 Loadout
U-238	3.1E-04	8.6E-07	9.7E-05	9.0E-05
U-235	1.4E-05	4.8E-08	4.6E-06	4.5E-06
U-234	3.0E-04	8.6E-07	9.7E-05	9.0E-05
Ra-226	8.2E-05	5.5E-07	6.0E-05	1.7E-05
Th-232	9.0E-06	1.9E-07	2.3E-05	4.5E-06
Th-230	7.8E-05	8.9E-07	6.5E-05	3.4E-05
Th-228	9.0E-06	1.9E-07	2.3E-05	4.5E-06
Ra-224	9.0E-06	1.9E-07	2.3E-05	4.5E-06
Th-234	2.8E-03	1.0E-05	1.3E-03	9.8E-04
Pa-234m	2.8E-03	1.0E-05	1.3E-03	9.8E-04
Th-231	1.3E-04	5.8E-07	6.3E-05	4.9E-05
Ra-228	8.2E-05	2.2E-06	3.1E-04	4.9E-05
Ac-228	8.2E-05	2.2E-06	3.1E-04	4.9E-05
Pa-231	1.4E-05	4.8E-08	4.6E-06	4.5E-06
Ac-227	1.4E-05	4.8E-08	4.6E-06	4.5E-06

[a] Release rate based on 365-day period at a respective flow rate (as presented in Table A.4-4) as determined from the average annual wind speed (4.446 meters/second) and the effective site area (as presented in Table A.4-3) for each location.

4.7 CAP88-PC RESULTS

The CAP88-PC report is contained in Attachment 2. The effective area factor input was taken from Table A.4-3. This evaluation demonstrates that all SLDS critical receptors receive less than 10 percent of the dose standard in 40 *CFR* 61.102 and therefore, SLDS is exempt from the reporting requirements of 40 *CFR* 61.104(a). Table A.4-6 summarizes the results.

Table A.4-6. SLDS CAP88-PC Results for Critical Receptors for CY 2011

Source	Dose (mrem/yr)			
	Resident[a]	School[b]	Business[b]	Farm[a]
DT-2	<0.1	<0.1	<0.1	<0.1
DT-12	<0.1	<0.1	<0.1	<0.1
Plant 7	0.1	<0.1	0.1	<0.1
Plant 6 Loadout	<0.1	<0.1	<0.1	<0.1
SLDS Total Dose[c]	**0.1**	**<0.1**	**0.2**	**<0.1**

[a] 100 percent occupancy factor.
[b] Corrected for the 23 percent occupancy factor (50 weeks/yr 40 hours/week).
[c] Combined dose from all sources at SLDS.

5.0 REFERENCES

USACE 1999. *St. Louis-FUSRAP Internal Dosimetry Technical Basis Manual*, U.S. Army Corps of Engineers, St. Louis District Office, FUSRAP, November.

USACE 2010. *Pre-Design Investigation Data Summary Report, Burlington Northern Santa Fe Railroad Vicinity Property (DT-12), FUSRAP St. Louis Downtown Site, St. Louis, Missouri.* Revision 0, April 21.

USEPA 1989. EPA 520/1-89-002, *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities*, U.S. Environmental Protection Agency, Office of Radiation Programs, Washington, DC, October.

USEPA 2007. CAP88-PC Version 3.0 Computer Code, U.S. Environmental Protection Agency, December.

40 *CFR* 61, Subpart I. *National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H.*

40 *CFR* Subpart D. *Method for Estimating Radionuclide Emissions.*

40 *CFR* 61 Appendix E. *Compliance Procedures Methods for Determining Compliance with Subpart I.*

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APPENDIX A

FIGURE

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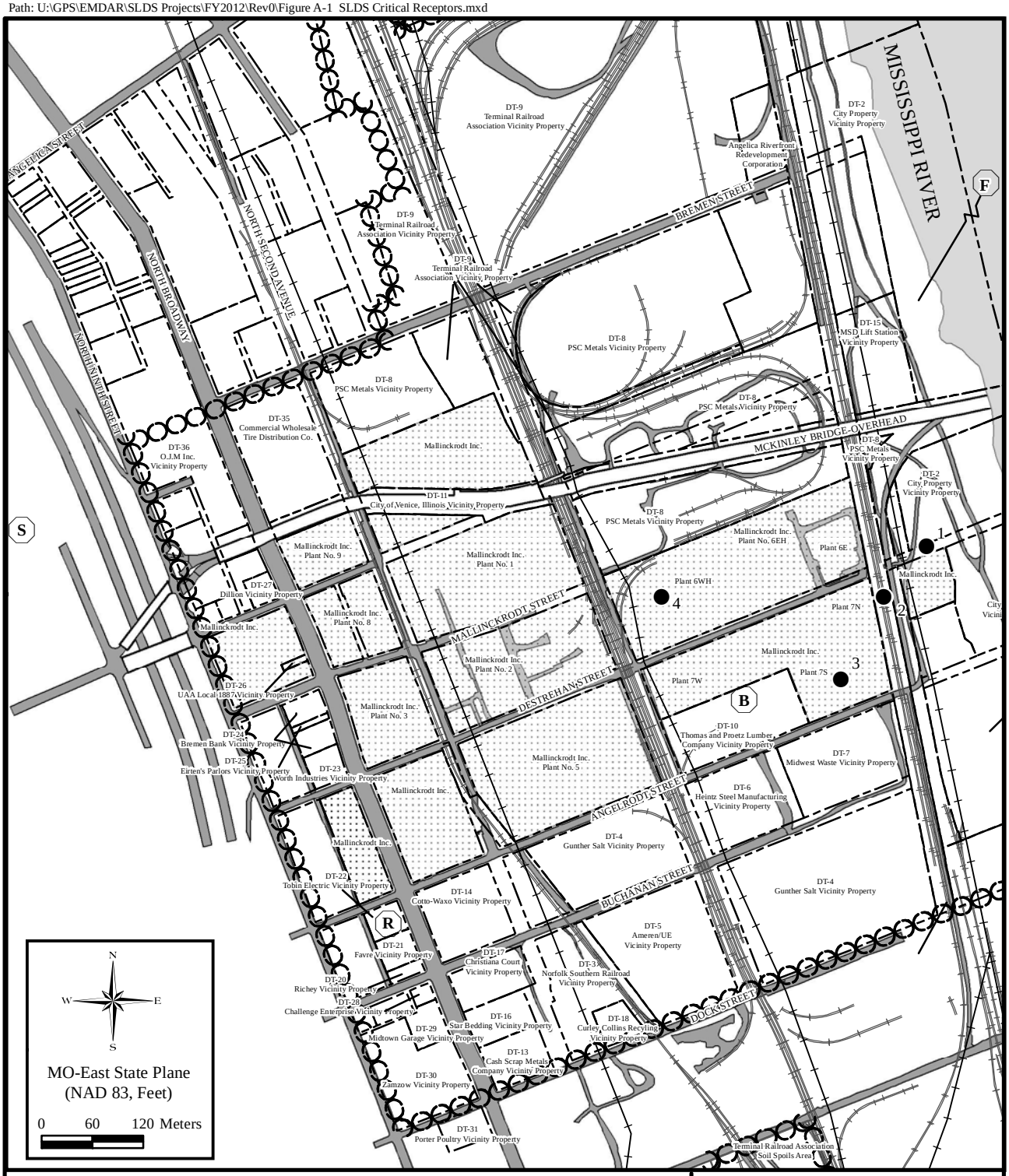
Path: U:\GPS\EMDAR\SLDS Projects\FY2012\Rev0\Figure A-1 SLDS Critical Receptors.mxd



Legend

- ROD Boundary
- Vicinity Properties
- Railroad
- Mallinckrodt Property
- Road
- River/Stream

Location

1. DT-2
2. DT-12
3. Plant 7
4. Plant 6

R Residential	F Farm	B Business	S School
875 m SW	2515 m ENE	325 m SW	1165 m WSW
695 m W	2895 m NE	340 m NW	1180 m W
615 m SW	2805 m NE	75 m SW	960 m W
495 m SW	2915 m NE	160 m SSE	750 m W

Figure A-1. SLDS Critical Receptors

FUSRAP

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KLP	0	6-19-2012

ATTACHMENT 1

CALCULATED EMISSION RATES FROM SLDS PROPERTIES

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Table A1-1. SLDS Excavation/Loadout Area Soil Radionuclide Concentrations for CY 2011

Property	DT-2[a]	DT-12[b]	Plant 7[a]	Plant 6 Loadout[a]	Average[c]
Radionuclide	**Average Concentration (pCi/g)**				
U-238	75	3	21	140	60
U-235	3.5	0.19	1	7	3
U-234	74	3	21	140	60
Ra-226	20	2	13	27	16
Ra-228	2.2	0.67	5	7	4
Th-232	2.2	0.73	5	7	4
Th-230	19	4	14	52	22
Th-228	2.2	0.73	5	7	4

[a] Radionuclides and concentrations from *St. Louis-FUSRAP Internal Dosimetry Technical Basis Manual* (USACE 1999).
[b] Data from Table 1 of the *Pre-Design Investigation Data Summary Report, Burlington Northern Santa Fe Railroad Vicinity Property (DT-12), FUSRAP St. Louis Downtown Site* (USACE 2010).
[c] Average concentration from SLDS CY 2011 excavated property and loadout area.
pCi/g = picocuries per gram

Table A1-2. SLDS Average Gross Alpha and Beta Airborne Particulate Concentrations for CY 2011

Location	Average Concentration (uCi/ml) for Location[a]	
	Gross Alpha	**Gross Beta**
DT-2	3.54E-15	2.49E-14
DT-12	7.34E-15	4.86E-14
Plant 7	2.93E-15	2.43E-14
Plant 6 Loadout	3.79E-15	3.07E-14
Background Concentration[b]	2.51E-15	1.78E-14

[a] Average concentration values for the sampling period by location.
[b] These concentrations are only provided for informational purposes. However, as a conservative approach, they were not subtracted from the gross average concentration during the determination of EDE.

Table A1-3. SLDS Excavation Data for CY 2011

Excavation Location Name	Surface Area (m^2)	Start Date	Backfill Date
DT-12, Area 7, SU-7/SU-4	22	08/01/11	09/30/11
DT-2, Area 3, SU-2C	699	02/17/11	09/20/11
DT-2, Area 3, SU-2D	520	02/17/11	10/12/11
DT-2, Area 3, SU-3A	967	02/17/11	11/01/11
DT-2, Area 4, SU-2A	38	01/24/11	02/08/11
DT-2, Area 5, SU-2A	43	01/19/11	02/08/11
DT-2, Area 6, SU-2E	47	11/14/11	12/28/11
DT-2, Area 7	560	10/24/11	12/31/11
DT-2, Area 9, SU-2B	470	01/25/11	03/30/11
Plant 6 Loadout	2,000	01/01/11	12/31/11
Plant 7 North, SU-9	1,100	01/01/11	05/10/11
Plant 7 West, SU-1	770	04/15/11	12/31/11

Note: Open/close dates set to start or stop at the calendar year boundary.

Table A1-4. SLDS Average Surface Area and Flow Rate Per Location at SLDS for CY 2011

Location	Total Days	Surface Area * Total Days	Average Surface Area/yr (m^2) [a]	Diameter of Stack $D=(1.3*A)^{1/2}$(m)	Flow Rate $F=V*Pi*(D)^2/4$ (m^3/min.)
DT-2					
DT-2, Area 3, SU-2c	216	150,984			
DT-2, Area 3, SU-2d	238	123,760			
DT-2, Area 3, SU-3a	258	249,486			
DT-2, Area 4, SU-2a	16	608			
DT-2, Area 5, SU-2a	21	903			
DT-2, Area 6, SU-2e	45	2,115			
DT-2, Area 7	69	3,8640			
DT-2, Area 9, SU-2b	65	30,550			
Total		**597,046**	**1,636**	**46**	**4.5E+05**
Plant 7					
Plant 7 North, SU-9	130	143,000			
Plant 7 West, SU-1	261	200,970			
Total		**343,970**	**942**	**35**	**2.6E+05**
DT-12					
DT-12, Area 7, SU-7/SU-4	61	1,342			
Total		**1,342**	**4**	**2**	**1.0E+03**
Plant 6 Loadout					
Plant 6 Loadout[b]	365	167,900			
Total		**167,900**	**460**	**24**	**1.3E+05**

[a] Average Surface Area/yr = [Σ(Surface Area x Total days)]/365.
[b] This value has been multiplied by a factor of 0.23 to account for the loadout pile being uncovered for only 2,000 hours per year.

Table A1-5. SLDS Airborne Radioactive Particulate Emissions Based on Excavation Perimeter Air Samples for CY 2011

Property	DT-2			DT-12			Plant 7			Plant 6 Loadout		
Radionuclide	Activity Fraction[a]	Emission Conc. (uCi/cm^3)[b]	Release Rate (Ci/y)[c]	Activity Fraction[a]	Emission Conc. (uCi/cm^3)[b]	Release Rate (Ci/y)[c]	Activity Fraction[a]	Emission Conc. (uCi/cm^3)[b]	Release Rate (Ci/y)[c]	Activity Fraction[a]	Emission Conc. (uCi/cm^3)[b]	Release Rate (Ci/y)[c]
U-238	0.37	1.3E-15	3.1E-04	0.22	1.6E-15	8.6E-07	0.24	7.1E-16	9.7E-05	0.35	1.3E-15	9.0E-05
U-235	0.02	6.0E-17	1.4E-05	0.01	9.2E-17	4.8E-08	0.01	3.4E-17	4.6E-06	0.02	6.6E-17	4.5E-06
U-234[d]	0.36	1.3E-15	3.0E-04	0.22	1.6E-15	8.6E-07	0.24	7.1E-16	9.7E-05	0.35	1.3E-15	9.0E-05
Ra-226	0.10	3.5E-16	8.2E-05	0.14	1.1E-15	5.5E-07	0.15	4.4E-16	6.0E-05	0.07	2.6E-16	1.7E-05
Th-232	0.01	3.8E-17	9.0E-06	0.05	3.5E-16	1.9E-07	0.06	1.7E-16	2.3E-05	0.02	6.6E-17	4.5E-06
Th-230	0.09	3.3E-16	7.8E-05	0.23	1.7E-15	8.9E-07	0.16	4.7E-16	6.5E-05	0.13	4.9E-16	3.4E-05
Th-228[d]	0.01	3.8E-17	9.0E-06	0.05	3.5E-16	1.9E-07	0.06	1.7E-16	2.3E-05	0.02	6.6E-17	4.5E-06
Ra-224[d]	0.01	3.8E-17	9.0E-06	0.05	3.5E-16	1.9E-07	0.06	1.7E-16	2.3E-05	0.02	6.6E-17	4.5E-06
Th-234[d]	0.47	1.2E-14	2.8E-03	0.40	1.9E-14	1.0E-05	0.40	9.6E-15	1.3E-03	0.47	1.4E-14	9.8E-04
Pa-234m[d]	0.47	1.2E-14	2.8E-03	0.40	1.9E-14	1.0E-05	0.40	9.6E-15	1.3E-03	0.47	1.4E-14	9.8E-04
Th-231[d]	0.02	5.5E-16	1.3E-04	0.02	1.1E-15	5.8E-07	0.02	4.6E-16	6.3E-05	0.02	7.1E-16	4.9E-05
Ra-228[d]	0.01	3.5E-16	8.2E-05	0.09	4.2E-15	2.2E-06	0.09	2.3E-15	3.1E-04	0.02	7.1E-16	4.9E-05
Ac-228[d]	0.01	3.5E-16	8.2E-05	0.09	4.2E-15	2.2E-06	0.09	2.3E-15	3.1E-04	0.02	7.1E-16	4.9E-05
Pa-231[d]	0.02	6.0E-17	1.4E-05	0.01	9.2E-17	4.8E-08	0.01	3.4E-17	4.6E-06	0.02	6.6E-17	4.5E-06
Ac-227[d]	0.02	6.0E-17	1.4E-05	0.01	9.2E-17	4.8E-08	0.01	3.4E-17	4.6E-06	0.02	6.6E-17	4.5E-06

[a] Derived from the average soil radionuclide concentrations for SLDS, as presented in Table A1-1.

[b] Emission concentration is equal to the activity fraction * the gross alpha or gross beta airborne particulate concentrations listed in Table A1-2.

[c] Release rate based on 365-day period at measured flow rate (Table A1-4) for each site, as determined from the average annual wind speed (4.446 meters/second) and calculated site area (Table A1-4). (Note: 1 mL = 1 cm^3.)

[d] Note: When data was not available, the radionuclide was assumed to be in secular equilibrium with parent.

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ATTACHMENT 2

CAP88-PC OUTPUT REPORT FOR SLDS PROPERTIES

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CAP88 OUTPUT RESULTS

PSC METALS

DT-2

C A P 8 8 - P C

Version 3.0

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K E Q U I V A L E N T S U M M A R I E S

Non-Radon Individual Assessment
Apr 23, 2012 02:47 pm

Facility: DT-2
Address: Bremen
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2011

Comments: Air
Air

Dataset Name: DT22011
Dataset Date: 4/23/2012 2:41:00 PM
Wind File: C:\Program Files (x86)\CAP88-PC30\WindLib\13994.WND

Apr 23, 2012 02:47 pm SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)
Adrenals	7.07E-04
B Surfac	1.40E-01
Breasts	7.50E-04
St Wall	7.26E-04
ULI Wall	7.89E-04
Kidneys	3.12E-03
Lungs	3.34E-02
Ovaries	1.78E-03
R Marrow	6.63E-03
Spleen	7.32E-04
Thymus	7.21E-04
Uterus	7.17E-04
Bld Wall	7.31E-04
Brain	7.21E-04
Esophagu	1.01E-02
SI Wall	7.23E-04
LLI Wall	9.24E-04
Liver	8.99E-03
Muscle	7.58E-04
Pancreas	7.08E-04
Skin	1.19E-02
Testes	1.84E-03
Thyroid	7.36E-04
EFFEC	1.44E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem/y)
INGESTION	4.93E-03
INHALATION	1.39E-01
AIR IMMERSION	6.75E-07
GROUND SURFACE	3.67E-04
INTERNAL	1.44E-01
EXTERNAL	3.68E-04
TOTAL	1.44E-01

Apr 23, 2012 02:47 pm SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem/y)
U-238	1.91E-02
Th-234	4.97E-04
Pa-234m	1.15E-04
Pa-234	3.29E-06
U-234	2.25E-02
Th-230	2.35E-02
Ra-226	7.13E-03
Rn-222	1.36E-13
Po-218	7.11E-10
Pb-214	1.97E-05
Bi-214	1.18E-04
Po-214	6.50E-09
Pb-210	7.26E-06
Bi-210	2.20E-08
Po-210	6.17E-07
At-218	5.91E-11
U-235	9.34E-04
Th-231	1.15E-06
Pa-231	2.80E-02
Ac-227	2.18E-02
Th-227	2.35E-06
Ra-223	1.39E-05
Rn-219	0.00E+00
Po-215	1.41E-09
Pb-211	7.97E-07
Bi-211	3.70E-07
Tl-207	4.66E-07
Po-211	1.71E-10
Fr-223	2.51E-08
Th-232	4.78E-03
Ra-228	7.23E-03
Ac-228	9.70E-05
Th-228	7.61E-03
Ra-224	5.71E-04
Rn-220	1.37E-11
Po-216	2.24E-10
Pb-212	2.12E-06
Bi-212	3.12E-06
Po-212	0.00E+00
Tl-208	1.48E-05
TOTAL	1.44E-01

Apr 23, 2012 02:47 pm SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	7.69E-11
Stomach	2.08E-10
Colon	8.04E-10
Liver	2.11E-09
LUNG	6.69E-08
Bone	1.86E-09
Skin	1.67E-11
Breast	1.22E-10
Ovary	2.96E-10
Bladder	1.80E-10
Kidneys	2.64E-10
Thyroid	1.60E-11
Leukemia	3.76E-10
Residual	8.36E-10
Total	7.40E-08
TOTAL	1.48E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	1.73E-09
INHALATION	7.22E-08
AIR IMMERSION	3.09E-13
GROUND SURFACE	1.52E-10
INTERNAL	7.39E-08
EXTERNAL	1.52E-10
TOTAL	7.40E-08

Apr 23, 2012 02:47 pm SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.58E-08
Th-234	4.73E-10
Pa-234m	1.85E-11
Pa-234	1.79E-12
U-234	1.86E-08
Th-230	1.20E-08
Ra-226	5.48E-09
Rn-222	7.37E-20
Po-218	3.90E-16
Pb-214	1.05E-11
Bi-214	6.29E-11
Po-214	3.57E-15
Pb-210	2.41E-12
Bi-210	1.07E-14
Po-210	2.36E-13
At-218	2.80E-17
U-235	7.71E-10
Th-231	9.92E-13
Pa-231	2.64E-09
Ac-227	5.73E-09
Th-227	1.90E-12
Ra-223	7.56E-12
Rn-219	0.00E+00
Po-215	7.74E-16
Pb-211	2.65E-13
Bi-211	2.03E-13
Tl-207	5.95E-14
Po-211	9.36E-17
Fr-223	1.42E-14
Th-232	2.11E-09
Ra-228	3.23E-09
Ac-228	5.38E-11
Th-228	6.51E-09
Ra-224	4.91E-10
Rn-220	7.49E-18
Po-216	1.23E-16
Pb-212	1.23E-12
Bi-212	1.40E-12
Po-212	0.00E+00
Tl-208	8.06E-12
TOTAL	7.40E-08

Apr 23, 2012 02:47 pm SUMMARY
Page 5

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT RATE (mrem/y)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	325	875	1165	2515	
N	1.4E-01	2.5E-02	1.6E-02	7.0E-03	
NNW	7.5E-02	1.5E-02	1.0E-02	5.3E-03	
NW	8.8E-02	1.6E-02	1.1E-02	5.6E-03	
WNW	1.1E-01	1.9E-02	1.3E-02	6.0E-03	
W	8.2E-02	1.5E-02	1.1E-02	5.4E-03	
WSW	4.1E-02	9.2E-03	6.9E-03	4.4E-03	**School**
SW	5.7E-02	1.1E-02	8.2E-03	4.7E-03	**Business / Residence**
SSW	6.9E-02	1.3E-02	9.4E-03	5.0E-03	
S	6.1E-02	1.2E-02	8.8E-03	4.9E-03	
SSE	4.4E-02	9.7E-03	7.2E-03	4.5E-03	
SE	6.2E-02	1.3E-02	8.9E-03	4.9E-03	
ESE	1.0E-01	1.9E-02	1.3E-02	5.9E-03	
E	1.4E-01	2.3E-02	1.5E-02	6.6E-03	
ENE	1.1E-01	2.0E-02	1.3E-02	6.1E-03	Farm
NE	7.0E-02	1.4E-02	9.5E-03	5.1E-03	
NNE	5.9E-02	1.2E-02	8.6E-03	4.8E-03	

Apr 23, 2012 02:47 pm SUMMARY
Page 6

INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	325	875	1165	2515
N	7.4E-08	1.2E-08	7.9E-09	3.0E-09
NNW	3.8E-08	7.0E-09	4.7E-09	2.2E-09
NW	4.5E-08	7.9E-09	5.2E-09	2.3E-09
WNW	5.5E-08	9.4E-09	6.1E-09	2.5E-09
W	4.2E-08	7.4E-09	4.9E-09	2.2E-09
WSW	2.1E-08	4.2E-09	3.0E-09	1.7E-09
SW	2.9E-08	5.4E-09	3.7E-09	1.9E-09
SSW	3.5E-08	6.4E-09	4.3E-09	2.0E-09
S	3.1E-08	5.8E-09	4.0E-09	2.0E-09
SSE	2.2E-08	4.4E-09	3.1E-09	1.7E-09
SE	3.1E-08	5.9E-09	4.0E-09	2.0E-09
ESE	5.3E-08	9.2E-09	6.0E-09	2.5E-09
E	7.0E-08	1.2E-08	7.3E-09	2.8E-09
ENE	5.8E-08	9.8E-09	6.3E-09	2.6E-09
NE	3.6E-08	6.5E-09	4.3E-09	2.1E-09
NNE	3.0E-08	5.6E-09	3.9E-09	1.9E-09

CAP88 OUTPUT RESULTS

PSC METALS

DT-12

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Clean Air Act Assessment Package - 1988

D O S E A N D R I S K E Q U I V A L E N T S U M M A R I E S

Non-Radon Individual Assessment
Apr 23, 2012 02:47 pm

Facility: DT-12 BNSF
Address: Destrehan
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2011

Comments: Air
Air

Dataset Name: DT122011
Dataset Date: 4/23/2012 2:46:00 PM
Wind File: . C:\Program Files (x86)\CAP88-PC30\WindLib\13994.WND

Apr 23, 2012 02:47 pm SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)
Adrenals	5.63E-06
B Surfac	8.83E-04
Breasts	6.11E-06
St Wall	5.83E-06
ULI Wall	6.23E-06
Kidneys	1.98E-05
Lungs	2.50E-04
Ovaries	1.15E-05
R Marrow	5.12E-05
Spleen	5.88E-06
Thymus	5.78E-06
Uterus	5.75E-06
Bld Wall	5.90E-06
Brain	5.80E-06
Esophagu	8.82E-05
SI Wall	5.80E-06
LLI Wall	7.11E-06
Liver	4.28E-05
Muscle	6.22E-06
Pancreas	5.63E-06
Skin	5.16E-05
Testes	1.21E-05
Thyroid	5.98E-06
EFFEC	9.98E-04

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem/y)
INGESTION	8.29E-05
INHALATION	9.12E-04
AIR IMMERSION	8.79E-09
GROUND SURFACE	3.58E-06
INTERNAL	9.95E-04
EXTERNAL	3.58E-06
TOTAL	9.98E-04

Apr 23, 2012 02:47 pm SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem/y)
U-238	4.88E-05
Th-234	1.63E-06
Pa-234m	3.61E-07
Pa-234	6.95E-09
U-234	5.93E-05
Th-230	2.46E-04
Ra-226	4.43E-05
Rn-222	0.00E+00
Po-218	4.39E-12
Pb-214	1.22E-07
Bi-214	7.32E-07
Po-214	4.02E-11
Pb-210	0.00E+00
Bi-210	0.00E+00
Po-210	0.00E+00
At-218	0.00E+00
U-235	2.94E-06
Th-231	4.49E-09
Pa-231	8.82E-05
Ac-227	6.86E-05
Th-227	5.49E-09
Ra-223	4.53E-08
Rn-219	0.00E+00
Po-215	4.37E-12
Pb-211	2.47E-09
Bi-211	1.14E-09
Tl-207	1.44E-09
Po-211	0.00E+00
Fr-223	0.00E+00
Th-232	9.28E-05
Ra-228	1.82E-04
Ac-228	2.40E-06
Th-228	1.48E-04
Ra-224	1.11E-05
Rn-220	2.66E-13
Po-216	4.82E-12
Pb-212	4.50E-08
Bi-212	6.69E-08
Po-212	0.00E+00
Tl-208	3.17E-07
TOTAL	9.98E-04

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Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	6.46E-13
Stomach	2.26E-12
Colon	8.00E-12
Liver	1.19E-11
LUNG	4.80E-10
Bone	1.66E-11
Skin	9.95E-14
Breast	1.31E-12
Ovary	2.13E-12
Bladder	1.46E-12
Kidneys	1.90E-12
Thyroid	1.64E-13
Leukemia	3.95E-12
Residual	8.83E-12
Total	5.40E-10
TOTAL	1.08E-09

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	3.09E-11
INHALATION	5.07E-10
AIR IMMERSION	4.60E-15
GROUND SURFACE	1.77E-12
INTERNAL	5.38E-10
EXTERNAL	1.77E-12
TOTAL	5.40E-10

Apr 23, 2012 02:47 pm SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	4.03E-11
Th-234	1.55E-12
Pa-234m	5.80E-14
Pa-234	3.79E-15
U-234	4.90E-11
Th-230	1.26E-10
Ra-226	3.39E-11
Rn-222	0.00E+00
Po-218	2.41E-18
Pb-214	6.51E-14
Bi-214	3.89E-13
Po-214	2.21E-17
Pb-210	0.00E+00
Bi-210	0.00E+00
Po-210	0.00E+00
At-218	0.00E+00
U-235	2.43E-12
Th-231	3.97E-15
Pa-231	8.33E-12
Ac-227	1.81E-11
Th-227	4.35E-15
Ra-223	2.46E-14
Rn-219	0.00E+00
Po-215	2.40E-18
Pb-211	8.19E-16
Bi-211	6.27E-16
Tl-207	1.84E-16
Po-211	0.00E+00
Fr-223	0.00E+00
Th-232	4.09E-11
Ra-228	8.12E-11
Ac-228	1.33E-12
Th-228	1.26E-10
Ra-224	9.54E-12
Rn-220	1.45E-19
Po-216	2.64E-18
Pb-212	2.60E-14
Bi-212	3.01E-14
Po-212	0.00E+00
Tl-208	1.73E-13
TOTAL	5.40E-10

Apr 23, 2012 02:47 pm SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT RATE (mrem/y)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	340	695	1180	2895	
N	1.0E-03	3.0E-04	1.5E-04	8.0E-05	
NNW	5.4E-04	1.9E-04	1.1E-04	7.0E-05	
NW	6.3E-04	2.1E-04	1.2E-04	7.2E-05	**Business**
WNW	7.5E-04	2.4E-04	1.3E-04	7.5E-05	**Residence / School**
W	5.8E-04	1.9E-04	1.1E-04	7.1E-05	
WSW	3.1E-04	1.2E-04	8.4E-05	6.5E-05	
SW	4.1E-04	1.5E-04	9.4E-05	6.7E-05	
SSW	5.0E-04	1.7E-04	1.0E-04	6.9E-05	
S	4.4E-04	1.6E-04	9.8E-05	6.8E-05	
SSE	3.3E-04	1.3E-04	8.7E-05	6.6E-05	
SE	4.5E-04	1.6E-04	9.9E-05	6.8E-05	
ESE	7.3E-04	2.3E-04	1.3E-04	7.4E-05	
E	9.4E-04	2.9E-04	1.4E-04	7.8E-05	
ENE	7.9E-04	2.5E-04	1.3E-04	7.5E-05	
NE	5.0E-04	1.7E-04	1.0E-04	6.9E-05	Farm
NNE	4.3E-04	1.6E-04	9.6E-05	6.8E-05	

Apr 23, 2012 02:47 pm SUMMARY
Page 6

INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	340	695	1180	2895
N	5.4E-10	1.6E-10	7.3E-11	3.3E-11
NNW	2.9E-10	9.1E-11	4.9E-11	2.8E-11
NW	3.3E-10	1.0E-10	5.3E-11	2.9E-11
WNW	4.1E-10	1.2E-10	5.9E-11	3.0E-11
W	3.1E-10	9.6E-11	5.0E-11	2.8E-11
WSW	1.6E-10	5.8E-11	3.6E-11	2.5E-11
SW	2.2E-10	7.2E-11	4.1E-11	2.6E-11
SSW	2.6E-10	8.4E-11	4.6E-11	2.7E-11
S	2.3E-10	7.7E-11	4.3E-11	2.7E-11
SSE	1.7E-10	6.1E-11	3.7E-11	2.6E-11
SE	2.4E-10	7.8E-11	4.4E-11	2.7E-11
ESE	3.9E-10	1.2E-10	5.9E-11	3.0E-11
E	5.1E-10	1.5E-10	6.9E-11	3.2E-11
ENE	4.3E-10	1.3E-10	6.1E-11	3.1E-11
NE	2.7E-10	8.5E-11	4.6E-11	2.8E-11
NNE	2.3E-10	7.5E-11	4.2E-11	2.7E-11

CAP88 OUTPUT RESULTS

PSC METALS

Plant 7

C A P 8 8 - P C

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Version 3.0

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K E Q U I V A L E N T S U M M A R I E S

Non-Radon Individual Assessment
Apr 23, 2012 02:46 pm

Facility: Plant 7
Address: Destrehan
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2011

Comments: Air
Air

Dataset Name: PLT72011
Dataset Date: 4/23/2012 1:49:00 PM
Wind File: . C:\Program Files (x86)\CAP88-PC30\WindLib\13994.WND

Apr 23, 2012 02:46 pm SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)
Adrenals	9.62E-03
B Surfac	1.29E+00
Breasts	1.05E-02
St Wall	9.98E-03
ULI Wall	1.06E-02
Kidneys	3.14E-02
Lungs	3.98E-01
Ovaries	1.80E-02
R Marrow	8.11E-02
Spleen	1.01E-02
Thymus	9.87E-03
Uterus	9.83E-03
Bld Wall	1.01E-02
Brain	9.92E-03
Esophagu	1.36E-01
SI Wall	9.91E-03
LLI Wall	1.20E-02
Liver	6.60E-02
Muscle	1.07E-02
Pancreas	9.61E-03
Skin	9.24E-02
Testes	1.90E-02
Thyroid	1.03E-02
EFFEC	1.55E+00

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem/y)
INGESTION	1.28E-01
INHALATION	1.42E+00
AIR IMMERSION	1.82E-05
GROUND SURFACE	6.56E-03
INTERNAL	1.55E+00
EXTERNAL	6.58E-03
TOTAL	1.55E+00

Apr 23, 2012 02:46 pm SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem/y)
U-238	8.13E-02
Th-234	3.09E-03
Pa-234m	6.47E-04
Pa-234	1.73E-05
U-234	9.89E-02
Th-230	2.66E-01
Ra-226	6.92E-02
Rn-222	1.29E-12
Po-218	6.75E-09
Pb-214	1.87E-04
Bi-214	1.12E-03
Po-214	6.18E-08
Pb-210	6.00E-05
Bi-210	2.02E-07
Po-210	4.96E-06
At-218	5.11E-10
U-235	4.17E-03
Th-231	7.05E-06
Pa-231	1.25E-01
Ac-227	9.74E-02
Th-227	6.90E-06
Ra-223	5.23E-05
Rn-219	0.00E+00
Po-215	6.02E-09
Pb-211	3.40E-06
Bi-211	1.58E-06
Tl-207	1.99E-06
Po-211	7.08E-10
Fr-223	1.09E-07
Th-232	1.66E-01
Ra-228	3.49E-01
Ac-228	4.81E-03
Th-228	2.65E-01
Ra-224	1.99E-02
Rn-220	4.56E-10
Po-216	8.82E-09
Pb-212	8.22E-05
Bi-212	1.22E-04
Po-212	0.00E+00
Tl-208	5.81E-04
TOTAL	1.55E+00

Apr 23, 2012 02:46 pm SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	1.06E-09
Stomach	3.75E-09
Colon	1.31E-08
Liver	1.87E-08
LUNG	7.67E-07
Bone	2.61E-08
Skin	1.71E-10
Breast	2.20E-09
Ovary	3.33E-09
Bladder	2.38E-09
Kidneys	3.07E-09
Thyroid	2.72E-10
Leukemia	6.47E-09
Residual	1.44E-08
Total	8.62E-07
TOTAL	1.72E-06

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	4.87E-08
INHALATION	8.10E-07
AIR IMMERSION	9.53E-12
GROUND SURFACE	3.24E-09
INTERNAL	8.59E-07
EXTERNAL	3.25E-09
TOTAL	8.62E-07

Apr 23, 2012 02:46 pm SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	6.72E-08
Th-234	2.92E-09
Pa-234m	1.04E-10
Pa-234	9.43E-12
U-234	8.19E-08
Th-230	1.37E-07
Ra-226	5.40E-08
Rn-222	7.03E-19
Po-218	3.70E-15
Pb-214	9.99E-11
Bi-214	5.98E-10
Po-214	3.39E-14
Pb-210	1.99E-11
Bi-210	9.10E-14
Po-210	1.90E-12
At-218	2.42E-16
U-235	3.45E-09
Th-231	6.32E-12
Pa-231	1.18E-08
Ac-227	2.56E-08
Th-227	5.27E-12
Ra-223	2.84E-11
Rn-219	0.00E+00
Po-215	3.30E-15
Pb-211	1.13E-12
Bi-211	8.63E-13
Tl-207	2.54E-13
Po-211	3.88E-16
Fr-223	6.22E-14
Th-232	7.35E-08
Ra-228	1.57E-07
Ac-228	2.67E-09
Th-228	2.27E-07
Ra-224	1.71E-08
Rn-220	2.49E-16
Po-216	4.83E-15
Pb-212	4.75E-11
Bi-212	5.50E-11
Po-212	0.00E+00
Tl-208	3.17E-10
TOTAL	8.62E-07

Apr 23, 2012 02:46 pm SUMMARY
Page 5

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT RATE (mrem/y)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	75	615	960	2805	
N	1.6E+00	1.2E-01	9.9E-02	8.8E-02	
NNW	8.7E-01	1.0E-01	9.3E-02	8.7E-02	
NW	9.9E-01	1.0E-01	9.4E-02	8.7E-02	
WNW	1.2E+00	1.1E-01	9.6E-02	8.7E-02	
W	9.2E-01	1.0E-01	9.3E-02	8.7E-02	School
WSW	5.0E-01	9.4E-02	8.9E-02	8.6E-02	
SW	6.5E-01	9.7E-02	9.1E-02	8.6E-02	**Business / Residence**
SSW	7.8E-01	1.0E-01	9.2E-02	8.6E-02	
S	7.0E-01	9.9E-02	9.1E-02	8.6E-02	
SSE	5.2E-01	9.5E-02	8.9E-02	8.6E-02	
SE	7.2E-01	9.9E-02	9.1E-02	8.6E-02	
ESE	1.1E+00	1.1E-01	9.5E-02	8.7E-02	
E	1.5E+00	1.2E-01	9.8E-02	8.7E-02	
ENE	1.2E+00	1.1E-01	9.6E-02	8.7E-02	
NE	8.0E-01	1.0E-01	9.2E-02	8.6E-02	Farm
NNE	7.0E-01	9.8E-02	9.1E-02	8.6E-02	

Apr 23, 2012 02:46 pm SUMMARY
Page 6

INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	75	615	960	2805
N	8.6E-07	5.1E-08	4.0E-08	3.4E-08
NNW	4.8E-07	4.2E-08	3.7E-08	3.3E-08
NW	5.4E-07	4.3E-08	3.7E-08	3.3E-08
WNW	6.5E-07	4.6E-08	3.8E-08	3.3E-08
W	5.0E-07	4.3E-08	3.7E-08	3.3E-08
WSW	2.7E-07	3.7E-08	3.5E-08	3.3E-08
SW	3.5E-07	3.9E-08	3.5E-08	3.3E-08
SSW	4.2E-07	4.1E-08	3.6E-08	3.3E-08
S	3.8E-07	4.0E-08	3.6E-08	3.3E-08
SSE	2.8E-07	3.8E-08	3.5E-08	3.3E-08
SE	3.9E-07	4.0E-08	3.6E-08	3.3E-08
ESE	6.3E-07	4.6E-08	3.8E-08	3.3E-08
E	8.2E-07	4.9E-08	4.0E-08	3.4E-08
ENE	6.8E-07	4.7E-08	3.8E-08	3.3E-08
NE	4.4E-07	4.1E-08	3.6E-08	3.3E-08
NNE	3.8E-07	4.0E-08	3.6E-08	3.3E-08

CAP88 OUTPUT RESULTS

PSC METALS

Plant 6

C A P 8 8 - P C

Version 3.0

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K E Q U I V A L E N T S U M M A R I E S

Non-Radon Individual Assessment
Apr 23, 2012 02:47 pm

Facility: Plant 6 Loadout
Address: Destrehan
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2011

Comments: Air
Air

Dataset Name: PLT6LO11
Dataset Date: 4/23/2012 2:37:00 PM
Wind File: . C:\Program Files (x86)\CAP88-PC30\WindLib\13994.WND

Apr 23, 2012 02:47 pm SUMMARY
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ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)
Adrenals	9.17E-04
B Surfac	1.86E-01
Breasts	9.72E-04
St Wall	9.39E-04
ULI Wall	1.02E-03
Kidneys	4.08E-03
Lungs	4.51E-02
Ovaries	2.32E-03
R Marrow	9.06E-03
Spleen	9.45E-04
Thymus	9.33E-04
Uterus	9.29E-04
Bld Wall	9.46E-04
Brain	9.34E-04
Esophagu	1.44E-02
SI Wall	9.35E-04
LLI Wall	1.19E-03
Liver	1.13E-02
Muscle	9.81E-04
Pancreas	9.16E-04
Skin	1.47E-02
Testes	2.39E-03
Thyroid	9.54E-04
EFFEC	1.93E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem/y)
INGESTION	7.58E-03
INHALATION	1.85E-01
AIR IMMERSION	1.16E-06
GROUND SURFACE	4.68E-04
INTERNAL	1.92E-01
EXTERNAL	4.69E-04
TOTAL	1.93E-01

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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem/y)
U-238	2.17E-02
Th-234	6.41E-04
Pa-234m	1.41E-04
Pa-234	3.95E-06
U-234	2.64E-02
Th-230	3.80E-02
Ra-226	5.42E-03
Rn-222	1.02E-13
Po-218	5.30E-10
Pb-214	1.47E-05
Bi-214	8.84E-05
Po-214	4.85E-09
Pb-210	5.13E-06
Bi-210	1.62E-08
Po-210	4.27E-07
At-218	0.00E+00
U-235	1.11E-03
Th-231	1.55E-06
Pa-231	3.34E-02
Ac-227	2.60E-02
Th-227	1.93E-06
Ra-223	1.53E-05
Rn-219	0.00E+00
Po-215	1.63E-09
Pb-211	9.23E-07
Bi-211	4.28E-07
Tl-207	5.39E-07
Po-211	1.63E-10
Fr-223	2.94E-08
Th-232	8.88E-03
Ra-228	1.56E-02
Ac-228	2.10E-04
Th-228	1.41E-02
Ra-224	1.06E-03
Rn-220	2.49E-11
Po-216	4.34E-10
Pb-212	4.08E-06
Bi-212	6.03E-06
Po-212	0.00E+00
Tl-208	2.86E-05
TOTAL	1.93E-01

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CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	1.05E-10
Stomach	3.02E-10
Colon	1.12E-09
Liver	2.72E-09
LUNG	8.94E-08
Bone	2.61E-09
Skin	2.15E-11
Breast	1.75E-10
Ovary	4.02E-10
Bladder	2.45E-10
Kidneys	3.56E-10
Thyroid	2.29E-11
Leukemia	5.45E-10
Residual	1.14E-09
Total	9.92E-08
TOTAL	1.98E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	2.73E-09
INHALATION	9.63E-08
AIR IMMERSION	5.55E-13
GROUND SURFACE	1.96E-10
INTERNAL	9.90E-08
EXTERNAL	1.96E-10
TOTAL	9.92E-08

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.80E-08
Th-234	6.08E-10
Pa-234m	2.27E-11
Pa-234	2.15E-12
U-234	2.19E-08
Th-230	1.95E-08
Ra-226	4.20E-09
Rn-222	5.55E-20
Po-218	2.91E-16
Pb-214	7.85E-12
Bi-214	4.69E-11
Po-214	2.66E-15
Pb-210	1.70E-12
Bi-210	7.67E-15
Po-210	1.63E-13
At-218	0.00E+00
U-235	9.20E-10
Th-231	1.37E-12
Pa-231	3.16E-09
Ac-227	6.84E-09
Th-227	1.50E-12
Ra-223	8.32E-12
Rn-219	0.00E+00
Po-215	8.96E-16
Pb-211	3.06E-13
Bi-211	2.34E-13
Tl-207	6.88E-14
Po-211	8.93E-17
Fr-223	1.67E-14
Th-232	3.92E-09
Ra-228	6.98E-09
Ac-228	1.17E-10
Th-228	1.21E-08
Ra-224	9.13E-10
Rn-220	1.36E-17
Po-216	2.38E-16
Pb-212	2.37E-12
Bi-212	2.71E-12
Po-212	0.00E+00
Tl-208	1.56E-11
TOTAL	9.92E-08

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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT RATE (mrem/y)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	160	495	750	2915	
N	1.9E-01	2.8E-02	1.6E-02	6.2E-03	
NNW	1.0E-01	1.7E-02	1.1E-02	5.7E-03	
NW	1.2E-01	1.9E-02	1.1E-02	5.8E-03	
WNW	1.4E-01	2.2E-02	1.3E-02	5.9E-03	
W	1.1E-01	1.8E-02	1.1E-02	5.8E-03	School
WSW	5.6E-02	1.1E-02	8.0E-03	5.5E-03	
SW	7.7E-02	1.4E-02	9.1E-03	5.6E-03	Residence
SSW	9.4E-02	1.6E-02	1.0E-02	5.7E-03	
S	8.2E-02	1.5E-02	9.5E-03	5.6E-03	
SSE	5.9E-02	1.2E-02	8.2E-03	5.5E-03	**Business**
SE	8.3E-02	1.5E-02	9.6E-03	5.6E-03	
ESE	1.4E-01	2.2E-02	1.3E-02	5.9E-03	
E	1.8E-01	2.7E-02	1.5E-02	6.1E-03	
ENE	1.5E-01	2.3E-02	1.3E-02	6.0E-03	
NE	9.4E-02	1.6E-02	1.0E-02	5.7E-03	Farm
NNE	8.0E-02	1.4E-02	9.3E-03	5.6E-03	

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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	160	495	750	2915
N	9.9E-08	1.4E-08	7.3E-09	2.4E-09
NNW	5.2E-08	8.0E-09	4.7E-09	2.2E-09
NW	6.1E-08	9.0E-09	5.1E-09	2.2E-09
WNW	7.4E-08	1.1E-08	5.8E-09	2.3E-09
W	5.6E-08	8.4E-09	4.9E-09	2.2E-09
WSW	2.8E-08	5.0E-09	3.3E-09	2.0E-09
SW	3.9E-08	6.3E-09	3.9E-09	2.1E-09
SSW	4.8E-08	7.4E-09	4.4E-09	2.1E-09
S	4.2E-08	6.7E-09	4.1E-09	2.1E-09
SSE	3.0E-08	5.3E-09	3.4E-09	2.0E-09
SE	4.2E-08	6.8E-09	4.1E-09	2.1E-09
ESE	7.2E-08	1.0E-08	5.7E-09	2.2E-09
E	9.4E-08	1.3E-08	6.9E-09	2.3E-09
ENE	7.8E-08	1.1E-08	6.0E-09	2.3E-09
NE	4.8E-08	7.5E-09	4.4E-09	2.1E-09
NNE	4.1E-08	6.6E-09	4.0E-09	2.1E-09

C A P 8 8 - P C

Version 3.0

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K E Q U I V A L E N T S U M M A R I E S

Radon Individual Assessment
Mar 28, 2012 12:30 pm

Facility: SLDS Radon Diffusion Constant
Address: Angelrodt
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2011

Comments: Air
Air

Dataset Name: SLDS Radon 2011
Dataset Date: 3/28/2012 12:30:00 PM
Wind File: . C:\Program Files\CAP88-PC30\WindLib\13994.WND

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ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)
EFFEC	9.89E-01

Radon Decay Product Concentration (working level)

1.23E-04

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem/y)
INGESTION	0.00E+00
INHALATION	9.89E-01
AIR IMMERSION	8.93E-05
GROUND SURFACE	0.00E+00
INTERNAL	9.89E-01
EXTERNAL	8.93E-05
TOTAL	9.89E-01

Radon Decay Product Concentration (working level)

1.23E-04

No Ground Surface Concentration or Ingestion Rate Exposures for RN-222

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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY
(RN-222 Working Level Calculations Excluded)

Nuclide	Selected Individual (mrem/y)
Rn-222	9.89E-01
TOTAL	9.89E-01

Radon Decay Product Concentration (working level)

1.23E-04

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Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
	Selected Individual Cancer Risk
Radon Decay Product Lung Exposure	1.62E-04
Total Fatal Risk All Exposures	1.74E-04

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PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	0.00E+00
INHALATION	1.12E-05
AIR IMMERSION	2.13E-09
GROUND SURFACE	0.00E+00
INTERNAL	1.12E-05
EXTERNAL	2.13E-09
TOTAL	1.12E-05

	Selected Individual Cancer Risk
Radon Decay Product Lung Exposure	1.62E-04
Total Fatal Risk All Exposures	1.74E-04

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
Rn-222	1.12E-05
TOTAL	1.12E-05

	Selected Individual Cancer Risk
Radon Decay Product Lung Exposure	1.62E-04
Total Fatal Risk All Exposures	1.74E-04

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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT RATE (mrem/y)
(All Radionuclides and Pathways)

	Distance (m)		
Direction	1	50	
N	9.9E-01	2.9E-01	
NNW	9.9E-01	2.7E-01	
NW	9.9E-01	2.4E-01	
WNW	9.9E-01	2.6E-01	
W	9.9E-01	2.1E-01	
WSW	9.9E-01	1.5E-01	
SW	9.9E-01	1.4E-01	(0.14 ÷ 0.99) = 0.14
SSW	9.9E-01	1.7E-01	
S	9.9E-01	1.6E-01	
SSE	9.9E-01	1.5E-01	
SE	9.9E-01	1.9E-01	
ESE	9.9E-01	2.7E-01	
E	9.9E-01	3.2E-01	
ENE	9.9E-01	2.8E-01	
NE	9.9E-01	2.1E-01	
NNE	9.9E-01	2.3E-01	

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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)	
Direction	1	50
N	1.6E-04	4.7E-05
NNW	1.6E-04	4.4E-05
NW	1.6E-04	4.0E-05
WNW	1.6E-04	4.2E-05
W	1.6E-04	3.4E-05
WSW	1.6E-04	2.4E-05
SW	1.6E-04	2.4E-05
SSW	1.6E-04	2.8E-05
S	1.6E-04	2.6E-05
SSE	1.6E-04	2.4E-05
SE	1.6E-04	3.1E-05
ESE	1.6E-04	4.5E-05
E	1.6E-04	5.2E-05
ENE	1.6E-04	4.6E-05
NE	1.6E-04	3.4E-05
NNE	1.6E-04	3.8E-05

APPENDIX B

ENVIRONMENTAL TLD, ALPHA TRACK AND PERIMETER AIR DATA
(On CD-ROM at the end of this document)

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Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD121414	City Property	01/19/11	Gross Alpha/Beta	Gross Alpha	5.816E-15	7.839E-15	1.158E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.778E-14	1.664E-14	1.792E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121415	City Property	01/24/11	Gross Alpha/Beta	Gross Alpha	4.706E-15	1.487E-14	2.549E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	5.549E-14	4.642E-14	7.056E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121416	City Property	01/25/11	Gross Alpha/Beta	Gross Alpha	-1.865E-15	1.341E-14	2.886E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	7.929E-14	5.402E-14	7.99E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121417	City Property	01/26/11	Gross Alpha/Beta	Gross Alpha	4.99E-16	4.385E-15	8.315E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.878E-14	1.521E-14	2.302E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121418	City Property	01/27/11	Gross Alpha/Beta	Gross Alpha	-5.51E-16	3.965E-15	8.532E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.525E-14	1.697E-14	2.362E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121419	City Property	02/15/11	Gross Alpha/Beta	Gross Alpha	6.435E-15	7.375E-15	1.069E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.61E-14	1.268E-14	1.701E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121420	City Property	02/16/11	Gross Alpha/Beta	Gross Alpha	4.93E-16	4.93E-15	1.027E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.821E-14	1.249E-14	1.635E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121421	City Property	02/21/11	Gross Alpha/Beta	Gross Alpha	-2.388E-15	1.141E-14	2.557E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.716E-14	2.766E-14	3.968E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121422	City Property	02/22/11	Gross Alpha/Beta	Gross Alpha	-2.262E-15	4.395E-15	1.125E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.223E-15	1.107E-14	1.745E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121423	City Property	02/23/11	Gross Alpha/Beta	Gross Alpha	1.48E-16	5.101E-15	1.029E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.158E-14	1.234E-14	1.597E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121424	City Property	02/24/11	Gross Alpha/Beta	Gross Alpha	4.142E-15	7.612E-15	1.227E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.731E-14	1.488E-14	1.904E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121425	City Property	02/28/11	Gross Alpha/Beta	Gross Alpha	4.99E-16	4.754E-15	1.009E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.39E-14	1.32E-14	1.765E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121426	City Property	03/01/11	Gross Alpha/Beta	Gross Alpha	2.817E-15	5.573E-15	9.505E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.899E-14	1.202E-14	1.662E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121427	City Property	03/02/11	Gross Alpha/Beta	Gross Alpha	3.869E-15	5.864E-15	9.216E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.295E-14	1.099E-14	1.611E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121428	City Property	03/03/11	Gross Alpha/Beta	Gross Alpha	2.868E-15	5.675E-15	9.679E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.077E-14	1.241E-14	1.692E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121429	City Property	03/09/11	Gross Alpha/Beta	Gross Alpha	4.046E-15	7.953E-15	1.296E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.057E-14	2.86E-14	3.95E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121430	City Property	03/10/11	Gross Alpha/Beta	Gross Alpha	1.312E-15	4.155E-15	7.605E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.524E-14	1.752E-14	2.318E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121431	City Property	03/14/11	Gross Alpha/Beta	Gross Alpha	-5.44E-16	3.899E-15	8.69E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.333E-14	1.893E-14	2.436E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121432	City Property	03/15/11	Gross Alpha/Beta	Gross Alpha	6.254E-15	7.969E-15	1.111E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.522E-14	2.406E-14	3.114E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121433	City Property	03/21/11	Gross Alpha/Beta	Gross Alpha	7.441E-15	1.836E-14	3.296E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.778E-14	4.285E-14	5.588E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121434	City Property	03/29/11	Gross Alpha/Beta	Gross Alpha	7.952E-15	1.464E-14	2.371E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.281E-14	4.957E-14	6.974E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121435	City Property	03/30/11	Gross Alpha/Beta	Gross Alpha	2.8E-15	5.156E-15	8.349E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.383E-14	1.889E-14	2.456E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121436	City Property	03/31/11	Gross Alpha/Beta	Gross Alpha	4.114E-15	5.94E-15	8.89E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	5.304E-14	2.134E-14	2.615E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121437	City Property	04/04/11	Gross Alpha/Beta	Gross Alpha	-1.695E-15	4.157E-15	9.55E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	-4.034E-15	1.929E-14	2.739E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121438	City Property	04/05/11	Gross Alpha/Beta	Gross Alpha	7.27E-16	5.386E-15	9.55E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.919E-14	2.184E-14	2.739E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121439	City Property	04/06/11	Gross Alpha/Beta	Gross Alpha	1.702E-15	5.187E-15	8.388E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.174E-14	1.815E-14	2.406E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121440	City Property	04/07/11	Gross Alpha/Beta	Gross Alpha	4.493E-15	7.037E-15	9.843E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	7.256E-15	2.079E-14	2.823E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121441	BNSF Railroad	04/06/11	Gross Alpha/Beta	Gross Alpha	1.334E-15	9.89E-15	1.754E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	-1.598E-15	3.589E-14	5.03E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD121442	City Property	04/11/11	Gross Alpha/Beta	Gross Alpha	1.158E-15	6.602E-15	1.163E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.532E-15	2.318E-14	3.421E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121443	City Property	04/12/11	Gross Alpha/Beta	Gross Alpha	-1.312E-15	3.546E-15	8.193E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	8.73E-15	1.691E-14	2.41E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121444	City Property	04/13/11	Gross Alpha/Beta	Gross Alpha	-1.312E-15	3.546E-15	8.193E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.568E-14	1.747E-14	2.41E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121445	City Property	04/14/11	Gross Alpha/Beta	Gross Alpha	-2.64E-16	4.403E-15	8.724E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.483E-14	1.924E-14	2.566E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121446	City Property	04/18/11	Gross Alpha/Beta	Gross Alpha	-1.476E-15	2.921E-15	8.649E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.396E-14	1.889E-14	2.538E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121447	City Property	04/19/11	Gross Alpha/Beta	Gross Alpha	-4E-18	3.8E-17	9E-17	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.59E-16	1.9E-16	2.65E-16	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121448	City Property	04/20/11	Gross Alpha/Beta	Gross Alpha	-3.54E-16	3.521E-15	8.311E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	-6.02E-16	1.624E-14	2.439E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121449	City Property	04/26/11	Gross Alpha/Beta	Gross Alpha	6.65E-16	5.396E-15	1.045E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.181E-14	1.182E-14	1.703E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121450	City Property	04/27/11	Gross Alpha/Beta	Gross Alpha	1.313E-15	1.065E-14	2.062E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	6.623E-15	2.124E-14	3.36E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121451	City Property	04/28/11	Gross Alpha/Beta	Gross Alpha	1.268E-15	1.029E-14	1.992E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.263E-14	2.481E-14	3.245E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121452	City Property	05/09/11	Gross Alpha/Beta	Gross Alpha	3.7E-17	6.081E-15	1.039E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	-5.056E-15	1.014E-14	1.615E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121453	City Property	05/10/11	Gross Alpha/Beta	Gross Alpha	3.8E-17	6.24E-15	1.066E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.734E-14	1.304E-14	1.657E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121454	City Property	05/11/11	Gross Alpha/Beta	Gross Alpha	5.63E-15	7.915E-15	1.048E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.107E-14	1.323E-14	1.629E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121455	City Property	05/12/11	Gross Alpha/Beta	Gross Alpha	1.176E-15	6.642E-15	1.066E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.144E-14	1.346E-14	1.657E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121456	City Property	05/16/11	Gross Alpha/Beta	Gross Alpha	3.645E-15	6.885E-15	1.08E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	6.234E-15	1.184E-14	1.703E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121457	City Property	05/17/11	Gross Alpha/Beta	Gross Alpha	7.199E-15	8.05E-15	1.089E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.192E-14	1.26E-14	1.718E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121458	City Property	05/18/11	Gross Alpha/Beta	Gross Alpha	1.52E-16	5.461E-15	1.056E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	6.781E-15	1.167E-14	1.666E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121459	City Property	05/19/11	Gross Alpha/Beta	Gross Alpha	1.54E-16	5.533E-15	1.07E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.033E-14	1.222E-14	1.688E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121460	City Property	05/23/11	Gross Alpha/Beta	Gross Alpha	4.081E-15	7.021E-15	1.183E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.036E-14	1.466E-14	1.969E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121461	City Property	05/24/11	Gross Alpha/Beta	Gross Alpha	1.02E-15	4.532E-15	9.202E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.002E-14	1.072E-14	1.531E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121462	City Property	05/25/11	Gross Alpha/Beta	Gross Alpha	-3.732E-15	4.342E-15	1.553E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.255E-14	1.756E-14	2.584E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121463	City Property	05/26/11	Gross Alpha/Beta	Gross Alpha	-6.9E-17	4.773E-15	1.102E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.263E-15	1.186E-14	1.833E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121464	BNSF Railroad	05/31/11	Gross Alpha/Beta	Gross Alpha	4.201E-15	1.528E-14	2.65E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	7.366E-15	2.857E-14	4.686E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121465	City Property	06/16/11	Gross Alpha/Beta	Gross Alpha	1.59E-15	3.955E-15	7.761E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	-9.37E-16	2.861E-14	2.58E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121466	City Property	06/20/11	Gross Alpha/Beta	Gross Alpha	2.934E-15	7.021E-15	1.018E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	8.228E-15	1.16E-14	1.672E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121467	City Property	06/21/11	Gross Alpha/Beta	Gross Alpha	-7.77E-16	9.094E-15	1.596E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.613E-14	1.858E-14	2.622E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121468	City Property	06/22/11	Gross Alpha/Beta	Gross Alpha	6.45E-16	6.205E-15	1.013E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.502E-14	1.233E-14	1.664E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121469	City Property	06/23/11	Gross Alpha/Beta	Gross Alpha	6.65E-16	6.4E-15	1.045E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	6.337E-15	1.166E-14	1.717E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD121470	City Property	06/28/11	Gross Alpha/Beta	Gross Alpha	3.284E-15	5.322E-15	8.552E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.405E-14	1.926E-14	2.521E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121471	City Property	06/29/11	Gross Alpha/Beta	Gross Alpha	3.315E-15	5.371E-15	8.632E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.197E-14	1.764E-14	2.544E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121472	City Property	07/13/11	Gross Alpha/Beta	Gross Alpha	-5.728E-15	9.045E-15	2.563E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.546E-14	2.622E-14	3.788E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121473	City Property	07/14/11	Gross Alpha/Beta	Gross Alpha	9.69E-16	5.663E-15	1.128E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.146E-14	1.319E-14	1.667E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121474	City Property	07/18/11	Gross Alpha/Beta	Gross Alpha	1.036E-15	4.902E-15	7.824E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.535E-14	1.475E-14	2.387E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121475	City Property	07/19/11	Gross Alpha/Beta	Gross Alpha	6.039E-15	6.554E-15	7.598E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.28E-14	1.503E-14	2.318E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121476	City Property	07/20/11	Gross Alpha/Beta	Gross Alpha	4.254E-15	6.236E-15	8.028E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.783E-14	1.532E-14	2.449E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121477	City Property	07/21/11	Gross Alpha/Beta	Gross Alpha	-1.132E-15	4.293E-15	8.548E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.786E-14	1.71E-14	2.608E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121478	BNSF Railroad	07/19/11	Gross Alpha/Beta	Gross Alpha	-1.344E-15	5.095E-15	1.015E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.131E-14	2.014E-14	3.095E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121479	BNSF Railroad	07/20/11	Gross Alpha/Beta	Gross Alpha	5.177E-15	7.589E-15	9.769E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.325E-14	1.786E-14	2.98E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121480	City Property	07/25/11	Gross Alpha/Beta	Gross Alpha	1.031E-14	7.975E-15	1.006E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.38E-14	1.145E-14	1.636E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121481	City Property	07/25/11	Gross Alpha/Beta	Gross Alpha	-9.03E-16	5.584E-15	1.423E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.208E-14	1.532E-14	2.313E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121482	City Property	07/26/11	Gross Alpha/Beta	Gross Alpha	3.888E-15	6.129E-15	1.046E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.662E-14	1.324E-14	1.7E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121483	City Property	07/26/11	Gross Alpha/Beta	Gross Alpha	2.75E-15	5.69E-15	1.046E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.209E-14	1.379E-14	1.7E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121484	City Property	07/27/11	Gross Alpha/Beta	Gross Alpha	1.571E-15	5.082E-15	1.019E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.79E-14	1.5E-14	1.657E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121485	City Property	07/27/11	Gross Alpha/Beta	Gross Alpha	3.789E-15	5.973E-15	1.019E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.391E-14	1.464E-14	1.657E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121486	City Property	07/28/11	Gross Alpha/Beta	Gross Alpha	4.87E-16	4.818E-15	1.074E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.944E-14	1.381E-14	1.745E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121487	City Property	07/28/11	Gross Alpha/Beta	Gross Alpha	4.028E-15	6.349E-15	1.083E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.263E-14	1.319E-14	1.761E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121488	City Property	08/01/11	Gross Alpha/Beta	Gross Alpha	3.628E-15	4.721E-15	7.151E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.73E-14	1.822E-14	2.37E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121489	City Property	08/01/11	Gross Alpha/Beta	Gross Alpha	2.591E-15	4.241E-15	7.151E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.271E-14	1.862E-14	2.37E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121490	City Property	08/02/11	Gross Alpha/Beta	Gross Alpha	1.088E-14	7.242E-15	7.151E-15	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.339E-14	1.867E-14	2.37E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121491	City Property	08/02/11	Gross Alpha/Beta	Gross Alpha	5.7E-15	5.559E-15	7.151E-15	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
				Gross Beta	5.558E-14	1.954E-14	2.37E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121492	City Property	08/03/11	Gross Alpha/Beta	Gross Alpha	9.93E-15	6.997E-15	7.212E-15	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.649E-14	1.903E-14	2.39E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121493	City Property	08/03/11	Gross Alpha/Beta	Gross Alpha	1.335E-14	8.054E-15	7.37E-15	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.634E-14	1.862E-14	2.442E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121494	City Property	08/04/11	Gross Alpha/Beta	Gross Alpha	6.228E-15	6.073E-15	7.814E-15	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.856E-14	1.818E-14	2.589E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121495	City Property	08/04/11	Gross Alpha/Beta	Gross Alpha	5.096E-15	5.634E-15	7.814E-15	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.817E-14	1.895E-14	2.589E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121496	BNSF Railroad	08/01/11	Gross Alpha/Beta	Gross Alpha	1.242E-14	1.094E-14	1.319E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
				Gross Beta	4.629E-14	3.187E-14	4.369E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121497	BNSF Railroad	08/02/11	Gross Alpha/Beta	Gross Alpha	4.247E-15	6.951E-15	1.172E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.563E-14	2.625E-14	3.883E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD121498	BNSF Railroad	08/08/11	Gross Alpha/Beta	Gross Alpha	1.05E-14	1.265E-14	1.823E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.348E-14	1.98E-14	2.831E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121499	City Property	08/08/11	Gross Alpha/Beta	Gross Alpha	-7.75E-16	4.843E-15	1.078E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.913E-14	1.297E-14	1.673E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121500	City Property	08/08/11	Gross Alpha/Beta	Gross Alpha	3.91E-16	5.421E-15	1.087E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.564E-14	1.375E-14	1.688E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121501	City Property	08/09/11	Gross Alpha/Beta	Gross Alpha	8.202E-15	7.858E-15	1.036E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.846E-14	1.351E-14	1.609E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121502	City Property	08/09/11	Gross Alpha/Beta	Gross Alpha	1.753E-14	1.031E-14	1.059E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
				Gross Beta	3.868E-14	1.473E-14	1.644E-14	uCi/mL	=		Downtown VP (General Area) Perimeter Air
SLD121503	City Property	08/10/11	Gross Alpha/Beta	Gross Alpha	-7.59E-16	4.738E-15	1.054E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	9.159E-15	1.161E-14	1.637E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD121504	City Property	08/10/11	Gross Alpha/Beta	Gross Alpha	3.793E-15	6.57E-15	1.054E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	1.394E-14	1.216E-14	1.637E-14	uCi/mL	U	T04, T05	Downtown VP (General Area) Perimeter Air
SLD121505	City Property	08/11/11	Gross Alpha/Beta	Gross Alpha	6.936E-15	7.375E-15	1.014E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	2.59E-14	1.303E-14	1.575E-14	uCi/mL	J	T04	Downtown VP (General Area) Perimeter Air
SLD121506	City Property	08/11/11	Gross Alpha/Beta	Gross Alpha	3.62E-15	6.271E-15	1.006E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
				Gross Beta	8.741E-15	1.108E-14	1.562E-14	uCi/mL	UJ	T06	Downtown VP (General Area) Perimeter Air
SLD133642	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	9.59E-15	8.34E-15	1.028E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.685E-14	1.432E-14	1.618E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133643	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	6.824E-15	8.012E-15	1.106E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.592E-14	1.597E-14	1.741E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133644	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	9.511E-15	8.271E-15	1.02E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.462E-14	1.403E-14	1.605E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133645	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	6.345E-15	7.449E-15	1.028E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.945E-14	1.456E-14	1.618E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133646	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	6.794E-15	7.977E-15	1.101E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.738E-14	1.515E-14	1.733E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133647	6WH LOADOUT	01/03/11	Gross Alpha/Beta	Gross Alpha	5.42E-15	7.34E-15	1.059E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.261E-14	1.426E-14	1.666E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133648	6WH LOADOUT	01/04/11	Gross Alpha/Beta	Gross Alpha	9.49E-16	5.735E-15	1.041E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.943E-14	1.377E-14	1.639E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133649	6WH LOADOUT	01/04/11	Gross Alpha/Beta	Gross Alpha	3.291E-15	6.833E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.705E-14	1.501E-14	1.718E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133650	6WH LOADOUT	01/04/11	Gross Alpha/Beta	Gross Alpha	4.148E-15	6.736E-15	1.02E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.497E-14	1.311E-14	1.605E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133651	6WH LOADOUT	01/04/11	Gross Alpha/Beta	Gross Alpha	3.291E-15	6.833E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.328E-14	1.369E-14	1.718E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133655	6WH LOADOUT	01/05/11	Gross Alpha/Beta	Gross Alpha	9.472E-15	8.238E-15	1.015E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.935E-14	1.349E-14	1.598E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133656	6WH LOADOUT	01/05/11	Gross Alpha/Beta	Gross Alpha	3.632E-15	5.555E-15	8.65E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.545E-14	1.697E-14	2.409E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133657	6WH LOADOUT	01/05/11	Gross Alpha/Beta	Gross Alpha	9.58E-15	7.286E-15	8.254E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.694E-14	1.641E-14	2.299E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133658	6WH LOADOUT	01/05/11	Gross Alpha/Beta	Gross Alpha	5.768E-15	6.325E-15	8.65E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.87E-14	1.803E-14	2.409E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133659	6WH LOADOUT	01/05/11	Gross Alpha/Beta	Gross Alpha	3.394E-15	5.192E-15	8.085E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.161E-14	1.65E-14	2.252E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133660	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	5.326E-15	5.84E-15	7.988E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.638E-14	1.67E-14	2.225E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133661	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	8.818E-15	7.204E-15	8.502E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	7.027E-14	2.008E-14	2.368E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133662	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	4.429E-15	5.609E-15	8.152E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.672E-14	1.92E-14	2.27E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133663	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	3.95E-16	3.825E-15	7.988E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.927E-14	1.767E-14	2.225E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133664	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	1.148E-14	7.741E-15	8.152E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.028E-14	1.804E-14	2.27E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133665	6WH LOADOUT	01/06/11	Gross Alpha/Beta	Gross Alpha	4.639E-15	5.875E-15	8.538E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.575E-14	1.983E-14	2.378E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133666	Plant 7N	01/03/11	Gross Alpha/Beta	Gross Alpha	-7.16E-16	3.965E-15	9.663E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.791E-14	2.051E-14	2.691E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133667	Plant 7N	01/04/11	Gross Alpha/Beta	Gross Alpha	2.668E-15	5.337E-15	9.004E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.068E-14	1.718E-14	2.508E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133668	Plant 7N	01/05/11	Gross Alpha/Beta	Gross Alpha	5.897E-15	6.466E-15	8.843E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.887E-14	1.759E-14	2.463E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133669	Plant 7N	01/06/11	Gross Alpha/Beta	Gross Alpha	3.746E-15	5.73E-15	8.923E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.712E-14	1.915E-14	2.485E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133670	Plant 7N	01/10/11	Gross Alpha/Beta	Gross Alpha	8.191E-15	7.418E-15	9.364E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.693E-14	1.898E-14	2.607E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133671	Plant 7N	01/12/11	Gross Alpha/Beta	Gross Alpha	5.393E-15	7.08E-15	1.053E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.362E-14	2.161E-14	2.932E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133672	Plant 7N	01/13/11	Gross Alpha/Beta	Gross Alpha	4.884E-15	6.412E-15	9.54E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.005E-14	2.103E-14	2.656E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133673	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	5.066E-15	6.828E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.177E-14	1.525E-14	1.56E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133674	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	6.543E-15	7.64E-15	1.079E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.856E-14	1.579E-14	1.668E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133675	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	8.44E-16	5.365E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.037E-14	1.427E-14	1.56E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133676	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	1.9E-15	5.766E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.354E-14	1.455E-14	1.56E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133677	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	4.287E-15	6.941E-15	1.079E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.449E-14	1.543E-14	1.668E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133678	6WH LOADOUT	01/10/11	Gross Alpha/Beta	Gross Alpha	1.939E-15	5.884E-15	1.03E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.423E-14	1.485E-14	1.592E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133679	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	-1.325E-15	4.665E-15	1.056E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.033E-14	1.65E-14	1.633E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133680	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	1.028E-14	8.889E-15	1.117E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.045E-14	1.723E-14	1.728E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133681	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	1.955E-15	5.933E-15	1.038E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.536E-14	1.67E-14	1.606E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133682	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	3.066E-15	6.371E-15	1.047E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.254E-14	1.658E-14	1.619E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133683	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	6.487E-15	7.575E-15	1.069E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.957E-14	1.577E-14	1.654E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133684	6WH LOADOUT	01/12/11	Gross Alpha/Beta	Gross Alpha	4.44E-15	7.189E-15	1.117E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.376E-14	1.829E-14	1.728E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133685	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	5.608E-15	7.559E-15	1.117E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.713E-14	1.611E-14	1.728E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133686	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	6.432E-15	7.51E-15	1.06E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.256E-14	1.592E-14	1.64E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133687	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	3.365E-15	5.396E-15	8.607E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.175E-14	1.873E-14	2.396E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133688	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	8.756E-15	7.285E-15	8.794E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.655E-14	2.013E-14	2.448E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133689	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	2.439E-15	5.222E-15	9.029E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.237E-14	1.955E-14	2.513E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133690	6WH LOADOUT	01/13/11	Gross Alpha/Beta	Gross Alpha	2.375E-15	5.086E-15	8.794E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.516E-14	2.003E-14	2.448E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133691	6WH LOADOUT	01/17/11	Gross Alpha/Beta	Gross Alpha	6.247E-15	7.294E-15	1.03E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.137E-13	2.068E-14	1.593E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133692	6WH LOADOUT	01/17/11	Gross Alpha/Beta	Gross Alpha	1.051E-14	8.439E-15	1.026E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.119E-13	2.051E-14	1.586E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133693	6WH LOADOUT	01/17/11	Gross Alpha/Beta	Gross Alpha	9.478E-15	8.194E-15	1.03E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	7.558E-14	1.811E-14	1.593E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133694	6WH LOADOUT	01/17/11	Gross Alpha/Beta	Gross Alpha	1.661E-14	9.745E-15	1.005E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	8.574E-14	1.852E-14	1.554E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133695	6WH LOADOUT	01/19/11	Gross Alpha/Beta	Gross Alpha	-2.617E-15	4.427E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.995E-14	1.57E-14	1.759E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133696	6WH LOADOUT	01/19/11	Gross Alpha/Beta	Gross Alpha	4.381E-15	7.094E-15	1.102E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.041E-14	1.534E-14	1.705E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133697	6WH LOADOUT	01/19/11	Gross Alpha/Beta	Gross Alpha	5.584E-15	7.526E-15	1.112E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.394E-14	1.664E-14	1.72E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133698	6WH LOADOUT	01/19/11	Gross Alpha/Beta	Gross Alpha	5.763E-15	7.767E-15	1.148E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.959E-14	1.668E-14	1.775E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133699	Plant 7N	01/17/11	Gross Alpha/Beta	Gross Alpha	-2.716E-15	4.594E-15	1.18E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-7.65E-16	1.308E-14	1.825E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133700	6WH LOADOUT	01/25/11	Gross Alpha/Beta	Gross Alpha	8.717E-15	7.264E-15	8.245E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.824E-14	1.828E-14	2.283E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133701	6WH LOADOUT	01/25/11	Gross Alpha/Beta	Gross Alpha	1.535E-15	4.851E-15	8.315E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.503E-14	1.659E-14	2.302E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133702	6WH LOADOUT	01/25/11	Gross Alpha/Beta	Gross Alpha	3.504E-15	5.505E-15	8.076E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.835E-14	1.8E-14	2.236E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133703	6WH LOADOUT	01/25/11	Gross Alpha/Beta	Gross Alpha	1.165E-14	7.991E-15	8.143E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.751E-14	1.805E-14	2.254E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133704	6WH LOADOUT	01/26/11	Gross Alpha/Beta	Gross Alpha	1.516E-15	4.79E-15	8.211E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.326E-14	1.628E-14	2.273E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133705	6WH LOADOUT	01/26/11	Gross Alpha/Beta	Gross Alpha	5.563E-15	6.25E-15	8.143E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.154E-14	1.761E-14	2.254E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133706	6WH LOADOUT	01/26/11	Gross Alpha/Beta	Gross Alpha	3.624E-15	5.692E-15	8.351E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.886E-14	1.527E-14	2.312E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133707	6WH LOADOUT	01/26/11	Gross Alpha/Beta	Gross Alpha	-5.87E-16	4.222E-15	9.085E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.162E-14	1.758E-14	2.515E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133708	6WH LOADOUT	01/27/11	Gross Alpha/Beta	Gross Alpha	7.078E-15	7.071E-15	8.761E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.334E-14	1.719E-14	2.426E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133709	6WH LOADOUT	01/27/11	Gross Alpha/Beta	Gross Alpha	5.14E-16	4.519E-15	8.57E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.494E-14	1.858E-14	2.373E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133710	6WH LOADOUT	01/27/11	Gross Alpha/Beta	Gross Alpha	4.606E-15	5.985E-15	8.245E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.414E-14	1.721E-14	2.283E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133711	6WH LOADOUT	01/27/11	Gross Alpha/Beta	Gross Alpha	1.504E-15	4.75E-15	8.143E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.552E-14	1.791E-14	2.254E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133712	Plant 7N	02/07/11	Gross Alpha/Beta	Gross Alpha	6.6E-15	7.314E-15	9.102E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.544E-14	1.838E-14	2.614E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133713	Plant 7N	02/08/11	Gross Alpha/Beta	Gross Alpha	-2.013E-15	5.1E-15	1.18E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.346E-15	2.15E-14	3.389E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133714	6WH LOADOUT	02/07/11	Gross Alpha/Beta	Gross Alpha	5.552E-15	7.385E-15	1.13E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.604E-14	1.439E-14	1.799E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133715	6WH LOADOUT	02/07/11	Gross Alpha/Beta	Gross Alpha	1.745E-15	5.809E-15	1.098E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.52E-15	1.21E-14	1.749E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133716	6WH LOADOUT	02/07/11	Gross Alpha/Beta	Gross Alpha	5.448E-15	7.247E-15	1.109E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.892E-14	1.341E-14	1.765E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133717	6WH LOADOUT	02/07/11	Gross Alpha/Beta	Gross Alpha	2.676E-15	5.69E-15	9.922E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.298E-14	1.155E-14	1.58E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133718	6WH LOADOUT	02/08/11	Gross Alpha/Beta	Gross Alpha	4.755E-15	6.326E-15	9.678E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.909E-14	1.198E-14	1.541E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133719	6WH LOADOUT	02/08/11	Gross Alpha/Beta	Gross Alpha	4.736E-15	6.3E-15	9.638E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.606E-14	1.267E-14	1.535E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133720	6WH LOADOUT	02/08/11	Gross Alpha/Beta	Gross Alpha	2.882E-15	6.128E-15	1.069E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.605E-14	1.376E-14	1.701E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133721	6WH LOADOUT	02/08/11	Gross Alpha/Beta	Gross Alpha	4.875E-15	6.485E-15	9.922E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.409E-14	1.376E-14	1.58E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133722	6WH LOADOUT	02/09/11	Gross Alpha/Beta	Gross Alpha	2.806E-15	5.966E-15	1.04E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.084E-14	1.179E-14	1.656E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133723	6WH LOADOUT	02/09/11	Gross Alpha/Beta	Gross Alpha	4.775E-15	6.352E-15	9.717E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.369E-14	1.251E-14	1.547E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133724	6WH LOADOUT	02/09/11	Gross Alpha/Beta	Gross Alpha	2.568E-15	5.461E-15	9.522E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.309E-14	1.116E-14	1.516E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133725	6WH LOADOUT	02/09/11	Gross Alpha/Beta	Gross Alpha	4.679E-15	6.224E-15	9.522E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.372E-14	1.123E-14	1.516E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133726	6WH LOADOUT	02/10/11	Gross Alpha/Beta	Gross Alpha	4.679E-15	6.224E-15	9.522E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.942E-14	1.186E-14	1.516E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133727	6WH LOADOUT	02/10/11	Gross Alpha/Beta	Gross Alpha	6.845E-15	6.96E-15	9.599E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.149E-14	1.216E-14	1.528E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133728	6WH LOADOUT	02/10/11	Gross Alpha/Beta	Gross Alpha	2.676E-15	5.69E-15	9.922E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.627E-14	1.193E-14	1.58E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133729	6WH LOADOUT	02/10/11	Gross Alpha/Beta	Gross Alpha	-6.59E-16	4.471E-15	1.05E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.001E-14	1.292E-14	1.671E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133730	6WH LOADOUT	02/14/11	Gross Alpha/Beta	Gross Alpha	-6.23E-16	4.226E-15	9.922E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.697E-15	1.093E-14	1.58E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133731	6WH LOADOUT	02/14/11	Gross Alpha/Beta	Gross Alpha	-3.646E-15	1.703E-15	9.224E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.145E-14	1.067E-14	1.469E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133732	6WH LOADOUT	02/14/11	Gross Alpha/Beta	Gross Alpha	1.55E-15	5.161E-15	9.758E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.921E-15	1.068E-14	1.554E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133733	6WH LOADOUT	02/14/11	Gross Alpha/Beta	Gross Alpha	-6.93E-16	4.7E-15	1.103E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.443E-14	1.285E-14	1.757E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133734	6WH LOADOUT	02/15/11	Gross Alpha/Beta	Gross Alpha	-6.18E-16	4.191E-15	9.839E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.268E-14	1.253E-14	1.567E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133735	6WH LOADOUT	02/15/11	Gross Alpha/Beta	Gross Alpha	5.2E-16	5.202E-15	1.083E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.137E-14	1.341E-14	1.725E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133736	6WH LOADOUT	02/15/11	Gross Alpha/Beta	Gross Alpha	1.83E-15	6.092E-15	1.152E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.272E-14	1.426E-14	1.834E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133737	6WH LOADOUT	02/15/11	Gross Alpha/Beta	Gross Alpha	3.824E-15	6.179E-15	1.005E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.45E-14	1.294E-14	1.6E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133738	6WH LOADOUT	02/16/11	Gross Alpha/Beta	Gross Alpha	3.89E-15	6.286E-15	1.022E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.696E-14	1.337E-14	1.628E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133739	6WH LOADOUT	02/16/11	Gross Alpha/Beta	Gross Alpha	5.473E-15	7.281E-15	1.114E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.457E-14	1.297E-14	1.774E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133740	6WH LOADOUT	02/16/11	Gross Alpha/Beta	Gross Alpha	2.699E-15	5.738E-15	1.001E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.238E-14	1.368E-14	1.593E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133741	6WH LOADOUT	02/16/11	Gross Alpha/Beta	Gross Alpha	5.203E-15	6.922E-15	1.059E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.582E-14	1.363E-14	1.686E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133742	6WH LOADOUT	02/21/11	Gross Alpha/Beta	Gross Alpha	1.099E-14	1.408E-14	2.047E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.733E-14	2.662E-14	3.558E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133743	6WH LOADOUT	02/21/11	Gross Alpha/Beta	Gross Alpha	3.613E-15	1.162E-14	2.15E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.761E-14	2.667E-14	3.737E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133744	6WH LOADOUT	02/21/11	Gross Alpha/Beta	Gross Alpha	1.166E-14	1.494E-14	2.172E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.778E-14	2.694E-14	3.776E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133745	6WH LOADOUT	02/21/11	Gross Alpha/Beta	Gross Alpha	9.791E-15	1.52E-14	2.365E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.681E-14	3.135E-14	4.111E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133746	6WH LOADOUT	02/22/11	Gross Alpha/Beta	Gross Alpha	-7.86E-16	4.17E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.868E-14	1.37E-14	1.754E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133747	6WH LOADOUT	02/22/11	Gross Alpha/Beta	Gross Alpha	3.831E-15	5.947E-15	9.255E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.167E-14	1.196E-14	1.609E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133748	6WH LOADOUT	02/22/11	Gross Alpha/Beta	Gross Alpha	4.926E-15	6.313E-15	9.175E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.579E-14	1.338E-14	1.595E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133749	6WH LOADOUT	02/22/11	Gross Alpha/Beta	Gross Alpha	4.863E-15	6.232E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.009E-14	1.155E-14	1.575E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133750	6WH LOADOUT	02/23/11	Gross Alpha/Beta	Gross Alpha	6.107E-15	6.763E-15	9.255E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.304E-14	1.211E-14	1.609E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133751	6WH LOADOUT	02/23/11	Gross Alpha/Beta	Gross Alpha	2.778E-15	5.666E-15	9.546E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.697E-14	1.288E-14	1.659E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133752	6WH LOADOUT	02/23/11	Gross Alpha/Beta	Gross Alpha	2.922E-15	5.96E-15	1.004E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.452E-14	1.426E-14	1.745E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133753	6WH LOADOUT	02/23/11	Gross Alpha/Beta	Gross Alpha	1.135E-14	8.682E-15	9.855E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.679E-14	1.322E-14	1.713E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133754	6WH LOADOUT	02/24/11	Gross Alpha/Beta	Gross Alpha	1.245E-14	8.932E-15	9.765E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.113E-14	1.557E-14	1.697E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133755	6WH LOADOUT	02/24/11	Gross Alpha/Beta	Gross Alpha	1.043E-14	8.575E-15	1.014E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.297E-14	1.523E-14	1.762E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133756	6WH LOADOUT	02/24/11	Gross Alpha/Beta	Gross Alpha	9.765E-15	8.756E-15	1.114E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.912E-14	1.397E-14	1.729E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133757	6WH LOADOUT	02/24/11	Gross Alpha/Beta	Gross Alpha	1.56E-16	5.398E-15	1.089E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.481E-14	1.43E-14	1.69E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133758	Plant 7N	02/21/11	Gross Alpha/Beta	Gross Alpha	-6.345E-15	1.233E-14	3.155E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.924E-14	3.237E-14	4.895E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133759	Plant 7N	02/22/11	Gross Alpha/Beta	Gross Alpha	3.661E-15	6.728E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.713E-14	1.238E-14	1.683E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133760	Plant 7N	02/23/11	Gross Alpha/Beta	Gross Alpha	1.26E-16	4.33E-15	8.739E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.437E-14	1.004E-14	1.356E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133761	Plant 7N	02/24/11	Gross Alpha/Beta	Gross Alpha	3.417E-15	6.28E-15	1.012E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.664E-14	1.163E-14	1.571E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133762	Plant 7N	02/28/11	Gross Alpha/Beta	Gross Alpha	-7.93E-16	4.293E-15	1.071E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.456E-14	1.391E-14	1.872E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133763	Plant 7N	03/01/11	Gross Alpha/Beta	Gross Alpha	5.084E-15	5.535E-15	7.625E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.806E-14	9.968E-15	1.333E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133764	Plant 7N	03/02/11	Gross Alpha/Beta	Gross Alpha	4.265E-15	5.358E-15	7.851E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.487E-14	1.197E-14	1.373E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133765	Plant 7N	03/03/11	Gross Alpha/Beta	Gross Alpha	6.369E-15	6.18E-15	8.06E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.983E-14	1.169E-14	1.409E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133766	6WH LOADOUT	02/28/11	Gross Alpha/Beta	Gross Alpha	7.967E-15	7.119E-15	8.796E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.861E-14	1.322E-14	1.529E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133767	6WH LOADOUT	02/28/11	Gross Alpha/Beta	Gross Alpha	-1.724E-15	2.852E-15	8.583E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.109E-14	1.321E-14	1.492E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133768	6WH LOADOUT	02/28/11	Gross Alpha/Beta	Gross Alpha	2.753E-15	5.616E-15	9.461E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.31E-14	1.344E-14	1.645E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133769	6WH LOADOUT	02/28/11	Gross Alpha/Beta	Gross Alpha	-7.02E-16	3.729E-15	9.02E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.001E-14	1.362E-14	1.568E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133770	6WH LOADOUT	03/01/11	Gross Alpha/Beta	Gross Alpha	3.831E-15	5.947E-15	9.255E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.489E-14	1.437E-14	1.609E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133771	6WH LOADOUT	03/01/11	Gross Alpha/Beta	Gross Alpha	7.54E-15	7.426E-15	9.632E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.636E-14	1.398E-14	1.674E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133772	6WH LOADOUT	03/01/11	Gross Alpha/Beta	Gross Alpha	5.977E-15	6.619E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.414E-14	1.407E-14	1.575E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133773	6WH LOADOUT	03/01/11	Gross Alpha/Beta	Gross Alpha	1.49E-15	4.791E-15	8.869E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.521E-14	1.485E-14	1.542E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133774	6WH LOADOUT	03/02/11	Gross Alpha/Beta	Gross Alpha	7.934E-15	7.09E-15	8.76E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.367E-14	1.366E-14	1.523E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133775	6WH LOADOUT	03/02/11	Gross Alpha/Beta	Gross Alpha	5.804E-15	6.427E-15	8.796E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.64E-14	1.396E-14	1.529E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133776	6WH LOADOUT	03/02/11	Gross Alpha/Beta	Gross Alpha	3.848E-15	5.973E-15	9.296E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.189E-14	1.507E-14	1.616E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133777	6WH LOADOUT	03/02/11	Gross Alpha/Beta	Gross Alpha	5.171E-15	6.627E-15	9.632E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.909E-14	1.613E-14	1.674E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133778	6WH LOADOUT	03/03/11	Gross Alpha/Beta	Gross Alpha	7.439E-15	7.327E-15	9.503E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.811E-14	1.4E-14	1.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133779	6WH LOADOUT	03/03/11	Gross Alpha/Beta	Gross Alpha	3.718E-15	5.771E-15	8.982E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.392E-14	1.297E-14	1.561E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133780	6WH LOADOUT	03/03/11	Gross Alpha/Beta	Gross Alpha	1.404E-15	4.319E-15	8.121E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.404E-14	1.115E-14	1.42E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133781	6WH LOADOUT	03/03/11	Gross Alpha/Beta	Gross Alpha	3.449E-15	5.227E-15	8.216E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.102E-14	1.198E-14	1.436E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133782	Plant 7W	03/07/11	Gross Alpha/Beta	Gross Alpha	1.809E-14	8.802E-15	6.728E-15	uCi/mL	=		SLDS (General Area) Perimeter Air
				Gross Beta	7.555E-14	1.984E-14	2.051E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133783	Plant 7W	03/08/11	Gross Alpha/Beta	Gross Alpha	2.65E-16	3.818E-15	8.136E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.042E-14	1.983E-14	2.48E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133784	Plant 7W	03/09/11	Gross Alpha/Beta	Gross Alpha	3.819E-15	1.21E-14	2.214E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.009E-14	4.904E-14	6.75E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133785	Plant 7W	03/10/11	Gross Alpha/Beta	Gross Alpha	3.952E-15	4.876E-15	6.676E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.679E-14	1.641E-14	2.035E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133786	6WH LOADOUT	03/07/11	Gross Alpha/Beta	Gross Alpha	1.566E-15	4.817E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.474E-14	1.105E-14	1.584E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133787	6WH LOADOUT	03/07/11	Gross Alpha/Beta	Gross Alpha	3.803E-15	5.764E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.81E-14	1.146E-14	1.584E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133788	6WH LOADOUT	03/07/11	Gross Alpha/Beta	Gross Alpha	-7.2E-16	3.899E-15	9.723E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.625E-15	9.204E-15	1.7E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133789	6WH LOADOUT	03/07/11	Gross Alpha/Beta	Gross Alpha	1.553E-15	4.776E-15	8.982E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.46E-14	1.211E-14	1.57E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133790	6WH LOADOUT	03/08/11	Gross Alpha/Beta	Gross Alpha	1.745E-15	5.368E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.166E-14	1.294E-14	1.765E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133791	6WH LOADOUT	03/08/11	Gross Alpha/Beta	Gross Alpha	5.972E-15	9.052E-15	1.423E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.053E-14	1.824E-14	2.487E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133792	6WH LOADOUT	03/08/11	Gross Alpha/Beta	Gross Alpha	2.708E-15	5.357E-15	9.136E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.284E-14	1.09E-14	1.597E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133793	6WH LOADOUT	03/08/11	Gross Alpha/Beta	Gross Alpha	-6.95E-16	3.761E-15	9.379E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.703E-15	1.075E-14	1.64E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133794	6WH LOADOUT	03/09/11	Gross Alpha/Beta	Gross Alpha	3.771E-15	5.715E-15	8.982E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.292E-15	1.029E-14	1.57E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133795	6WH LOADOUT	03/09/11	Gross Alpha/Beta	Gross Alpha	4.36E-16	4.16E-15	8.832E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.212E-15	9.6E-15	1.544E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133796	6WH LOADOUT	03/09/11	Gross Alpha/Beta	Gross Alpha	2.922E-15	5.781E-15	9.859E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.189E-14	1.272E-14	1.724E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133797	6WH LOADOUT	03/09/11	Gross Alpha/Beta	Gross Alpha	4.59E-16	4.378E-15	9.297E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.798E-15	1.001E-14	1.625E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133798	6WH LOADOUT	03/10/11	Gross Alpha/Beta	Gross Alpha	8.901E-15	7.232E-15	8.582E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.668E-14	1.192E-14	1.5E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133799	6WH LOADOUT	03/10/11	Gross Alpha/Beta	Gross Alpha	2.596E-15	5.136E-15	8.759E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.307E-14	1.278E-14	1.531E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133800	6WH LOADOUT	03/10/11	Gross Alpha/Beta	Gross Alpha	2.417E-15	4.751E-15	7.74E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.177E-14	1.908E-14	2.359E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133801	6WH LOADOUT	03/10/11	Gross Alpha/Beta	Gross Alpha	2.53E-16	3.632E-15	7.74E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.187E-14	1.833E-14	2.359E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133802	6WH LOADOUT	03/14/11	Gross Alpha/Beta	Gross Alpha	2.812E-15	8.035E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.158E-14	1.167E-14	1.784E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133803	6WH LOADOUT	03/14/11	Gross Alpha/Beta	Gross Alpha	5.053E-15	8.371E-15	1.086E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.106E-14	1.114E-14	1.703E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133804	6WH LOADOUT	03/14/11	Gross Alpha/Beta	Gross Alpha	3.06E-16	6.689E-15	1.052E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.588E-15	1.026E-14	1.651E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133805	6WH LOADOUT	03/14/11	Gross Alpha/Beta	Gross Alpha	2.66E-15	7.602E-15	1.076E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.011E-14	1.216E-14	1.688E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133806	6WH LOADOUT	03/15/11	Gross Alpha/Beta	Gross Alpha	2.88E-16	6.302E-15	9.915E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.762E-14	1.221E-14	1.555E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133807	6WH LOADOUT	03/15/11	Gross Alpha/Beta	Gross Alpha	-8.46E-16	6.311E-15	1.057E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.221E-14	1.331E-14	1.658E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133808	6WH LOADOUT	03/15/11	Gross Alpha/Beta	Gross Alpha	-4.382E-15	4.974E-15	1.076E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.941E-14	1.207E-14	1.688E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133809	6WH LOADOUT	03/15/11	Gross Alpha/Beta	Gross Alpha	1.609E-15	7.828E-15	1.165E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.549E-14	1.467E-14	1.827E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133810	6WH LOADOUT	03/16/11	Gross Alpha/Beta	Gross Alpha	-3.631E-15	6.226E-15	1.218E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.233E-14	1.483E-14	1.911E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133811	6WH LOADOUT	03/16/11	Gross Alpha/Beta	Gross Alpha	1.602E-15	7.79E-15	1.159E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.698E-14	1.37E-14	1.818E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133812	6WH LOADOUT	03/16/11	Gross Alpha/Beta	Gross Alpha	6.382E-15	8.902E-15	1.111E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.585E-14	1.313E-14	1.743E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133813	6WH LOADOUT	03/16/11	Gross Alpha/Beta	Gross Alpha	5.053E-15	8.371E-15	1.086E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.959E-14	1.218E-14	1.703E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133814	Plant 7W	03/14/11	Gross Alpha/Beta	Gross Alpha	-7.89E-16	5.66E-15	1.262E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-2.302E-15	2.58E-14	3.536E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133815	Plant 7W	03/15/11	Gross Alpha/Beta	Gross Alpha	1.395E-15	4.248E-15	7.435E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.449E-14	1.785E-14	2.084E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133816	Plant 7W	03/16/11	Gross Alpha/Beta	Gross Alpha	3.357E-15	5.154E-15	7.668E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.367E-14	1.757E-14	2.149E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133817	Plant 7W	03/17/11	Gross Alpha/Beta	Gross Alpha	2.831E-15	5.647E-15	9.052E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.498E-14	2.053E-14	2.537E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD133818	Plant 7W	03/21/11	Gross Alpha/Beta	Gross Alpha	1.961E-15	4.838E-15	8.686E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.538E-14	1.334E-14	1.473E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133819	Plant 7W	03/22/11	Gross Alpha/Beta	Gross Alpha	3.011E-15	5.308E-15	8.789E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.183E-14	1.405E-14	1.49E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133820	Plant 7W	03/23/11	Gross Alpha/Beta	Gross Alpha	-1.121E-15	3.446E-15	9E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.44E-14	1.365E-14	1.526E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133821	Plant 7W	03/24/11	Gross Alpha/Beta	Gross Alpha	1.696E-15	7.869E-15	1.556E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.125E-15	1.988E-14	2.639E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD133822	6WH LOADOUT	03/22/11	Gross Alpha/Beta	Gross Alpha	1.121E-14	8.35E-15	9.66E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.822E-14	1.484E-14	1.638E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD133823	6WH LOADOUT	03/22/11	Gross Alpha/Beta	Gross Alpha	5.614E-15	6.709E-15	9.744E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.803E-14	1.582E-14	1.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133824	6WH LOADOUT	03/22/11	Gross Alpha/Beta	Gross Alpha	1.161E-14	8.649E-15	1.001E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.484E-14	1.587E-14	1.696E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD133825	6WH LOADOUT	03/22/11	Gross Alpha/Beta	Gross Alpha	9.569E-15	8.249E-15	1.033E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.86E-14	1.477E-14	1.751E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135825	6WH LOADOUT	03/24/11	Gross Alpha/Beta	Gross Alpha	1.203E-15	5.582E-15	1.104E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.065E-14	1.586E-14	1.872E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135826	6WH LOADOUT	03/24/11	Gross Alpha/Beta	Gross Alpha	-8.1E-17	4.653E-15	1.038E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.104E-14	1.6E-14	1.759E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135827	6WH LOADOUT	03/24/11	Gross Alpha/Beta	Gross Alpha	1.071E-15	4.97E-15	9.829E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.803E-14	1.504E-14	1.667E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135828	6WH LOADOUT	03/24/11	Gross Alpha/Beta	Gross Alpha	2.144E-15	5.289E-15	9.496E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.176E-14	1.403E-14	1.61E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135829	6WH LOADOUT	03/28/11	Gross Alpha/Beta	Gross Alpha	3.134E-15	5.525E-15	9.147E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.442E-14	1.474E-14	1.551E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135830	6WH LOADOUT	03/28/11	Gross Alpha/Beta	Gross Alpha	1.095E-15	5.082E-15	1.005E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.725E-14	1.524E-14	1.704E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135831	6WH LOADOUT	03/28/11	Gross Alpha/Beta	Gross Alpha	9.93E-16	4.607E-15	9.11E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.619E-14	1.484E-14	1.545E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135832	6WH LOADOUT	03/28/11	Gross Alpha/Beta	Gross Alpha	3.338E-15	5.885E-15	9.744E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.052E-14	1.515E-14	1.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135833	6WH LOADOUT	03/29/11	Gross Alpha/Beta	Gross Alpha	-3.891E-15	4.891E-15	1.612E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.405E-14	2.627E-14	2.734E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135834	6WH LOADOUT	03/29/11	Gross Alpha/Beta	Gross Alpha	1.185E-14	1.244E-14	1.711E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.358E-14	2.66E-14	2.9E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135835	6WH LOADOUT	03/29/11	Gross Alpha/Beta	Gross Alpha	1.939E-15	8.994E-15	1.779E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-2.866E-15	2.174E-14	3.016E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135836	6WH LOADOUT	03/29/11	Gross Alpha/Beta	Gross Alpha	1.923E-15	8.923E-15	1.765E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.447E-14	2.347E-14	2.992E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135837	6WH LOADOUT	03/30/11	Gross Alpha/Beta	Gross Alpha	2.365E-15	5.833E-15	1.047E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.967E-14	1.775E-14	1.776E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135838	6WH LOADOUT	03/30/11	Gross Alpha/Beta	Gross Alpha	-7.7E-17	4.428E-15	9.873E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.72E-14	1.757E-14	1.674E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135839	6WH LOADOUT	03/30/11	Gross Alpha/Beta	Gross Alpha	6.752E-15	7.085E-15	9.744E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.578E-14	1.729E-14	1.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135840	6WH LOADOUT	03/30/11	Gross Alpha/Beta	Gross Alpha	8.873E-15	7.65E-15	9.577E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.006E-14	1.578E-14	1.624E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135841	6WH LOADOUT	03/31/11	Gross Alpha/Beta	Gross Alpha	2.229E-15	5.499E-15	9.873E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.305E-14	1.724E-14	1.674E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135842	6WH LOADOUT	03/31/11	Gross Alpha/Beta	Gross Alpha	-7.8E-17	4.487E-15	1.001E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.517E-14	1.758E-14	1.696E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135843	6WH LOADOUT	03/31/11	Gross Alpha/Beta	Gross Alpha	2.968E-15	5.465E-15	8.85E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.353E-14	2.129E-14	2.603E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135844	6WH LOADOUT	03/31/11	Gross Alpha/Beta	Gross Alpha	3.112E-15	5.729E-15	9.277E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.844E-14	2.248E-14	2.729E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135845	Plant 7N	03/28/11	Gross Alpha/Beta	Gross Alpha	3.66E-15	6.738E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.423E-14	2.394E-14	3.21E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135846	Plant 7N	03/29/11	Gross Alpha/Beta	Gross Alpha	5.991E-15	6.339E-15	8.349E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.093E-14	2.08E-14	2.456E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135847	Plant 7N	03/30/11	Gross Alpha/Beta	Gross Alpha	3.657E-15	5.28E-15	7.903E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.728E-14	1.827E-14	2.325E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135848	Plant 7N	03/31/11	Gross Alpha/Beta	Gross Alpha	1.09E-14	1.32E-14	1.847E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.792E-14	4.052E-14	5.432E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135849	Plant 7N	04/04/11	Gross Alpha/Beta	Gross Alpha	2.596E-15	5.263E-15	7.874E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.066E-15	1.689E-14	2.258E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135850	Plant 7N	04/05/11	Gross Alpha/Beta	Gross Alpha	6.58E-16	4.879E-15	8.651E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.429E-14	1.963E-14	2.481E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135851	Plant 7N	04/07/11	Gross Alpha/Beta	Gross Alpha	1.593E-14	1.794E-14	2.243E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.397E-14	4.796E-14	6.434E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135852	6WH LOADOUT	04/04/11	Gross Alpha/Beta	Gross Alpha	4.362E-15	6.44E-15	9.963E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.23E-16	1.151E-14	1.824E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135853	6WH LOADOUT	04/04/11	Gross Alpha/Beta	Gross Alpha	-1.801E-15	3.106E-15	9.597E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.298E-15	1.155E-14	1.757E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135854	6WH LOADOUT	04/04/11	Gross Alpha/Beta	Gross Alpha	1.768E-15	5.097E-15	9.425E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.412E-14	1.251E-14	1.725E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135855	6WH LOADOUT	04/04/11	Gross Alpha/Beta	Gross Alpha	5.69E-16	4.362E-15	9.097E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.022E-14	1.169E-14	1.665E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135856	6WH LOADOUT	04/05/11	Gross Alpha/Beta	Gross Alpha	5.055E-15	6.224E-15	8.98E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-2.2E-17	1.029E-14	1.644E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135857	6WH LOADOUT	04/05/11	Gross Alpha/Beta	Gross Alpha	1.729E-15	4.985E-15	9.217E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.004E-14	1.292E-14	1.687E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135858	6WH LOADOUT	04/05/11	Gross Alpha/Beta	Gross Alpha	1.768E-15	5.097E-15	9.425E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.251E-14	1.445E-14	1.725E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135859	6WH LOADOUT	04/05/11	Gross Alpha/Beta	Gross Alpha	1.852E-15	5.338E-15	9.869E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.923E-14	1.36E-14	1.806E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135860	6WH LOADOUT	04/06/11	Gross Alpha/Beta	Gross Alpha	7.876E-15	7.539E-15	9.686E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.396E-14	1.389E-14	1.773E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135861	6WH LOADOUT	04/06/11	Gross Alpha/Beta	Gross Alpha	2.87E-15	5.469E-15	9.177E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.719E-14	1.257E-14	1.68E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135862	6WH LOADOUT	04/06/11	Gross Alpha/Beta	Gross Alpha	3.849E-15	5.682E-15	8.791E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.505E-14	1.295E-14	1.609E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135863	6WH LOADOUT	04/06/11	Gross Alpha/Beta	Gross Alpha	2.845E-15	5.421E-15	9.097E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.66E-14	1.347E-14	1.665E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135864	6WH LOADOUT	04/07/11	Gross Alpha/Beta	Gross Alpha	4.018E-15	5.931E-15	9.177E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.992E-14	1.486E-14	1.68E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135865	6WH LOADOUT	04/07/11	Gross Alpha/Beta	Gross Alpha	2.621E-15	5.859E-15	9.174E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.533E-14	2.263E-14	1.567E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135866	6WH LOADOUT	04/07/11	Gross Alpha/Beta	Gross Alpha	-4.33E-16	4.3E-15	8.536E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.68E-14	1.958E-14	2.448E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135867	6WH LOADOUT	04/07/11	Gross Alpha/Beta	Gross Alpha	2.958E-15	5.997E-15	8.973E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.823E-14	2.198E-14	2.574E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135868	6WH LOADOUT	04/11/11	Gross Alpha/Beta	Gross Alpha	2.209E-15	7.979E-15	1.353E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.816E-14	3.033E-14	2.31E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135869	6WH LOADOUT	04/11/11	Gross Alpha/Beta	Gross Alpha	7.561E-15	1.035E-14	1.425E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.703E-14	3.181E-14	2.434E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135870	6WH LOADOUT	04/11/11	Gross Alpha/Beta	Gross Alpha	5.22E-16	6.867E-15	1.28E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2E-14	2.888E-14	2.186E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135871	6WH LOADOUT	04/11/11	Gross Alpha/Beta	Gross Alpha	3.657E-15	8.174E-15	1.28E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.94E-14	2.949E-14	2.186E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135872	6WH LOADOUT	04/12/11	Gross Alpha/Beta	Gross Alpha	2.61E-15	5.834E-15	9.135E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.629E-14	2.074E-14	1.56E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135873	6WH LOADOUT	04/12/11	Gross Alpha/Beta	Gross Alpha	5.915E-15	6.945E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.681E-14	2.061E-14	1.547E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135874	6WH LOADOUT	04/12/11	Gross Alpha/Beta	Gross Alpha	5.275E-15	7.223E-15	9.943E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.773E-14	2.258E-14	1.698E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135875	6WH LOADOUT	04/12/11	Gross Alpha/Beta	Gross Alpha	6.647E-15	7.804E-15	1.018E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.665E-14	2.302E-14	1.738E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135876	6WH LOADOUT	04/13/11	Gross Alpha/Beta	Gross Alpha	2.936E-15	6.563E-15	1.028E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.04E-14	2.411E-14	1.755E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135877	6WH LOADOUT	04/13/11	Gross Alpha/Beta	Gross Alpha	6.553E-15	7.695E-15	1.004E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.337E-14	2.377E-14	1.714E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135878	6WH LOADOUT	04/13/11	Gross Alpha/Beta	Gross Alpha	2.621E-15	5.859E-15	9.174E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.253E-14	2.186E-14	1.567E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135879	6WH LOADOUT	04/13/11	Gross Alpha/Beta	Gross Alpha	-1.913E-15	3.842E-15	9.376E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.947E-14	2.147E-14	1.601E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135880	6WH LOADOUT	04/14/11	Gross Alpha/Beta	Gross Alpha	4.847E-15	6.637E-15	9.135E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.575E-14	2.197E-14	1.56E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135881	6WH LOADOUT	04/14/11	Gross Alpha/Beta	Gross Alpha	8.202E-15	7.686E-15	9.135E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.367E-14	2.122E-14	1.56E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135882	6WH LOADOUT	04/14/11	Gross Alpha/Beta	Gross Alpha	4.474E-15	7.498E-15	1.096E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.679E-14	2.536E-14	1.872E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135883	6WH LOADOUT	04/14/11	Gross Alpha/Beta	Gross Alpha	1.662E-15	6.003E-15	1.018E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.263E-14	2.34E-14	1.738E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD135884	Plant 7N	04/11/11	Gross Alpha/Beta	Gross Alpha	-2.88E-16	4.803E-15	9.517E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.492E-15	1.917E-14	2.799E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135885	Plant 7N	04/13/11	Gross Alpha/Beta	Gross Alpha	4.983E-15	6.196E-15	8.053E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.594E-14	2.082E-14	2.369E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135886	Plant 7N	04/14/11	Gross Alpha/Beta	Gross Alpha	3.823E-15	5.662E-15	7.819E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.629E-14	1.678E-14	2.3E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135887	Plant 7N	04/19/11	Gross Alpha/Beta	Gross Alpha	5.285E-15	6.303E-15	8.849E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.12E-14	1.828E-14	2.597E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135888	Plant 7N	04/20/11	Gross Alpha/Beta	Gross Alpha	-3.45E-16	3.432E-15	8.099E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.153E-15	1.623E-14	2.377E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135889	Plant 7N	04/21/11	Gross Alpha/Beta	Gross Alpha	1.765E-15	4.611E-15	8.275E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.946E-14	1.781E-14	2.429E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135890	6WH LOADOUT	04/18/11	Gross Alpha/Beta	Gross Alpha	7.398E-15	7.589E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.911E-14	1.404E-14	1.76E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135891	6WH LOADOUT	04/18/11	Gross Alpha/Beta	Gross Alpha	3.87E-15	6.48E-15	1.03E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.05E-14	1.44E-14	1.8E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135892	6WH LOADOUT	04/18/11	Gross Alpha/Beta	Gross Alpha	2.71E-15	6.17E-15	1.06E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.69E-14	1.44E-14	1.85E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135893	6WH LOADOUT	04/18/11	Gross Alpha/Beta	Gross Alpha	1.52E-16	4.49E-15	9.52E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.57E-14	1.41E-14	1.66E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135894	6WH LOADOUT	04/19/11	Gross Alpha/Beta	Gross Alpha	1.54E-15	6.03E-15	1.14E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.23E-14	1.47E-14	1.99E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135895	6WH LOADOUT	04/19/11	Gross Alpha/Beta	Gross Alpha	-1.08E-15	4.22E-15	1.04E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.95E-14	1.33E-14	1.81E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135896	6WH LOADOUT	04/19/11	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.8E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.88E-14	1.37E-14	1.89E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135897	6WH LOADOUT	04/19/11	Gross Alpha/Beta	Gross Alpha	5.63E-15	7.66E-15	1.14E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.82E-14	1.43E-14	1.99E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135898	6WH LOADOUT	04/20/11	Gross Alpha/Beta	Gross Alpha	3.5E-15	5.87E-15	9.36E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.09E-14	1.12E-14	1.63E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135899	6WH LOADOUT	04/20/11	Gross Alpha/Beta	Gross Alpha	3.71E-15	6.22E-15	9.91E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-5.45E-16	1.04E-14	1.73E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135900	6WH LOADOUT	04/20/11	Gross Alpha/Beta	Gross Alpha	3.43E-15	5.75E-15	9.16E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.13E-15	9.21E-15	1.6E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135901	6WH LOADOUT	04/20/11	Gross Alpha/Beta	Gross Alpha	2.34E-15	5.32E-15	9.16E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1E-14	1.09E-14	1.6E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135902	6WH LOADOUT	04/21/11	Gross Alpha/Beta	Gross Alpha	7.91E-15	7.32E-15	9.28E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.88E-14	1.21E-14	1.62E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135903	6WH LOADOUT	04/21/11	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.85E-15	9.16E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.79E-14	1.18E-14	1.6E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135904	6WH LOADOUT	04/21/11	Gross Alpha/Beta	Gross Alpha	3.106E-15	5.582E-15	9.102E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.456E-14	1.905E-14	2.671E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135905	6WH LOADOUT	04/21/11	Gross Alpha/Beta	Gross Alpha	2.951E-15	5.304E-15	8.649E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.528E-14	1.821E-14	2.538E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135906	6WH LOADOUT	04/25/11	Gross Alpha/Beta	Gross Alpha	4.814E-15	6.728E-15	9.747E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.892E-15	1.704E-14	2.738E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135907	6WH LOADOUT	04/25/11	Gross Alpha/Beta	Gross Alpha	-2.283E-15	3.741E-15	1.024E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.198E-14	1.804E-14	2.875E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135908	6WH LOADOUT	04/25/11	Gross Alpha/Beta	Gross Alpha	-9.64E-16	4.063E-15	9.304E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.26E-16	1.547E-14	2.613E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135909	6WH LOADOUT	04/25/11	Gross Alpha/Beta	Gross Alpha	-9.42E-16	3.973E-15	9.097E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.136E-14	1.609E-14	2.555E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135910	6WH LOADOUT	04/26/11	Gross Alpha/Beta	Gross Alpha	-1.895E-15	3.104E-15	8.493E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.315E-15	1.437E-14	2.386E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135911	6WH LOADOUT	04/26/11	Gross Alpha/Beta	Gross Alpha	1.39E-16	4.336E-15	8.71E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-1.36E-15	1.429E-14	2.447E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135912	6WH LOADOUT	04/26/11	Gross Alpha/Beta	Gross Alpha	3.406E-15	5.891E-15	9.097E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.261E-15	1.545E-14	2.555E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135913	6WH LOADOUT	04/26/11	Gross Alpha/Beta	Gross Alpha	-9.91E-16	4.177E-15	9.565E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.707E-15	1.672E-14	2.687E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135914	6WH LOADOUT	04/27/11	Gross Alpha/Beta	Gross Alpha	-1.019E-15	4.297E-15	9.841E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.609E-15	1.672E-14	2.764E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135915	6WH LOADOUT	04/27/11	Gross Alpha/Beta	Gross Alpha	1.272E-15	5.185E-15	9.39E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.466E-14	1.687E-14	2.637E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135916	6WH LOADOUT	04/27/11	Gross Alpha/Beta	Gross Alpha	1.81E-16	5.661E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.065E-14	1.98E-14	3.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135917	6WH LOADOUT	04/27/11	Gross Alpha/Beta	Gross Alpha	3.739E-15	6.465E-15	9.985E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.793E-14	1.814E-14	2.805E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135918	6WH LOADOUT	04/28/11	Gross Alpha/Beta	Gross Alpha	1.451E-15	5.918E-15	1.072E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.202E-15	1.859E-14	3.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135919	6WH LOADOUT	04/28/11	Gross Alpha/Beta	Gross Alpha	1.475E-15	6.012E-15	1.089E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.805E-14	2.05E-14	3.058E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135920	6WH LOADOUT	04/28/11	Gross Alpha/Beta	Gross Alpha	3.999E-15	8.41E-15	1.387E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.876E-14	1.718E-14	2.26E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135921	6WH LOADOUT	04/28/11	Gross Alpha/Beta	Gross Alpha	1.26E-14	1.072E-14	1.309E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.303E-14	1.459E-14	2.133E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135922	Plant 7N	04/25/11	Gross Alpha/Beta	Gross Alpha	6.45E-16	5.232E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.076E-14	1.138E-14	1.651E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135923	Plant 7N	04/27/11	Gross Alpha/Beta	Gross Alpha	5.129E-15	8.279E-15	1.28E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.36E-14	1.438E-14	2.086E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135924	Plant 7N	04/28/11	Gross Alpha/Beta	Gross Alpha	5.186E-15	8.371E-15	1.295E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.207E-14	1.659E-14	2.109E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135925	Plant 7W	05/02/11	Gross Alpha/Beta	Gross Alpha	9.084E-15	8.418E-15	1.069E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.44E-14	1.451E-14	1.742E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135926	Plant 7W	05/03/11	Gross Alpha/Beta	Gross Alpha	1.701E-15	5.445E-15	9.669E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.33E-14	1.233E-14	1.576E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135927	Plant 7W	05/04/11	Gross Alpha/Beta	Gross Alpha	1.767E-15	5.657E-15	1.004E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.61E-15	1.078E-14	1.637E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135928	Plant 7W	05/05/11	Gross Alpha/Beta	Gross Alpha	4.186E-15	6.757E-15	1.045E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.8E-14	1.362E-14	1.703E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135929	6WH LOADOUT	05/02/11	Gross Alpha/Beta	Gross Alpha	1.881E-15	6.02E-15	1.069E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.792E-14	1.385E-14	1.742E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135930	6WH LOADOUT	05/02/11	Gross Alpha/Beta	Gross Alpha	5.746E-15	7.669E-15	1.12E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.266E-14	1.267E-14	1.825E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135931	6WH LOADOUT	05/02/11	Gross Alpha/Beta	Gross Alpha	5.108E-15	6.817E-15	9.958E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.326E-14	1.15E-14	1.623E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135932	6WH LOADOUT	05/02/11	Gross Alpha/Beta	Gross Alpha	4.041E-15	6.523E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.412E-14	1.173E-14	1.644E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135933	6WH LOADOUT	05/03/11	Gross Alpha/Beta	Gross Alpha	-1.667E-15	4.217E-15	1.036E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.607E-15	1.146E-14	1.688E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135934	6WH LOADOUT	05/03/11	Gross Alpha/Beta	Gross Alpha	-5.04E-16	4.816E-15	1.036E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.287E-14	1.298E-14	1.688E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135935	6WH LOADOUT	05/03/11	Gross Alpha/Beta	Gross Alpha	3.359E-15	7.065E-15	1.165E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.258E-14	1.426E-14	1.898E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135936	6WH LOADOUT	05/03/11	Gross Alpha/Beta	Gross Alpha	-3.033E-15	3.769E-15	1.11E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.824E-14	1.43E-14	1.808E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135937	6WH LOADOUT	05/04/11	Gross Alpha/Beta	Gross Alpha	2.921E-15	6.143E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.571E-15	1.035E-14	1.651E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135938	6WH LOADOUT	05/04/11	Gross Alpha/Beta	Gross Alpha	7.38E-16	5.987E-15	1.159E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.848E-15	1.234E-14	1.889E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135939	6WH LOADOUT	05/04/11	Gross Alpha/Beta	Gross Alpha	6.307E-15	7.269E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.276E-14	1.157E-14	1.644E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135940	6WH LOADOUT	05/04/11	Gross Alpha/Beta	Gross Alpha	-1.631E-15	4.125E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.418E-14	1.178E-14	1.651E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135941	6WH LOADOUT	05/09/11	Gross Alpha/Beta	Gross Alpha	1.136E-15	6.419E-15	1.03E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.665E-14	1.36E-14	1.602E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135942	6WH LOADOUT	05/09/11	Gross Alpha/Beta	Gross Alpha	9.976E-15	8.979E-15	1.034E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.61E-14	1.359E-14	1.608E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135943	6WH LOADOUT	05/09/11	Gross Alpha/Beta	Gross Alpha	3.497E-15	7.479E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.688E-14	1.313E-14	1.679E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135944	6WH LOADOUT	05/09/11	Gross Alpha/Beta	Gross Alpha	7.484E-15	9.122E-15	1.162E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.006E-14	1.534E-14	1.807E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135945	6WH LOADOUT	05/10/11	Gross Alpha/Beta	Gross Alpha	5.753E-15	8.088E-15	1.071E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.907E-14	1.426E-14	1.665E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135946	6WH LOADOUT	05/10/11	Gross Alpha/Beta	Gross Alpha	1.137E-14	9.487E-15	1.061E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.698E-14	1.491E-14	1.65E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135947	6WH LOADOUT	05/10/11	Gross Alpha/Beta	Gross Alpha	-1.246E-15	6.583E-15	1.208E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.815E-14	1.564E-14	1.878E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135948	6WH LOADOUT	05/10/11	Gross Alpha/Beta	Gross Alpha	7.244E-15	8.829E-15	1.125E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.55E-14	1.449E-14	1.749E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135949	6WH LOADOUT	05/11/11	Gross Alpha/Beta	Gross Alpha	2.464E-15	7.476E-15	1.135E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.992E-14	1.403E-14	1.765E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135950	6WH LOADOUT	05/11/11	Gross Alpha/Beta	Gross Alpha	5.252E-15	8.839E-15	1.22E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.531E-14	1.548E-14	1.896E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135951	6WH LOADOUT	05/11/11	Gross Alpha/Beta	Gross Alpha	2.344E-15	7.114E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.555E-14	1.498E-14	1.679E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135952	6WH LOADOUT	05/11/11	Gross Alpha/Beta	Gross Alpha	9.181E-15	9.006E-15	1.071E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.222E-14	1.359E-14	1.665E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135953	6WH LOADOUT	05/12/11	Gross Alpha/Beta	Gross Alpha	2.294E-15	6.961E-15	1.057E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.817E-14	1.497E-14	1.643E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135954	6WH LOADOUT	05/12/11	Gross Alpha/Beta	Gross Alpha	2.324E-15	7.052E-15	1.071E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.084E-14	1.345E-14	1.665E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135955	6WH LOADOUT	05/12/11	Gross Alpha/Beta	Gross Alpha	8.522E-15	9.235E-15	1.135E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.501E-14	1.455E-14	1.765E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135956	6WH LOADOUT	05/12/11	Gross Alpha/Beta	Gross Alpha	3.95E-15	8.446E-15	1.22E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.844E-14	1.579E-14	1.896E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135957	Plant 7W	05/09/11	Gross Alpha/Beta	Gross Alpha	2.227E-15	6.757E-15	1.026E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.705E-14	1.453E-14	1.595E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135958	Plant 7W	05/10/11	Gross Alpha/Beta	Gross Alpha	9.063E-15	8.89E-15	1.057E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.343E-14	1.453E-14	1.643E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135959	Plant 7W	05/11/11	Gross Alpha/Beta	Gross Alpha	2.19E-15	6.646E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.094E-14	1.28E-14	1.569E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135960	Plant 7W	05/12/11	Gross Alpha/Beta	Gross Alpha	8.109E-15	8.788E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.763E-14	1.517E-14	1.679E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135961	Plant 2	05/16/11	Gross Alpha/Beta	Gross Alpha	6.004E-15	1.568E-14	2.612E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.521E-14	2.983E-14	4.119E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135962	Plant 2	05/17/11	Gross Alpha/Beta	Gross Alpha	5.893E-15	7.531E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.373E-14	1.255E-14	1.68E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135963	Plant 2	05/18/11	Gross Alpha/Beta	Gross Alpha	1.168E-15	5.358E-15	9.565E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.195E-15	9.968E-15	1.508E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135964	6WH LOADOUT	05/16/11	Gross Alpha/Beta	Gross Alpha	2.585E-15	6.75E-15	1.125E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.031E-14	1.387E-14	1.774E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135965	6WH LOADOUT	05/16/11	Gross Alpha/Beta	Gross Alpha	4.08E-15	7.708E-15	1.209E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.26E-14	1.499E-14	1.906E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135966	6WH LOADOUT	05/16/11	Gross Alpha/Beta	Gross Alpha	2.438E-15	6.367E-15	1.061E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.944E-14	1.412E-14	1.673E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135967	6WH LOADOUT	05/16/11	Gross Alpha/Beta	Gross Alpha	4E-15	7.557E-15	1.185E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.293E-14	1.478E-14	1.869E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135968	6WH LOADOUT	05/17/11	Gross Alpha/Beta	Gross Alpha	4.683E-15	7.079E-15	1.052E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.763E-14	1.283E-14	1.658E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135969	6WH LOADOUT	05/17/11	Gross Alpha/Beta	Gross Alpha	2.438E-15	6.367E-15	1.061E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.435E-14	1.257E-14	1.673E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135970	6WH LOADOUT	05/17/11	Gross Alpha/Beta	Gross Alpha	1.461E-15	6.703E-15	1.197E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.774E-14	1.435E-14	1.887E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135971	6WH LOADOUT	05/17/11	Gross Alpha/Beta	Gross Alpha	1.361E-15	6.242E-15	1.114E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.58E-14	1.328E-14	1.757E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135972	6WH LOADOUT	05/18/11	Gross Alpha/Beta	Gross Alpha	2.561E-15	6.688E-15	1.114E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.595E-15	1.248E-14	1.757E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135973	6WH LOADOUT	05/18/11	Gross Alpha/Beta	Gross Alpha	1.72E-16	6.188E-15	1.197E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.779E-14	1.54E-14	1.887E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135974	6WH LOADOUT	05/18/11	Gross Alpha/Beta	Gross Alpha	-2.36E-15	4.902E-15	1.174E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.052E-15	1.314E-14	1.851E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135975	6WH LOADOUT	05/18/11	Gross Alpha/Beta	Gross Alpha	1.52E-16	5.485E-15	1.061E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.19E-14	1.337E-14	1.673E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135976	6WH LOADOUT	05/19/11	Gross Alpha/Beta	Gross Alpha	4.683E-15	7.079E-15	1.052E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.986E-14	1.407E-14	1.658E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD135977	6WH LOADOUT	05/19/11	Gross Alpha/Beta	Gross Alpha	7.878E-15	7.891E-15	1.025E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.182E-14	1.299E-14	1.616E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135978	6WH LOADOUT	05/19/11	Gross Alpha/Beta	Gross Alpha	6.618E-15	8.459E-15	1.197E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.619E-14	1.418E-14	1.887E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135979	6WH LOADOUT	05/19/11	Gross Alpha/Beta	Gross Alpha	1.361E-15	6.242E-15	1.114E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.228E-14	1.397E-14	1.757E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135980	6WH LOADOUT	05/23/11	Gross Alpha/Beta	Gross Alpha	2.33E-15	5.073E-15	8.661E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.204E-14	1.844E-14	2.621E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135981	6WH LOADOUT	05/24/11	Gross Alpha/Beta	Gross Alpha	7.497E-15	6.146E-15	6.968E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	9.163E-15	1.411E-14	2.108E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135982	6WH LOADOUT	05/23/11	Gross Alpha/Beta	Gross Alpha	-1.032E-15	2.723E-15	7.674E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.009E-14	1.554E-14	2.322E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135983	6WH LOADOUT	05/23/11	Gross Alpha/Beta	Gross Alpha	4.931E-15	5.49E-15	7.334E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.124E-14	1.583E-14	2.219E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135984	6WH LOADOUT	05/23/11	Gross Alpha/Beta	Gross Alpha	1.973E-15	4.295E-15	7.334E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.093E-14	1.496E-14	2.219E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135985	6WH LOADOUT	05/24/11	Gross Alpha/Beta	Gross Alpha	2.127E-15	4.631E-15	7.908E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.012E-14	1.684E-14	2.393E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135986	6WH LOADOUT	05/24/11	Gross Alpha/Beta	Gross Alpha	2.064E-15	4.495E-15	7.674E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.369E-14	1.747E-14	2.322E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135987	6WH LOADOUT	05/24/11	Gross Alpha/Beta	Gross Alpha	0	3.715E-15	8.343E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.71E-14	1.824E-14	2.524E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135988	6WH LOADOUT	05/24/11	Gross Alpha/Beta	Gross Alpha	0	3.99E-15	8.959E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.336E-14	1.828E-14	2.711E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135989	6WH LOADOUT	05/25/11	Gross Alpha/Beta	Gross Alpha	7.301E-15	9.48E-15	1.357E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.977E-14	2.85E-14	4.107E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135990	6WH LOADOUT	05/25/11	Gross Alpha/Beta	Gross Alpha	1.578E-15	6.104E-15	1.173E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.058E-14	2.421E-14	3.55E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135991	6WH LOADOUT	05/25/11	Gross Alpha/Beta	Gross Alpha	2.929E-15	6.379E-15	1.089E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.839E-15	2.103E-14	3.295E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135992	6WH LOADOUT	05/25/11	Gross Alpha/Beta	Gross Alpha	0	4.85E-15	1.089E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.336E-14	2.197E-14	3.295E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135993	6WH LOADOUT	05/26/11	Gross Alpha/Beta	Gross Alpha	1.063E-15	4.114E-15	7.908E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.665E-14	1.655E-14	2.393E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD135994	6WH LOADOUT	05/26/11	Gross Alpha/Beta	Gross Alpha	-2.337E-15	2.718E-15	9.722E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.397E-15	1.029E-14	1.618E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135995	6WH LOADOUT	05/26/11	Gross Alpha/Beta	Gross Alpha	7.273E-15	7.511E-15	1.045E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.294E-15	1.025E-14	1.739E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135996	6WH LOADOUT	05/26/11	Gross Alpha/Beta	Gross Alpha	-7.2E-17	4.994E-15	1.153E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.888E-15	1.273E-14	1.918E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD135997	Plant 7W	05/23/11	Gross Alpha/Beta	Gross Alpha	6.567E-15	6.782E-15	9.435E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.021E-14	1.213E-14	1.57E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD135998	Plant 7W	05/25/11	Gross Alpha/Beta	Gross Alpha	5.253E-15	1.257E-14	2.305E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.158E-14	2.763E-14	3.836E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD135999	Plant 7W	05/26/11	Gross Alpha/Beta	Gross Alpha	3.353E-15	5.77E-15	9.722E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.34E-16	9.921E-15	1.618E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD136000	Plant 7W	05/31/11	Gross Alpha/Beta	Gross Alpha	7.21E-15	6.727E-15	8.1E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.529E-14	1.035E-14	1.432E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136001	Plant 7W	06/01/11	Gross Alpha/Beta	Gross Alpha	-6.91E-16	3.743E-15	8.1E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.358E-14	1.127E-14	1.432E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136002	Plant 7W	06/02/11	Gross Alpha/Beta	Gross Alpha	3.387E-15	5.656E-15	8.418E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.897E-14	1.111E-14	1.488E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136003	6WH LOADOUT	05/31/11	Gross Alpha/Beta	Gross Alpha	7.047E-15	7.282E-15	9.173E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.671E-14	1.276E-14	1.622E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136004	6WH LOADOUT	05/31/11	Gross Alpha/Beta	Gross Alpha	4.872E-15	6.643E-15	9.292E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.754E-14	1.188E-14	1.643E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136005	6WH LOADOUT	05/31/11	Gross Alpha/Beta	Gross Alpha	4.575E-15	6.238E-15	8.726E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.647E-14	1.115E-14	1.543E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136006	6WH LOADOUT	05/31/11	Gross Alpha/Beta	Gross Alpha	4.594E-15	6.263E-15	8.761E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.423E-14	1.205E-14	1.549E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136007	6WH LOADOUT	06/01/11	Gross Alpha/Beta	Gross Alpha	3.962E-15	6.616E-15	9.847E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.354E-14	1.199E-14	1.741E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD136008	6WH LOADOUT	06/01/11	Gross Alpha/Beta	Gross Alpha	3.554E-15	5.936E-15	8.834E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.409E-14	1.099E-14	1.562E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD136009	6WH LOADOUT	06/01/11	Gross Alpha/Beta	Gross Alpha	3.1E-16	4.433E-15	8.484E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.663E-14	1.092E-14	1.5E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136010	6WH LOADOUT	06/01/11	Gross Alpha/Beta	Gross Alpha	3.07E-16	4.381E-15	8.385E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.03E-14	1.007E-14	1.483E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD136011	6WH LOADOUT	06/02/11	Gross Alpha/Beta	Gross Alpha	4.872E-15	6.643E-15	9.292E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.298E-14	1.249E-14	1.643E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136012	6WH LOADOUT	06/02/11	Gross Alpha/Beta	Gross Alpha	3.33E-16	4.753E-15	9.096E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.584E-14	1.147E-14	1.608E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD136013	6WH LOADOUT	06/02/11	Gross Alpha/Beta	Gross Alpha	6.277E-15	7.337E-15	9.713E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.757E-14	1.343E-14	1.717E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136014	6WH LOADOUT	06/02/11	Gross Alpha/Beta	Gross Alpha	5.655E-15	7.711E-15	1.079E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.061E-14	1.492E-14	1.907E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136015	Plant 7W	06/06/11	Gross Alpha/Beta	Gross Alpha	4.58E-16	3.184E-15	7.587E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.846E-14	2.944E-14	2.523E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD136016	Plant 7W	06/07/11	Gross Alpha/Beta	Gross Alpha	1.058E-14	6.714E-15	6.408E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.099E-14	2.568E-14	2.131E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136017	Plant 7W	06/08/11	Gross Alpha/Beta	Gross Alpha	4.17E-16	2.898E-15	6.905E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.428E-15	2.563E-14	2.296E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD136018	Plant 7W	06/09/11	Gross Alpha/Beta	Gross Alpha	2.686E-15	1.868E-14	4.452E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.145E-14	1.65E-13	1.48E-13	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD136019	6WH LOADOUT	06/06/11	Gross Alpha/Beta	Gross Alpha	3.784E-15	7.513E-15	1.051E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.642E-14	1.36E-14	1.657E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136020	6WH LOADOUT	06/06/11	Gross Alpha/Beta	Gross Alpha	3.8E-16	7.123E-15	1.174E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.953E-14	1.519E-14	1.852E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD136021	6WH LOADOUT	06/06/11	Gross Alpha/Beta	Gross Alpha	3.595E-15	7.137E-15	9.983E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.426E-14	1.382E-14	1.574E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136022	6WH LOADOUT	06/06/11	Gross Alpha/Beta	Gross Alpha	1.402E-15	6.383E-15	9.9E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.749E-14	1.307E-14	1.561E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136023	6WH LOADOUT	06/07/11	Gross Alpha/Beta	Gross Alpha	5.776E-15	7.776E-15	9.983E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.342E-14	1.466E-14	1.574E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD136024	6WH LOADOUT	06/07/11	Gross Alpha/Beta	Gross Alpha	1.352E-14	9.768E-15	1.007E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.972E-14	1.531E-14	1.587E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137468	6WH LOADOUT	06/07/11	Gross Alpha/Beta	Gross Alpha	1.482E-15	6.745E-15	1.046E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.591E-14	1.448E-14	1.65E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137469	6WH LOADOUT	06/07/11	Gross Alpha/Beta	Gross Alpha	1.157E-14	9.457E-15	1.028E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.27E-14	1.492E-14	1.622E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137470	6WH LOADOUT	06/08/11	Gross Alpha/Beta	Gross Alpha	7.103E-15	8.355E-15	1.033E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.492E-14	1.517E-14	1.629E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137471	6WH LOADOUT	06/08/11	Gross Alpha/Beta	Gross Alpha	-7.94E-16	5.843E-15	1.033E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.138E-14	1.39E-14	1.629E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137472	6WH LOADOUT	06/08/11	Gross Alpha/Beta	Gross Alpha	4.725E-15	7.526E-15	1.007E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.851E-14	1.43E-14	1.587E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137473	6WH LOADOUT	06/08/11	Gross Alpha/Beta	Gross Alpha	4.725E-15	7.526E-15	1.007E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.236E-14	1.553E-14	1.587E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137474	6WH LOADOUT	06/09/11	Gross Alpha/Beta	Gross Alpha	1.077E-14	9.47E-15	1.06E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.333E-14	1.532E-14	1.672E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137475	6WH LOADOUT	06/09/11	Gross Alpha/Beta	Gross Alpha	2.636E-15	7.153E-15	1.051E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.64E-14	1.549E-14	1.657E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137476	6WH LOADOUT	06/09/11	Gross Alpha/Beta	Gross Alpha	1.185E-14	7.923E-15	7.869E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.249E-14	3.068E-14	2.616E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137477	6WH LOADOUT	06/09/11	Gross Alpha/Beta	Gross Alpha	2.688E-15	4.506E-15	7.69E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.539E-14	3.016E-14	2.557E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137478	6WH LOADOUT	06/13/11	Gross Alpha/Beta	Gross Alpha	1.444E-15	6.573E-15	1.02E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.428E-14	1.198E-14	1.608E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137479	6WH LOADOUT	06/13/11	Gross Alpha/Beta	Gross Alpha	2.525E-15	6.853E-15	1.007E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.08E-14	1.146E-14	1.587E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137480	6WH LOADOUT	06/13/11	Gross Alpha/Beta	Gross Alpha	3.34E-16	6.264E-15	1.033E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.726E-15	1.16E-14	1.629E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137481	6WH LOADOUT	06/13/11	Gross Alpha/Beta	Gross Alpha	1.462E-15	6.658E-15	1.033E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.04E-14	1.167E-14	1.629E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137482	6WH LOADOUT	06/14/11	Gross Alpha/Beta	Gross Alpha	1.814E-15	8.26E-15	1.281E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.708E-15	1.399E-14	2.02E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137483	6WH LOADOUT	06/14/11	Gross Alpha/Beta	Gross Alpha	3.147E-15	8.539E-15	1.254E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.51E-14	1.446E-14	1.978E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137484	6WH LOADOUT	06/14/11	Gross Alpha/Beta	Gross Alpha	-3.503E-15	5.623E-15	1.186E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.174E-15	1.247E-14	1.87E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137485	6WH LOADOUT	06/14/11	Gross Alpha/Beta	Gross Alpha	3.02E-15	8.196E-15	1.204E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.971E-15	1.324E-14	1.899E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137486	6WH LOADOUT	06/15/11	Gross Alpha/Beta	Gross Alpha	2.525E-15	6.853E-15	1.007E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.663E-14	1.316E-14	1.587E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137487	6WH LOADOUT	06/15/11	Gross Alpha/Beta	Gross Alpha	4.785E-15	7.622E-15	1.02E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.762E-14	1.235E-14	1.608E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137488	6WH LOADOUT	06/15/11	Gross Alpha/Beta	Gross Alpha	7.795E-15	8.195E-15	9.779E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.075E-14	1.226E-14	1.542E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137489	6WH LOADOUT	06/15/11	Gross Alpha/Beta	Gross Alpha	-7.77E-16	5.72E-15	1.011E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.085E-14	1.15E-14	1.594E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137490	6WH LOADOUT	06/16/11	Gross Alpha/Beta	Gross Alpha	4.1E-16	7.689E-15	1.268E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.769E-14	1.698E-14	1.999E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137491	6WH LOADOUT	06/16/11	Gross Alpha/Beta	Gross Alpha	9.347E-15	6.613E-15	3.162E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.187E-14	1.208E-14	1.897E-15	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137492	6WH LOADOUT	06/16/11	Gross Alpha/Beta	Gross Alpha	1.598E-15	3.973E-15	7.796E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.483E-14	3.004E-14	2.592E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137493	6WH LOADOUT	06/16/11	Gross Alpha/Beta	Gross Alpha	3.732E-15	4.936E-15	7.553E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.407E-14	2.861E-14	2.511E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137494	Plant 7W	06/13/11	Gross Alpha/Beta	Gross Alpha	3.317E-15	4.388E-15	6.713E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.799E-15	2.514E-14	2.232E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137495	Plant 7W	06/15/11	Gross Alpha/Beta	Gross Alpha	2.413E-15	4.047E-15	6.905E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.395E-14	2.67E-14	2.296E-14	uCi/mL	J	T02	SLDS (General Area) Perimeter Air
SLD137496	Plant 7W	06/16/11	Gross Alpha/Beta	Gross Alpha	-4.47E-16	5.227E-15	9.174E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-4.327E-15	8.965E-15	1.507E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137497	Plant 7W	06/20/11	Gross Alpha/Beta	Gross Alpha	2.823E-15	6.755E-15	9.791E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.847E-14	1.235E-14	1.608E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137498	Plant 7W	06/21/11	Gross Alpha/Beta	Gross Alpha	2.02E-15	7.488E-15	1.148E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.16E-14	1.336E-14	1.886E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137499	Plant 7W	06/22/11	Gross Alpha/Beta	Gross Alpha	-1.57E-15	5.105E-15	9.75E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.577E-14	1.201E-14	1.602E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137500	Plant 7W	06/23/11	Gross Alpha/Beta	Gross Alpha	-2.781E-15	4.813E-15	1.018E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.86E-16	1.067E-14	1.672E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137501	Plant 2	06/22/11	Gross Alpha/Beta	Gross Alpha	1.867E-14	3.382E-14	4.66E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.512E-14	5.163E-14	7.656E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137502	6WH LOADOUT	06/20/11	Gross Alpha/Beta	Gross Alpha	1.057E-14	9.436E-15	1.067E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.856E-15	1.124E-14	1.66E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137503	6WH LOADOUT	06/20/11	Gross Alpha/Beta	Gross Alpha	7.27E-15	8.74E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.943E-14	1.304E-14	1.697E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137504	6WH LOADOUT	06/20/11	Gross Alpha/Beta	Gross Alpha	1.357E-15	6.876E-15	1.077E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.498E-14	1.241E-14	1.675E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137505	6WH LOADOUT	06/20/11	Gross Alpha/Beta	Gross Alpha	-1.102E-15	6.861E-15	1.223E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.544E-14	1.392E-14	1.903E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137506	6WH LOADOUT	06/21/11	Gross Alpha/Beta	Gross Alpha	5.148E-15	1.065E-14	1.504E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.289E-14	1.756E-14	2.34E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137507	6WH LOADOUT	06/21/11	Gross Alpha/Beta	Gross Alpha	8.82E-15	1.06E-14	1.324E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.413E-14	1.476E-14	2.059E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137508	6WH LOADOUT	06/21/11	Gross Alpha/Beta	Gross Alpha	4.48E-15	9.271E-15	1.309E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.992E-14	1.528E-14	2.037E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137509	6WH LOADOUT	06/21/11	Gross Alpha/Beta	Gross Alpha	2.36E-16	7.869E-15	1.309E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.161E-14	1.547E-14	2.037E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137510	6WH LOADOUT	06/22/11	Gross Alpha/Beta	Gross Alpha	1.249E-14	1.035E-14	1.137E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.393E-14	1.399E-14	1.769E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137511	6WH LOADOUT	06/22/11	Gross Alpha/Beta	Gross Alpha	4.043E-15	8.366E-15	1.182E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.41E-14	1.445E-14	1.838E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137512	6WH LOADOUT	06/22/11	Gross Alpha/Beta	Gross Alpha	6.091E-15	8.415E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.377E-14	1.241E-14	1.697E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137513	6WH LOADOUT	06/22/11	Gross Alpha/Beta	Gross Alpha	1.642E-15	8.318E-15	1.302E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.475E-14	1.462E-14	2.026E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137514	6WH LOADOUT	06/23/11	Gross Alpha/Beta	Gross Alpha	-1.113E-15	6.931E-15	1.236E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.079E-14	1.35E-14	1.923E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137515	6WH LOADOUT	06/23/11	Gross Alpha/Beta	Gross Alpha	3.785E-15	7.832E-15	1.106E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.324E-14	1.25E-14	1.721E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137516	6WH LOADOUT	06/23/11	Gross Alpha/Beta	Gross Alpha	-1.753E-15	5.702E-15	1.089E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.603E-15	1.215E-14	1.789E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137517	6WH LOADOUT	06/23/11	Gross Alpha/Beta	Gross Alpha	6.83E-16	6.577E-15	1.074E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.512E-15	1.199E-14	1.764E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137518	6WH LOADOUT	06/28/11	Gross Alpha/Beta	Gross Alpha	3.389E-15	6.274E-15	1.004E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.154E-14	1.151E-14	1.51E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137519	6WH LOADOUT	06/28/11	Gross Alpha/Beta	Gross Alpha	4.06E-15	7.517E-15	1.203E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.037E-14	1.316E-14	1.809E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137520	6WH LOADOUT	06/28/11	Gross Alpha/Beta	Gross Alpha	3.597E-15	6.659E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.598E-14	1.141E-14	1.602E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137521	6WH LOADOUT	06/28/11	Gross Alpha/Beta	Gross Alpha	1.301E-15	5.814E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.391E-14	1.116E-14	1.602E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137522	6WH LOADOUT	06/29/11	Gross Alpha/Beta	Gross Alpha	1.301E-15	5.814E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.286E-14	1.221E-14	1.602E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137523	6WH LOADOUT	06/29/11	Gross Alpha/Beta	Gross Alpha	2.449E-15	6.251E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.457E-14	1.347E-14	1.602E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137524	6WH LOADOUT	06/29/11	Gross Alpha/Beta	Gross Alpha	1.51E-16	5.272E-15	1.052E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.441E-14	1.109E-14	1.582E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137525	6WH LOADOUT	06/29/11	Gross Alpha/Beta	Gross Alpha	1.75E-16	6.12E-15	1.221E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.777E-14	1.417E-14	1.836E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137526	6WH LOADOUT	06/30/11	Gross Alpha/Beta	Gross Alpha	5.548E-15	8.236E-15	1.246E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.156E-14	1.482E-14	1.874E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137527	6WH LOADOUT	06/30/11	Gross Alpha/Beta	Gross Alpha	1.313E-15	5.865E-15	1.075E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.029E-14	1.2E-14	1.617E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137528	6WH LOADOUT	06/30/11	Gross Alpha/Beta	Gross Alpha	-2.211E-15	4.376E-15	1.099E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.856E-14	1.315E-14	1.653E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137529	6WH LOADOUT	06/30/11	Gross Alpha/Beta	Gross Alpha	1.56E-16	5.437E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.958E-14	1.313E-14	1.631E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137530	Plant 7W	06/28/11	Gross Alpha/Beta	Gross Alpha	1.905E-15	4.263E-15	7.571E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.77E-14	1.607E-14	2.231E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137531	Plant 7W	06/29/11	Gross Alpha/Beta	Gross Alpha	1.969E-15	4.407E-15	7.828E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.83E-14	1.661E-14	2.307E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137532	Plant 7W	06/30/11	Gross Alpha/Beta	Gross Alpha	4.112E-15	5.385E-15	7.963E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.977E-15	1.609E-14	2.347E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137533	Plant 7W	07/05/11	Gross Alpha/Beta	Gross Alpha	9E-17	5.815E-15	1.021E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.955E-14	1.154E-14	1.605E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137534	Plant 7W	07/06/11	Gross Alpha/Beta	Gross Alpha	3.228E-15	6.716E-15	9.928E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.03E-14	1.242E-14	1.56E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137535	Plant 7W	07/07/11	Gross Alpha/Beta	Gross Alpha	1.201E-15	6.385E-15	1.052E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.144E-14	1.309E-14	1.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137536	6WH LOADOUT	07/05/11	Gross Alpha/Beta	Gross Alpha	2.513E-15	7.351E-15	1.144E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.623E-14	1.34E-14	1.797E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137537	6WH LOADOUT	07/05/11	Gross Alpha/Beta	Gross Alpha	2.467E-15	7.218E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.794E-14	1.228E-14	1.764E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137538	6WH LOADOUT	07/05/11	Gross Alpha/Beta	Gross Alpha	4.647E-15	7.647E-15	1.079E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.089E-14	1.329E-14	1.695E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137539	6WH LOADOUT	07/05/11	Gross Alpha/Beta	Gross Alpha	4.667E-15	7.68E-15	1.084E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.937E-14	1.209E-14	1.703E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137540	6WH LOADOUT	07/06/11	Gross Alpha/Beta	Gross Alpha	1.186E-15	6.305E-15	1.039E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.184E-14	1.195E-14	1.631E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137541	6WH LOADOUT	07/06/11	Gross Alpha/Beta	Gross Alpha	2.35E-15	6.876E-15	1.07E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.453E-14	1.253E-14	1.681E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137542	6WH LOADOUT	07/06/11	Gross Alpha/Beta	Gross Alpha	5.735E-15	7.91E-15	1.07E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.401E-14	1.352E-14	1.681E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137543	6WH LOADOUT	07/06/11	Gross Alpha/Beta	Gross Alpha	7.386E-15	7.884E-15	9.888E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.518E-14	1.185E-14	1.553E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137544	6WH LOADOUT	07/07/11	Gross Alpha/Beta	Gross Alpha	1.678E-15	8.917E-15	1.469E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.532E-14	1.627E-14	2.307E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137545	6WH LOADOUT	07/07/11	Gross Alpha/Beta	Gross Alpha	1.1E-16	7.137E-15	1.254E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.163E-15	1.173E-14	1.969E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137546	6WH LOADOUT	07/07/11	Gross Alpha/Beta	Gross Alpha	1.12E-16	7.284E-15	1.279E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.448E-14	1.445E-14	2.01E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137547	6WH LOADOUT	07/07/11	Gross Alpha/Beta	Gross Alpha	-1.182E-15	6.466E-15	1.223E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.287E-15	1.133E-14	1.921E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137548	6WH LOADOUT	07/11/11	Gross Alpha/Beta	Gross Alpha	-8.34E-16	2.698E-15	8.045E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.613E-14	1.86E-14	2.479E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137549	6WH LOADOUT	07/11/11	Gross Alpha/Beta	Gross Alpha	9.386E-15	7.368E-15	8.232E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.846E-14	1.915E-14	2.537E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137550	6WH LOADOUT	07/11/11	Gross Alpha/Beta	Gross Alpha	2.897E-15	5.446E-15	9.315E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.118E-14	2.301E-14	2.871E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137551	6WH LOADOUT	07/11/11	Gross Alpha/Beta	Gross Alpha	1.359E-15	4.052E-15	7.866E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.746E-14	1.835E-14	2.424E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137552	6WH LOADOUT	07/12/11	Gross Alpha/Beta	Gross Alpha	7.761E-15	6.092E-15	6.807E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.655E-14	1.695E-14	2.098E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137553	6WH LOADOUT	07/12/11	Gross Alpha/Beta	Gross Alpha	-8.19E-16	2.65E-15	7.901E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.405E-14	1.893E-14	2.435E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137554	6WH LOADOUT	07/12/11	Gross Alpha/Beta	Gross Alpha	1.083E-14	7.075E-15	6.968E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.759E-14	1.66E-14	2.148E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137555	6WH LOADOUT	07/12/11	Gross Alpha/Beta	Gross Alpha	1.011E-14	1.053E-14	1.394E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.643E-14	3.329E-14	4.295E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137556	6WH LOADOUT	07/13/11	Gross Alpha/Beta	Gross Alpha	8.135E-15	6.91E-15	8.119E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.5E-14	1.866E-14	2.502E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137557	6WH LOADOUT	07/13/11	Gross Alpha/Beta	Gross Alpha	4.769E-15	5.71E-15	8.119E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.013E-14	1.906E-14	2.502E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137558	6WH LOADOUT	07/13/11	Gross Alpha/Beta	Gross Alpha	1.353E-15	4.034E-15	7.831E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.528E-14	1.731E-14	2.414E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137559	6WH LOADOUT	07/13/11	Gross Alpha/Beta	Gross Alpha	5.121E-15	6.132E-15	8.719E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.231E-14	2.04E-14	2.687E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137560	6WH LOADOUT	07/14/11	Gross Alpha/Beta	Gross Alpha	4.14E-15	5.961E-15	9.218E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.473E-14	2.157E-14	2.841E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137561	6WH LOADOUT	07/14/11	Gross Alpha/Beta	Gross Alpha	7.847E-15	6.665E-15	7.831E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.518E-14	1.811E-14	2.414E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137562	6WH LOADOUT	07/14/11	Gross Alpha/Beta	Gross Alpha	5.597E-15	7.298E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.179E-14	1.42E-14	1.659E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137563	6WH LOADOUT	07/14/11	Gross Alpha/Beta	Gross Alpha	6.667E-15	7.557E-15	1.108E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.52E-14	1.339E-14	1.638E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137564	Plant 7W	07/11/11	Gross Alpha/Beta	Gross Alpha	3.402E-15	6.76E-15	1.164E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.952E-14	1.627E-14	1.72E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137565	Plant 7W	07/12/11	Gross Alpha/Beta	Gross Alpha	1.897E-15	1.108E-14	2.207E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.925E-14	2.552E-14	3.261E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137566	Plant 7W	07/13/11	Gross Alpha/Beta	Gross Alpha	3.169E-15	6.298E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.399E-14	1.304E-14	1.603E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137567	Plant 7W	07/14/11	Gross Alpha/Beta	Gross Alpha	2.051E-15	5.887E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.996E-14	1.262E-14	1.603E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137939	Plant 7W	07/18/11	Gross Alpha/Beta	Gross Alpha	9.9E-16	4.684E-15	7.475E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.437E-14	1.496E-14	2.281E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137940	Plant 7W	07/21/11	Gross Alpha/Beta	Gross Alpha	6.381E-15	6.925E-15	8.028E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.408E-14	1.588E-14	2.449E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137941	6WH LOADOUT	07/18/11	Gross Alpha/Beta	Gross Alpha	9.69E-16	5.678E-15	1.157E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.146E-14	1.661E-14	1.857E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137942	6WH LOADOUT	07/18/11	Gross Alpha/Beta	Gross Alpha	9.645E-15	7.846E-15	9.664E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.297E-14	1.356E-14	1.551E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137943	6WH LOADOUT	07/18/11	Gross Alpha/Beta	Gross Alpha	2.007E-15	5.487E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.2E-14	1.401E-14	1.627E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137944	6WH LOADOUT	07/18/11	Gross Alpha/Beta	Gross Alpha	2.007E-15	5.487E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.478E-14	1.428E-14	1.627E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137945	6WH LOADOUT	07/19/11	Gross Alpha/Beta	Gross Alpha	7.867E-15	7.614E-15	1.023E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.131E-14	1.501E-14	1.641E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137946	6WH LOADOUT	07/19/11	Gross Alpha/Beta	Gross Alpha	1.034E-14	8.415E-15	1.036E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.31E-14	1.625E-14	1.663E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137947	6WH LOADOUT	07/19/11	Gross Alpha/Beta	Gross Alpha	9.79E-16	5.736E-15	1.169E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.297E-14	1.591E-14	1.876E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137948	6WH LOADOUT	07/19/11	Gross Alpha/Beta	Gross Alpha	3.267E-15	6.147E-15	1.046E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.776E-14	1.589E-14	1.679E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137949	6WH LOADOUT	07/20/11	Gross Alpha/Beta	Gross Alpha	4.23E-15	6.253E-15	9.915E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.852E-14	1.531E-14	1.591E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137950	6WH LOADOUT	07/20/11	Gross Alpha/Beta	Gross Alpha	7.32E-15	7.918E-15	1.117E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.264E-14	1.718E-14	1.793E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137951	6WH LOADOUT	07/20/11	Gross Alpha/Beta	Gross Alpha	5.531E-15	6.859E-15	1.023E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.5E-14	1.441E-14	1.641E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137952	6WH LOADOUT	07/20/11	Gross Alpha/Beta	Gross Alpha	-1.467E-15	3.744E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.659E-14	1.539E-14	1.627E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137953	6WH LOADOUT	07/21/11	Gross Alpha/Beta	Gross Alpha	2.007E-15	5.487E-15	1.013E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.021E-15	1.232E-14	1.627E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137954	6WH LOADOUT	07/21/11	Gross Alpha/Beta	Gross Alpha	3.124E-15	5.878E-15	1E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.926E-14	1.456E-14	1.605E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137955	6WH LOADOUT	07/21/11	Gross Alpha/Beta	Gross Alpha	3.706E-15	6.809E-15	9.325E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.345E-15	1.594E-14	2.845E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137956	6WH LOADOUT	07/21/11	Gross Alpha/Beta	Gross Alpha	-1.059E-15	4.014E-15	7.993E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.882E-14	1.623E-14	2.439E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137957	6WH LOADOUT	07/25/11	Gross Alpha/Beta	Gross Alpha	3.788E-15	4.93E-15	7.468E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.349E-14	1.702E-14	2.474E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137958	6WH LOADOUT	07/25/11	Gross Alpha/Beta	Gross Alpha	5.46E-16	3.228E-15	7.534E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.217E-14	1.787E-14	2.496E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137959	6WH LOADOUT	07/25/11	Gross Alpha/Beta	Gross Alpha	8.301E-15	6.712E-15	7.637E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.958E-14	1.788E-14	2.53E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137960	6WH LOADOUT	07/25/11	Gross Alpha/Beta	Gross Alpha	9.265E-15	7.492E-15	8.524E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.54E-14	1.943E-14	2.824E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137961	6WH LOADOUT	07/26/11	Gross Alpha/Beta	Gross Alpha	9.265E-15	7.492E-15	8.524E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.186E-14	1.996E-14	2.824E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137962	6WH LOADOUT	07/26/11	Gross Alpha/Beta	Gross Alpha	6.087E-15	5.936E-15	7.637E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.706E-14	1.999E-14	2.53E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137963	6WH LOADOUT	07/26/11	Gross Alpha/Beta	Gross Alpha	1.588E-15	3.78E-15	7.306E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.634E-14	1.772E-14	2.421E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137964	6WH LOADOUT	07/26/11	Gross Alpha/Beta	Gross Alpha	8.19E-15	6.623E-15	7.534E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.217E-14	1.787E-14	2.496E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137965	6WH LOADOUT	07/27/11	Gross Alpha/Beta	Gross Alpha	1.638E-15	3.898E-15	7.534E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.43E-14	1.882E-14	2.496E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137966	6WH LOADOUT	07/27/11	Gross Alpha/Beta	Gross Alpha	3.788E-15	4.93E-15	7.468E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.591E-14	2.025E-14	2.474E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137967	6WH LOADOUT	07/27/11	Gross Alpha/Beta	Gross Alpha	4.324E-15	5.627E-15	8.524E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.203E-14	2.154E-14	2.824E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137968	6WH LOADOUT	07/27/11	Gross Alpha/Beta	Gross Alpha	8.117E-15	6.564E-15	7.468E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.824E-14	1.897E-14	2.474E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137969	6WH LOADOUT	07/28/11	Gross Alpha/Beta	Gross Alpha	4.87E-15	5.385E-15	7.468E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.107E-14	1.918E-14	2.474E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137970	6WH LOADOUT	07/28/11	Gross Alpha/Beta	Gross Alpha	4.324E-15	5.627E-15	8.524E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.961E-14	2.135E-14	2.824E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137971	6WH LOADOUT	07/28/11	Gross Alpha/Beta	Gross Alpha	5.048E-15	6.566E-15	1.05E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.977E-14	1.458E-14	1.707E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137972	6WH LOADOUT	07/28/11	Gross Alpha/Beta	Gross Alpha	8.589E-15	7.771E-15	1.064E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.169E-14	1.491E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137973	Plant 2	08/03/11	Gross Alpha/Beta	Gross Alpha	5.285E-15	6.878E-15	1.042E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.474E-14	2.424E-14	3.452E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137974	6WH LOADOUT	08/01/11	Gross Alpha/Beta	Gross Alpha	2.799E-15	5.791E-15	1.064E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.918E-14	1.369E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137975	6WH LOADOUT	08/01/11	Gross Alpha/Beta	Gross Alpha	1.931E-15	6.247E-15	1.253E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.498E-14	1.716E-14	2.036E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137976	6WH LOADOUT	08/01/11	Gross Alpha/Beta	Gross Alpha	6.191E-15	6.953E-15	1.05E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.045E-14	1.465E-14	1.707E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137977	6WH LOADOUT	08/01/11	Gross Alpha/Beta	Gross Alpha	5.115E-15	6.654E-15	1.064E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.724E-14	1.542E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137978	6WH LOADOUT	08/02/11	Gross Alpha/Beta	Gross Alpha	6.273E-15	7.046E-15	1.064E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.613E-14	1.438E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137979	6WH LOADOUT	08/02/11	Gross Alpha/Beta	Gross Alpha	2.799E-15	5.791E-15	1.064E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.03E-14	1.478E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137980	6WH LOADOUT	08/02/11	Gross Alpha/Beta	Gross Alpha	-1.901E-15	3.602E-15	1.103E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.745E-14	1.491E-14	1.793E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD137981	6WH LOADOUT	08/02/11	Gross Alpha/Beta	Gross Alpha	3.244E-15	6.711E-15	1.233E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.475E-14	1.787E-14	2.005E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137982	6WH LOADOUT	08/03/11	Gross Alpha/Beta	Gross Alpha	1.509E-14	1.033E-14	1.215E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.837E-14	1.709E-14	1.974E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137983	6WH LOADOUT	08/03/11	Gross Alpha/Beta	Gross Alpha	7.885E-15	7.87E-15	1.129E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.17E-14	1.46E-14	1.835E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137984	6WH LOADOUT	08/03/11	Gross Alpha/Beta	Gross Alpha	2.799E-15	5.791E-15	1.064E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.308E-14	1.504E-14	1.73E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137985	6WH LOADOUT	08/03/11	Gross Alpha/Beta	Gross Alpha	3.992E-15	6.293E-15	1.074E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.346E-14	1.517E-14	1.745E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137986	6WH LOADOUT	08/04/11	Gross Alpha/Beta	Gross Alpha	-7.1E-16	4.389E-15	1.119E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.264E-14	1.355E-14	1.818E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137987	6WH LOADOUT	08/04/11	Gross Alpha/Beta	Gross Alpha	5.303E-15	6.898E-15	1.103E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.737E-14	1.389E-14	1.793E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137988	6WH LOADOUT	08/04/11	Gross Alpha/Beta	Gross Alpha	8.933E-15	8.916E-15	1.279E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.257E-14	1.62E-14	2.08E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD137989	6WH LOADOUT	08/04/11	Gross Alpha/Beta	Gross Alpha	-7.1E-16	4.389E-15	1.119E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.753E-14	1.298E-14	1.818E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137990	6WH LOADOUT	08/08/11	Gross Alpha/Beta	Gross Alpha	2.712E-15	5.142E-15	9.212E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.902E-15	1.938E-14	2.665E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137991	6WH LOADOUT	08/08/11	Gross Alpha/Beta	Gross Alpha	4.221E-15	6.178E-15	1.014E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.648E-14	2.2E-14	2.934E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137992	6WH LOADOUT	08/08/11	Gross Alpha/Beta	Gross Alpha	2.616E-15	4.96E-15	8.885E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.363E-14	1.994E-14	2.571E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137993	6WH LOADOUT	08/08/11	Gross Alpha/Beta	Gross Alpha	8.099E-15	6.995E-15	8.965E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	7.431E-15	1.892E-14	2.594E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137994	6WH LOADOUT	08/09/11	Gross Alpha/Beta	Gross Alpha	4.61E-16	3.991E-15	9.087E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.621E-14	1.982E-14	2.629E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137995	6WH LOADOUT	08/09/11	Gross Alpha/Beta	Gross Alpha	6.945E-15	6.586E-15	8.885E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.08E-14	1.974E-14	2.571E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD137996	6WH LOADOUT	08/09/11	Gross Alpha/Beta	Gross Alpha	4.888E-15	5.962E-15	9.087E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.85E-14	2.07E-14	2.629E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137997	6WH LOADOUT	08/09/11	Gross Alpha/Beta	Gross Alpha	6.794E-15	7.208E-15	1.03E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.64E-14	2.374E-14	2.979E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD137998	6WH LOADOUT	08/10/11	Gross Alpha/Beta	Gross Alpha	5.05E-16	4.366E-15	9.941E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.773E-14	2.168E-14	2.876E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD137999	6WH LOADOUT	08/10/11	Gross Alpha/Beta	Gross Alpha	6.914E-15	6.557E-15	8.846E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.508E-14	1.924E-14	2.559E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138000	6WH LOADOUT	08/10/11	Gross Alpha/Beta	Gross Alpha	2.433E-15	4.613E-15	8.264E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.46E-14	1.873E-14	2.391E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138001	6WH LOADOUT	08/10/11	Gross Alpha/Beta	Gross Alpha	2.494E-15	4.73E-15	8.473E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.849E-14	1.872E-14	2.451E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138002	6WH LOADOUT	08/11/11	Gross Alpha/Beta	Gross Alpha	8.099E-15	6.995E-15	8.965E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.812E-14	2.042E-14	2.594E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138003	6WH LOADOUT	08/11/11	Gross Alpha/Beta	Gross Alpha	7.07E-15	6.705E-15	9.046E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.254E-14	1.946E-14	2.617E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138004	6WH LOADOUT	08/11/11	Gross Alpha/Beta	Gross Alpha	7.639E-15	8.122E-15	1.117E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.648E-14	1.514E-14	1.735E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138005	6WH LOADOUT	08/11/11	Gross Alpha/Beta	Gross Alpha	3.231E-15	7.5E-15	1.283E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.029E-14	1.517E-14	1.992E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138006	6WH LOADOUT	08/15/11	Gross Alpha/Beta	Gross Alpha	5.491E-15	6.943E-15	9.738E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.861E-14	1.75E-14	2.652E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138007	6WH LOADOUT	08/15/11	Gross Alpha/Beta	Gross Alpha	3.185E-15	6.044E-15	9.521E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.676E-14	1.699E-14	2.593E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138008	6WH LOADOUT	08/15/11	Gross Alpha/Beta	Gross Alpha	-1.08E-16	5.586E-15	1.128E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.48E-14	1.971E-14	3.073E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138009	6WH LOADOUT	08/15/11	Gross Alpha/Beta	Gross Alpha	1.569E-14	9.747E-15	9.828E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.141E-14	1.704E-14	2.676E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138010	6WH LOADOUT	08/16/11	Gross Alpha/Beta	Gross Alpha	3.288E-15	6.239E-15	9.828E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.761E-14	1.839E-14	2.676E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138011	6WH LOADOUT	08/16/11	Gross Alpha/Beta	Gross Alpha	3.473E-15	9.35E-15	1.58E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.716E-14	2.728E-14	4.302E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138012	6WH LOADOUT	08/16/11	Gross Alpha/Beta	Gross Alpha	-9.3E-17	4.821E-15	9.738E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.882E-14	1.834E-14	2.652E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138013	6WH LOADOUT	08/16/11	Gross Alpha/Beta	Gross Alpha	1.01E-15	5.241E-15	9.606E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.051E-14	1.744E-14	2.616E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138014	6WH LOADOUT	08/17/11	Gross Alpha/Beta	Gross Alpha	4.239E-15	6.37E-15	9.436E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.641E-14	1.843E-14	2.57E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138015	6WH LOADOUT	08/17/11	Gross Alpha/Beta	Gross Alpha	3.228E-15	6.126E-15	9.65E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.362E-14	1.857E-14	2.628E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138016	6WH LOADOUT	08/17/11	Gross Alpha/Beta	Gross Alpha	2.121E-15	5.712E-15	9.65E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.29E-14	1.851E-14	2.628E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138017	6WH LOADOUT	08/17/11	Gross Alpha/Beta	Gross Alpha	-9E-17	4.671E-15	9.436E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.419E-14	1.902E-14	2.57E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138018	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	1.059E-14	8.184E-15	9.313E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.617E-14	1.969E-14	2.536E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138019	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	4.395E-15	6.604E-15	9.783E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.754E-14	2.058E-14	2.664E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138020	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	1.285E-14	9.132E-15	1.009E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.706E-14	1.637E-14	1.695E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138021	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	5.79E-15	7.049E-15	1E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.562E-14	1.431E-14	1.68E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138022	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	1.073E-15	4.92E-15	9.265E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.438E-15	9.542E-15	1.556E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138023	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	3.192E-15	5.734E-15	9.189E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.766E-14	1.053E-14	1.544E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138024	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	-1.1E-15	3.971E-15	9.498E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.495E-14	1.047E-14	1.595E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138025	6WH LOADOUT	08/18/11	Gross Alpha/Beta	Gross Alpha	-2.172E-15	3.265E-15	9.38E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.904E-15	9.573E-15	1.576E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138026	6WH LOADOUT	08/22/11	Gross Alpha/Beta	Gross Alpha	2.123E-15	5.274E-15	1.019E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.035E-14	1.41E-14	1.691E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138027	6WH LOADOUT	08/22/11	Gross Alpha/Beta	Gross Alpha	-1.89E-16	4.044E-15	9.97E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.424E-14	1.426E-14	1.655E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138028	6WH LOADOUT	08/22/11	Gross Alpha/Beta	Gross Alpha	5.383E-15	6.374E-15	9.801E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.012E-14	1.268E-14	1.626E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138029	6WH LOADOUT	08/22/11	Gross Alpha/Beta	Gross Alpha	6.206E-15	6.45E-15	9.362E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.431E-14	1.163E-14	1.554E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138030	6WH LOADOUT	08/23/11	Gross Alpha/Beta	Gross Alpha	5.36E-15	6.347E-15	9.759E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.129E-14	1.471E-14	1.619E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138031	6WH LOADOUT	08/23/11	Gross Alpha/Beta	Gross Alpha	4.013E-15	5.613E-15	9.212E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.532E-14	1.45E-14	1.529E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138032	6WH LOADOUT	08/23/11	Gross Alpha/Beta	Gross Alpha	4.198E-15	5.872E-15	9.636E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.064E-14	1.452E-14	1.599E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138033	6WH LOADOUT	08/23/11	Gross Alpha/Beta	Gross Alpha	8.368E-15	7.148E-15	9.4E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.427E-14	1.369E-14	1.56E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138034	6WH LOADOUT	08/24/11	Gross Alpha/Beta	Gross Alpha	2.978E-15	5.229E-15	9.249E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.338E-14	1.142E-14	1.535E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138035	6WH LOADOUT	08/24/11	Gross Alpha/Beta	Gross Alpha	1.081E-14	7.99E-15	9.677E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.172E-14	1.272E-14	1.606E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138036	6WH LOADOUT	08/24/11	Gross Alpha/Beta	Gross Alpha	5.206E-15	6.164E-15	9.478E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.236E-14	1.26E-14	1.573E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138037	6WH LOADOUT	08/24/11	Gross Alpha/Beta	Gross Alpha	6.415E-15	6.667E-15	9.677E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.964E-14	1.352E-14	1.606E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138038	6WH LOADOUT	08/25/11	Gross Alpha/Beta	Gross Alpha	6.497E-15	6.752E-15	9.801E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.943E-14	1.149E-14	1.626E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138039	6WH LOADOUT	08/25/11	Gross Alpha/Beta	Gross Alpha	9.16E-16	4.5E-15	9.677E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.71E-14	1.223E-14	1.606E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138040	6WH LOADOUT	08/25/11	Gross Alpha/Beta	Gross Alpha	7.665E-15	6.464E-15	6.855E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.909E-14	1.42E-14	2.264E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138041	6WH LOADOUT	08/25/11	Gross Alpha/Beta	Gross Alpha	5.529E-15	5.678E-15	6.716E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.288E-14	1.336E-14	2.218E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138042	6WH LOADOUT	08/26/11	Gross Alpha/Beta	Gross Alpha	3.794E-15	5.28E-15	7.181E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.346E-14	1.52E-14	2.372E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138043	6WH LOADOUT	08/26/11	Gross Alpha/Beta	Gross Alpha	5.073E-15	5.947E-15	7.506E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.754E-14	1.703E-14	2.479E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138044	6WH LOADOUT	08/26/11	Gross Alpha/Beta	Gross Alpha	6.18E-16	3.796E-15	7.181E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.554E-14	1.539E-14	2.372E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138045	6WH LOADOUT	08/26/11	Gross Alpha/Beta	Gross Alpha	3.746E-15	5.212E-15	7.089E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.111E-14	1.482E-14	2.342E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138046	6WH LOADOUT	08/29/11	Gross Alpha/Beta	Gross Alpha	9.961E-15	7.637E-15	8.355E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.868E-14	1.616E-14	2.454E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138047	6WH LOADOUT	08/29/11	Gross Alpha/Beta	Gross Alpha	1.148E-14	8.251E-15	8.669E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.964E-14	1.849E-14	2.546E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138048	6WH LOADOUT	08/29/11	Gross Alpha/Beta	Gross Alpha	4.329E-15	5.683E-15	8.17E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.948E-14	1.76E-14	2.399E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138049	6WH LOADOUT	08/29/11	Gross Alpha/Beta	Gross Alpha	3.204E-15	5.185E-15	8.063E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.71E-14	1.639E-14	2.368E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138050	6WH LOADOUT	08/30/11	Gross Alpha/Beta	Gross Alpha	5.341E-15	6.002E-15	8.063E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.384E-14	1.776E-14	2.368E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138051	6WH LOADOUT	08/30/11	Gross Alpha/Beta	Gross Alpha	6.494E-15	6.456E-15	8.17E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.362E-14	1.871E-14	2.399E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138052	6WH LOADOUT	08/30/11	Gross Alpha/Beta	Gross Alpha	7.854E-15	7.06E-15	8.47E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.653E-14	1.789E-14	2.487E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138053	6WH LOADOUT	08/30/11	Gross Alpha/Beta	Gross Alpha	2.136E-15	4.724E-15	8.063E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.966E-14	1.743E-14	2.368E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138054	6WH LOADOUT	08/31/11	Gross Alpha/Beta	Gross Alpha	7.301E-15	7.259E-15	9.186E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.564E-14	1.907E-14	2.698E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138055	6WH LOADOUT	08/31/11	Gross Alpha/Beta	Gross Alpha	1.079E-14	8.274E-15	9.051E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.783E-14	2.061E-14	2.658E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138056	6WH LOADOUT	08/31/11	Gross Alpha/Beta	Gross Alpha	1.34E-14	8.627E-15	8.431E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	7.503E-14	2.075E-14	2.476E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138057	6WH LOADOUT	08/31/11	Gross Alpha/Beta	Gross Alpha	1.015E-14	7.778E-15	8.509E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.449E-14	1.779E-14	2.499E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138058	6WH LOADOUT	09/01/11	Gross Alpha/Beta	Gross Alpha	1.359E-14	8.341E-15	7.891E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	7.364E-14	1.966E-14	2.317E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138059	6WH LOADOUT	09/01/11	Gross Alpha/Beta	Gross Alpha	7.224E-15	6.494E-15	7.791E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	8.956E-14	2.056E-14	2.288E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138060	6WH LOADOUT	09/01/11	Gross Alpha/Beta	Gross Alpha	5.406E-15	7.927E-15	1.173E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.762E-14	1.856E-14	1.624E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138061	6WH LOADOUT	09/01/11	Gross Alpha/Beta	Gross Alpha	2.077E-15	7.005E-15	1.189E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.905E-14	1.731E-14	1.645E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138062	6WH LOADOUT	09/02/11	Gross Alpha/Beta	Gross Alpha	1.077E-14	9.18E-15	1.149E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.754E-14	1.598E-14	1.59E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138063	6WH LOADOUT	09/02/11	Gross Alpha/Beta	Gross Alpha	9.74E-16	6.835E-15	1.226E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.35E-14	1.723E-14	1.697E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138064	6WH LOADOUT	09/02/11	Gross Alpha/Beta	Gross Alpha	8.762E-15	8.825E-15	1.173E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.072E-14	1.564E-14	1.624E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138065	6WH LOADOUT	09/02/11	Gross Alpha/Beta	Gross Alpha	2.025E-15	6.828E-15	1.158E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.935E-14	1.623E-14	1.604E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138066	6WH LOADOUT	09/06/11	Gross Alpha/Beta	Gross Alpha	9.46E-16	4.621E-15	8.374E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.133E-15	1.538E-14	2.505E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138067	6WH LOADOUT	09/06/11	Gross Alpha/Beta	Gross Alpha	-1.211E-15	3.363E-15	8.191E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.465E-14	1.575E-14	2.451E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138068	6WH LOADOUT	09/06/11	Gross Alpha/Beta	Gross Alpha	2.782E-15	4.941E-15	7.444E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.536E-15	1.332E-14	2.227E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138069	6WH LOADOUT	09/06/11	Gross Alpha/Beta	Gross Alpha	9.81E-16	4.793E-15	8.684E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.406E-14	1.656E-14	2.598E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138070	6WH LOADOUT	09/07/11	Gross Alpha/Beta	Gross Alpha	5.511E-15	6.596E-15	8.684E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.367E-14	1.74E-14	2.598E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138071	6WH LOADOUT	09/07/11	Gross Alpha/Beta	Gross Alpha	2.839E-15	5.041E-15	7.594E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.617E-14	1.483E-14	2.272E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138072	6WH LOADOUT	09/07/11	Gross Alpha/Beta	Gross Alpha	9.38E-16	4.581E-15	8.3E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.838E-14	1.627E-14	2.483E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138073	6WH LOADOUT	09/07/11	Gross Alpha/Beta	Gross Alpha	1.977E-15	4.957E-15	8.12E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.283E-14	1.633E-14	2.429E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138074	6WH LOADOUT	09/08/11	Gross Alpha/Beta	Gross Alpha	4.185E-15	5.92E-15	8.3E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.828E-14	1.711E-14	2.483E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138075	6WH LOADOUT	09/08/11	Gross Alpha/Beta	Gross Alpha	7.432E-15	7.01E-15	8.3E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.404E-14	1.675E-14	2.483E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138076	6WH LOADOUT	09/08/11	Gross Alpha/Beta	Gross Alpha	2.874E-15	5.103E-15	7.688E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.244E-14	1.466E-14	2.3E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138077	6WH LOADOUT	09/08/11	Gross Alpha/Beta	Gross Alpha	2.318E-15	5.812E-15	9.522E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.38E-14	2.054E-14	2.849E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138078	6WH LOADOUT	09/09/11	Gross Alpha/Beta	Gross Alpha	3.614E-15	6.419E-15	9.669E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.871E-14	2.04E-14	2.893E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138079	6WH LOADOUT	09/09/11	Gross Alpha/Beta	Gross Alpha	2.114E-15	5.301E-15	8.684E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.181E-14	1.808E-14	2.598E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138080	6WH LOADOUT	09/09/11	Gross Alpha/Beta	Gross Alpha	8.34E-15	8.74E-15	1.19E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.6E-14	1.55E-14	1.89E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138081	6WH LOADOUT	09/09/11	Gross Alpha/Beta	Gross Alpha	9.67E-16	6.26E-15	1.17E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.23E-14	1.39E-14	1.86E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138082	6WH LOADOUT	09/12/11	Gross Alpha/Beta	Gross Alpha	2.859E-15	6.126E-15	1E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.495E-14	1.832E-14	2.487E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138083	6WH LOADOUT	09/12/11	Gross Alpha/Beta	Gross Alpha	-2.627E-15	3.545E-15	9.823E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.924E-14	1.914E-14	2.443E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138084	6WH LOADOUT	09/12/11	Gross Alpha/Beta	Gross Alpha	6.7E-16	5.463E-15	1.038E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.426E-14	2.038E-14	2.581E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138085	6WH LOADOUT	09/12/11	Gross Alpha/Beta	Gross Alpha	-1.364E-15	3.683E-15	8.701E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.663E-14	1.564E-14	2.164E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138086	6WH LOADOUT	09/13/11	Gross Alpha/Beta	Gross Alpha	5.597E-15	6.547E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.523E-14	1.837E-14	2.253E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138087	6WH LOADOUT	09/13/11	Gross Alpha/Beta	Gross Alpha	6.412E-15	7.5E-15	1.038E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.501E-14	2.044E-14	2.581E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138088	6WH LOADOUT	09/13/11	Gross Alpha/Beta	Gross Alpha	6.097E-15	7.131E-15	9.867E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.373E-14	2.026E-14	2.454E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138089	6WH LOADOUT	09/13/11	Gross Alpha/Beta	Gross Alpha	6.265E-15	7.328E-15	1.014E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.328E-14	2.066E-14	2.521E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138090	6WH LOADOUT	09/14/11	Gross Alpha/Beta	Gross Alpha	1.751E-14	2.048E-14	2.834E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.551E-14	4.66E-14	7.047E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138091	6WH LOADOUT	09/14/11	Gross Alpha/Beta	Gross Alpha	8.206E-15	1.758E-14	2.87E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.39E-14	4.703E-14	7.139E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138092	6WH LOADOUT	09/14/11	Gross Alpha/Beta	Gross Alpha	2.29E-14	2.15E-14	2.729E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	1.052E-14	4.274E-14	6.786E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138093	6WH LOADOUT	09/14/11	Gross Alpha/Beta	Gross Alpha	1.846E-14	2.159E-14	2.987E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.663E-14	4.816E-14	7.428E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138094	6WH LOADOUT	09/15/11	Gross Alpha/Beta	Gross Alpha	1.614E-15	5.259E-15	9.209E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.354E-14	1.532E-14	2.29E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138095	6WH LOADOUT	09/15/11	Gross Alpha/Beta	Gross Alpha	1.594E-15	5.195E-15	9.095E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.929E-14	1.564E-14	2.262E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138096	6WH LOADOUT	09/15/11	Gross Alpha/Beta	Gross Alpha	5.773E-15	6.563E-15	1.002E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.079E-14	1.255E-14	1.629E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138097	6WH LOADOUT	09/15/11	Gross Alpha/Beta	Gross Alpha	-3.4E-16	4.26E-15	1.002E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.405E-14	1.289E-14	1.629E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138098	6WH LOADOUT	09/16/11	Gross Alpha/Beta	Gross Alpha	6.252E-15	7.107E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.12E-14	1.235E-14	1.764E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138099	6WH LOADOUT	09/16/11	Gross Alpha/Beta	Gross Alpha	-3.646E-15	2.562E-15	1.076E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.442E-14	1.369E-14	1.749E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138100	6WH LOADOUT	09/16/11	Gross Alpha/Beta	Gross Alpha	-1.511E-15	4.16E-15	1.114E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.295E-14	1.285E-14	1.811E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138101	6WH LOADOUT	09/16/11	Gross Alpha/Beta	Gross Alpha	6.06E-16	4.212E-15	8.938E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.796E-14	1.113E-14	1.453E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138102	6WH LOADOUT	09/19/11	Gross Alpha/Beta	Gross Alpha	2.265E-14	1.133E-14	8.804E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	7.747E-14	2.318E-14	2.736E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138103	6WH LOADOUT	09/19/11	Gross Alpha/Beta	Gross Alpha	7.937E-15	6.836E-15	7.713E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.606E-14	1.794E-14	2.397E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138104	6WH LOADOUT	09/19/11	Gross Alpha/Beta	Gross Alpha	3.077E-15	4.509E-15	6.578E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.859E-14	1.591E-14	2.044E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138105	6WH LOADOUT	09/19/11	Gross Alpha/Beta	Gross Alpha	3.775E-15	5.531E-15	8.07E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.773E-14	1.877E-14	2.508E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138106	6WH LOADOUT	09/20/11	Gross Alpha/Beta	Gross Alpha	2.679E-15	5.117E-15	8.184E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.926E-14	2.063E-14	2.543E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138107	6WH LOADOUT	09/20/11	Gross Alpha/Beta	Gross Alpha	7.75E-15	6.162E-15	6.628E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.557E-14	1.653E-14	2.06E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138108	6WH LOADOUT	09/20/11	Gross Alpha/Beta	Gross Alpha	5.824E-15	6.165E-15	7.782E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.852E-14	1.827E-14	2.418E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138109	6WH LOADOUT	09/20/11	Gross Alpha/Beta	Gross Alpha	1.476E-15	4.407E-15	7.888E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.483E-14	1.897E-14	2.451E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138110	6WH LOADOUT	09/21/11	Gross Alpha/Beta	Gross Alpha	1.496E-15	4.467E-15	7.996E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.079E-14	1.807E-14	2.485E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138111	6WH LOADOUT	09/21/11	Gross Alpha/Beta	Gross Alpha	1.456E-15	4.348E-15	7.782E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.353E-14	1.787E-14	2.418E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138112	6WH LOADOUT	09/21/11	Gross Alpha/Beta	Gross Alpha	3.828E-15	5.609E-15	8.184E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.951E-14	1.991E-14	2.543E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138113	6WH LOADOUT	09/21/11	Gross Alpha/Beta	Gross Alpha	5.89E-15	5.571E-15	6.628E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.856E-14	1.522E-14	2.06E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138114	6WH LOADOUT	09/22/11	Gross Alpha/Beta	Gross Alpha	2.388E-15	4.56E-15	7.294E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.346E-14	1.769E-14	2.267E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138115	6WH LOADOUT	09/22/11	Gross Alpha/Beta	Gross Alpha	8.601E-15	6.838E-15	7.355E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	2.09E-14	1.601E-14	2.286E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138116	6WH LOADOUT	09/22/11	Gross Alpha/Beta	Gross Alpha	2.547E-15	6.113E-15	9.283E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.574E-14	1.201E-14	1.548E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138117	6WH LOADOUT	09/22/11	Gross Alpha/Beta	Gross Alpha	2.643E-15	6.343E-15	9.633E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.332E-14	1.209E-14	1.606E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138118	6WH LOADOUT	09/26/11	Gross Alpha/Beta	Gross Alpha	5.789E-15	6.064E-15	7.895E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.357E-14	1.926E-14	2.335E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138119	6WH LOADOUT	09/26/11	Gross Alpha/Beta	Gross Alpha	1.785E-15	4.591E-15	7.999E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.749E-14	1.833E-14	2.366E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138120	6WH LOADOUT	09/26/11	Gross Alpha/Beta	Gross Alpha	5.976E-15	6.261E-15	8.151E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.801E-14	1.868E-14	2.411E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138121	6WH LOADOUT	09/26/11	Gross Alpha/Beta	Gross Alpha	2.864E-15	5.129E-15	8.166E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.942E-14	1.881E-14	2.415E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138122	6WH LOADOUT	09/27/11	Gross Alpha/Beta	Gross Alpha	7.992E-15	8.438E-15	1.164E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.366E-14	1.25E-14	1.697E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138123	6WH LOADOUT	09/27/11	Gross Alpha/Beta	Gross Alpha	-3.62E-15	4.202E-15	1.091E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.218E-14	1.172E-14	1.591E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138124	6WH LOADOUT	09/27/11	Gross Alpha/Beta	Gross Alpha	6.491E-15	7.659E-15	1.092E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.61E-14	1.216E-14	1.593E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138125	6WH LOADOUT	09/27/11	Gross Alpha/Beta	Gross Alpha	-1.682E-15	5.344E-15	1.147E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.265E-14	1.225E-14	1.673E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138126	6WH LOADOUT	09/28/11	Gross Alpha/Beta	Gross Alpha	-1.674E-15	5.319E-15	1.142E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.22E-15	8.866E-15	1.665E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138127	6WH LOADOUT	09/28/11	Gross Alpha/Beta	Gross Alpha	1.515E-15	6.53E-15	1.155E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.472E-14	1.457E-14	1.684E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138128	6WH LOADOUT	09/28/11	Gross Alpha/Beta	Gross Alpha	5.72E-15	7.711E-15	1.14E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.928E-14	1.291E-14	1.663E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138129	6WH LOADOUT	09/28/11	Gross Alpha/Beta	Gross Alpha	3.508E-15	6.91E-15	1.109E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.715E-14	1.241E-14	1.617E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138130	6WH LOADOUT	09/29/11	Gross Alpha/Beta	Gross Alpha	4.929E-15	7.837E-15	1.205E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.172E-14	1.743E-14	1.757E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138131	6WH LOADOUT	09/29/11	Gross Alpha/Beta	Gross Alpha	3.626E-15	7.144E-15	1.146E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.779E-14	1.478E-14	1.671E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138132	6WH LOADOUT	09/29/11	Gross Alpha/Beta	Gross Alpha	6.684E-15	7.886E-15	1.125E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.09E-14	1.394E-14	1.64E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138133	6WH LOADOUT	09/29/11	Gross Alpha/Beta	Gross Alpha	9.209E-15	8.844E-15	1.181E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.558E-14	1.582E-14	1.723E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138134	6WH LOADOUT	10/03/11	Gross Alpha/Beta	Gross Alpha	1.395E-15	6.156E-15	1.224E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.135E-14	1.928E-14	2.786E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138135	6WH LOADOUT	10/03/11	Gross Alpha/Beta	Gross Alpha	-1.019E-15	5.264E-15	1.252E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.025E-14	1.96E-14	2.851E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138136	6WH LOADOUT	10/03/11	Gross Alpha/Beta	Gross Alpha	2.527E-15	6.444E-15	1.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.93E-14	1.869E-14	2.718E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138137	6WH LOADOUT	10/03/11	Gross Alpha/Beta	Gross Alpha	5.163E-15	7.692E-15	1.268E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.912E-14	2.132E-14	2.887E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138138	6WH LOADOUT	10/04/11	Gross Alpha/Beta	Gross Alpha	5.379E-15	6.79E-15	1.065E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.491E-14	1.807E-14	2.426E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138795	City Property	08/15/11	Gross Alpha/Beta	Gross Alpha	4.44E-16	4.7	9.83	aCi/L	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.78E-14	1.23E-14	1.65E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138796	City Property	08/15/11	Gross Alpha/Beta	Gross Alpha	4.56E-16	4.82	10.1	aCi/L	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.8E-14	1.14E-14	1.7E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138797	City Property	08/16/11	Gross Alpha/Beta	Gross Alpha	2.34E-15	5.85E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.71E-14	1.25E-14	1.7E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138798	City Property	08/16/11	Gross Alpha/Beta	Gross Alpha	2.28E-15	5.69E-15	9.83E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.32E-14	1.29E-14	1.65E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138799	City Property	08/17/11	Gross Alpha/Beta	Gross Alpha	5.87E-15	7.14E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.99E-14	1.39E-14	1.7E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138800	City Property	08/17/11	Gross Alpha/Beta	Gross Alpha	1.17E-15	5.38E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.3E-14	1.2E-14	1.7E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138801	City Property	08/18/11	Gross Alpha/Beta	Gross Alpha	4.55E-15	6.54E-15	9.83E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.3E-14	1.48E-14	1.65E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138802	City Property	08/18/11	Gross Alpha/Beta	Gross Alpha	1.38E-14	9.3E-15	9.96E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.85E-14	1.36E-14	1.67E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138803	BNSF Railroad	08/17/11	Gross Alpha/Beta	Gross Alpha	1.11E-14	2.79E-14	4.81E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.36E-13	6.01E-14	8.08E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138804	BNSF Railroad	08/17/11	Gross Alpha/Beta	Gross Alpha	-7.27E-15	2.63E-14	6.28E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.12E-13	7.09E-14	1.05E-13	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138805	City Property	08/22/11	Gross Alpha/Beta	Gross Alpha	3.053E-15	5.396E-15	8.014E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.85E-14	1.717E-14	2.647E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138806	City Property	08/22/11	Gross Alpha/Beta	Gross Alpha	1.853E-15	4.805E-15	7.937E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.517E-14	1.673E-14	2.622E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138807	City Property	08/23/11	Gross Alpha/Beta	Gross Alpha	4.791E-15	5.616E-15	7.089E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.296E-14	1.672E-14	2.342E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138808	City Property	08/23/11	Gross Alpha/Beta	Gross Alpha	3.762E-15	5.234E-15	7.119E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.206E-14	1.75E-14	2.352E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138809	City Property	08/24/11	Gross Alpha/Beta	Gross Alpha	7.001E-15	6.459E-15	7.212E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.843E-14	1.57E-14	2.382E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138810	City Property	08/24/11	Gross Alpha/Beta	Gross Alpha	6.2E-16	3.813E-15	7.212E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.607E-14	1.637E-14	2.382E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138811	City Property	08/25/11	Gross Alpha/Beta	Gross Alpha	4.874E-15	5.714E-15	7.212E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.523E-14	1.449E-14	2.382E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138812	City Property	08/25/11	Gross Alpha/Beta	Gross Alpha	1.684E-15	4.366E-15	7.212E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.523E-14	1.449E-14	2.382E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138813	City Property	08/29/11	Gross Alpha/Beta	Gross Alpha	9.965E-15	9.183E-15	1.183E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.476E-14	1.331E-14	1.638E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138814	City Property	08/29/11	Gross Alpha/Beta	Gross Alpha	7.709E-15	8.61E-15	1.183E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.528E-14	1.231E-14	1.638E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138815	City Property	08/30/11	Gross Alpha/Beta	Gross Alpha	7.984E-15	8.917E-15	1.226E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.074E-14	1.328E-14	1.697E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138816	City Property	08/30/11	Gross Alpha/Beta	Gross Alpha	5.647E-15	8.281E-15	1.226E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.354E-14	1.357E-14	1.697E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138817	City Property	08/31/11	Gross Alpha/Beta	Gross Alpha	1.353E-14	1.011E-14	1.199E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.331E-14	1.43E-14	1.66E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138818	City Property	08/31/11	Gross Alpha/Beta	Gross Alpha	1.493E-14	1.055E-14	1.22E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.158E-14	1.528E-14	1.689E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138819	City Property	09/01/11	Gross Alpha/Beta	Gross Alpha	4.499E-15	7.98E-15	1.231E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.448E-14	1.736E-14	1.704E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138820	City Property	09/01/11	Gross Alpha/Beta	Gross Alpha	4.56E-15	8.089E-15	1.248E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.894E-14	1.707E-14	1.728E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138821	BNSF Railroad	09/01/11	Gross Alpha/Beta	Gross Alpha	-3.589E-15	7.809E-15	1.738E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.741E-14	1.862E-14	2.405E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138822	BNSF Railroad	08/31/11	Gross Alpha/Beta	Gross Alpha	-1.023E-14	1.38E-14	3.389E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.021E-14	3.373E-14	4.692E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138823	City Property	09/06/11	Gross Alpha/Beta	Gross Alpha	4.21E-15	6.9E-15	1.07E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.83E-14	1.25E-14	1.7E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138824	City Property	09/06/11	Gross Alpha/Beta	Gross Alpha	5.37E-15	7.31E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.78E-14	1.25E-14	1.72E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138825	City Property	09/07/11	Gross Alpha/Beta	Gross Alpha	8.53E-15	8.1E-15	1.06E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.02E-14	1.26E-14	1.68E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138826	City Property	09/07/11	Gross Alpha/Beta	Gross Alpha	3.02E-15	6.37E-15	1.04E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.17E-15	1.1E-14	1.66E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138827	City Property	09/08/11	Gross Alpha/Beta	Gross Alpha	7.47E-15	7.83E-15	1.06E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.68E-14	1.22E-14	1.69E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138828	City Property	09/08/11	Gross Alpha/Beta	Gross Alpha	1.33E-14	9.5E-15	1.09E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.79E-14	1.26E-14	1.73E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138829	City Property	09/12/11	Gross Alpha/Beta	Gross Alpha	1.88E-15	5.694E-15	1.109E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.229E-14	1.382E-14	1.803E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138830	City Property	09/12/11	Gross Alpha/Beta	Gross Alpha	8.805E-15	8.081E-15	1.129E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.343E-14	1.415E-14	1.836E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138831	City Property	09/13/11	Gross Alpha/Beta	Gross Alpha	1.26E-14	8.742E-15	1.062E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.971E-14	1.594E-14	1.726E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138832	City Property	09/13/11	Gross Alpha/Beta	Gross Alpha	5.06E-15	6.64E-15	1.066E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.035E-14	1.689E-14	1.734E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138833	City Property	09/14/11	Gross Alpha/Beta	Gross Alpha	-6.205E-15	8.19E-15	2.615E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.535E-15	2.733E-14	4.252E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138834	City Property	09/15/11	Gross Alpha/Beta	Gross Alpha	-1.44E-15	3.965E-15	1.062E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-1.15E-16	1.075E-14	1.726E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138835	City Property	09/15/11	Gross Alpha/Beta	Gross Alpha	3.828E-15	6.042E-15	1.027E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.257E-15	1.153E-14	1.669E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138836	City Property	09/19/11	Gross Alpha/Beta	Gross Alpha	-5.61E-16	5.501E-15	1.023E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.477E-14	1.284E-14	1.706E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138837	City Property	09/19/11	Gross Alpha/Beta	Gross Alpha	-5.61E-16	5.501E-15	1.023E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.333E-14	1.268E-14	1.706E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138838	City Property	09/20/11	Gross Alpha/Beta	Gross Alpha	2.699E-15	6.479E-15	9.839E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.905E-14	1.396E-14	1.64E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138839	City Property	09/20/11	Gross Alpha/Beta	Gross Alpha	7.048E-15	7.821E-15	9.881E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.504E-14	1.36E-14	1.647E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138840	City Property	09/21/11	Gross Alpha/Beta	Gross Alpha	7.171E-15	7.958E-15	1.005E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.868E-14	1.196E-14	1.676E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138841	City Property	09/21/11	Gross Alpha/Beta	Gross Alpha	1.648E-15	6.214E-15	1.001E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.071E-14	1.216E-14	1.669E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138842	City Property	09/22/11	Gross Alpha/Beta	Gross Alpha	5.076E-15	7.483E-15	1.028E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.488E-14	1.29E-14	1.713E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138843	City Property	09/22/11	Gross Alpha/Beta	Gross Alpha	5.64E-16	5.968E-15	1.028E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.922E-14	1.338E-14	1.713E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138845	BNSF Railroad	09/23/11	Gross Alpha/Beta	Gross Alpha	1.12E-14	7.815E-15	8.164E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.699E-14	1.203E-14	1.361E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138846	BNSF Railroad	09/24/11	Gross Alpha/Beta	Gross Alpha	2.288E-14	1.689E-14	1.813E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.516E-14	2.289E-14	3.022E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138847	City Property	09/26/11	Gross Alpha/Beta	Gross Alpha	2.931E-15	5.25E-15	8.358E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.011E-14	1.926E-14	2.472E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138848	City Property	09/26/11	Gross Alpha/Beta	Gross Alpha	1.865E-15	4.797E-15	8.358E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.201E-14	1.79E-14	2.472E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138849	City Property	09/27/11	Gross Alpha/Beta	Gross Alpha	5.063E-15	6.055E-15	8.358E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.011E-14	1.926E-14	2.472E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138850	City Property	09/27/11	Gross Alpha/Beta	Gross Alpha	6.197E-15	6.492E-15	8.452E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.045E-14	1.947E-14	2.5E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138851	City Property	09/28/11	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.306E-15	8.211E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.343E-14	1.847E-14	2.428E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138852	City Property	09/28/11	Gross Alpha/Beta	Gross Alpha	1.838E-14	9.517E-15	8.12E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	5.022E-14	2.017E-14	2.402E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138853	City Property	09/29/11	Gross Alpha/Beta	Gross Alpha	6.197E-15	6.492E-15	8.452E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.538E-14	1.983E-14	2.5E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138854	City Property	09/29/11	Gross Alpha/Beta	Gross Alpha	8.18E-16	4.395E-15	8.548E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.083E-14	1.896E-14	2.528E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138855	City Property	10/03/11	Gross Alpha/Beta	Gross Alpha	6.24E-16	5.959E-15	1.244E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.464E-15	1.188E-14	1.979E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138856	City Property	10/03/11	Gross Alpha/Beta	Gross Alpha	6.862E-15	8.165E-15	1.244E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.686E-14	1.414E-14	1.979E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138857	City Property	10/04/11	Gross Alpha/Beta	Gross Alpha	1.625E-15	5.61E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.263E-14	1.22E-14	1.718E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138858	City Property	10/04/11	Gross Alpha/Beta	Gross Alpha	3.66E-15	6.171E-15	1.043E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.659E-14	1.336E-14	1.659E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138859	City Property	10/05/11	Gross Alpha/Beta	Gross Alpha	4.859E-15	6.728E-15	1.077E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.016E-14	1.3E-14	1.712E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138860	City Property	10/05/11	Gross Alpha/Beta	Gross Alpha	3.779E-15	6.371E-15	1.077E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.532E-14	1.247E-14	1.712E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138861	City Property	10/06/11	Gross Alpha/Beta	Gross Alpha	1.686E-15	5.822E-15	1.121E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.501E-14	1.392E-14	1.783E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138862	City Property	10/06/11	Gross Alpha/Beta	Gross Alpha	-5.63E-16	4.884E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.444E-14	1.489E-14	1.786E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138863	City Property	10/10/11	Gross Alpha/Beta	Gross Alpha	2.726E-15	7.616E-15	1.132E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.488E-14	1.776E-14	1.811E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138864	City Property	10/10/11	Gross Alpha/Beta	Gross Alpha	8.147E-15	8.899E-15	1.103E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.987E-14	1.775E-14	1.764E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138865	City Property	10/11/11	Gross Alpha/Beta	Gross Alpha	1.577E-15	7.178E-15	1.117E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.384E-14	1.746E-14	1.787E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138866	City Property	10/11/11	Gross Alpha/Beta	Gross Alpha	6.11E-15	8.561E-15	1.132E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.007E-14	1.896E-14	1.811E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138867	City Property	10/12/11	Gross Alpha/Beta	Gross Alpha	3.689E-15	7.604E-15	1.084E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.451E-14	1.705E-14	1.734E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138868	City Property	10/12/11	Gross Alpha/Beta	Gross Alpha	-1.717E-15	5.899E-15	1.088E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.392E-14	1.707E-14	1.741E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138869	City Property	10/13/11	Gross Alpha/Beta	Gross Alpha	9.166E-15	9.087E-15	1.093E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.31E-14	1.787E-14	1.749E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138870	City Property	10/13/11	Gross Alpha/Beta	Gross Alpha	6.988E-15	8.548E-15	1.093E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.682E-14	1.737E-14	1.749E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138871	City Property	10/17/11	Gross Alpha/Beta	Gross Alpha	3.231E-15	7.917E-15	1.228E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.628E-14	1.495E-14	2.049E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138872	City Property	10/17/11	Gross Alpha/Beta	Gross Alpha	4.567E-15	8.357E-15	1.228E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.199E-14	1.445E-14	2.049E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138873	City Property	10/18/11	Gross Alpha/Beta	Gross Alpha	-2.967E-15	4.459E-15	1.055E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.742E-14	1.224E-14	1.76E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138874	City Property	10/19/11	Gross Alpha/Beta	Gross Alpha	-1.739E-15	4.798E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.919E-15	1.073E-14	1.683E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138875	City Property	10/20/11	Gross Alpha/Beta	Gross Alpha	-3.022E-15	4.542E-15	1.075E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.498E-15	1.102E-14	1.792E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138876	City Property	10/27/11	Gross Alpha/Beta	Gross Alpha	3.828E-15	7.886E-15	1.395E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.157E-14	1.656E-14	2.36E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138877	City Property	10/31/11	Gross Alpha/Beta	Gross Alpha	4.728E-15	6.025E-15	8.789E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.247E-14	1.254E-14	1.658E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138878	City Property	11/01/11	Gross Alpha/Beta	Gross Alpha	2.666E-15	5.368E-15	9.058E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.73E-14	1.439E-14	1.709E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138879	City Property	11/02/11	Gross Alpha/Beta	Gross Alpha	4.592E-15	5.852E-15	8.536E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.382E-14	1.439E-14	1.61E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138880	City Property	11/03/11	Gross Alpha/Beta	Gross Alpha	6.002E-15	6.619E-15	9.097E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.971E-14	1.258E-14	1.716E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138881	City Property	11/16/11	Gross Alpha/Beta	Gross Alpha	1.912E-14	2.208E-14	2.952E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.635E-14	3.512E-14	5.206E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138882	City Property	11/17/11	Gross Alpha/Beta	Gross Alpha	1.373E-15	8.99E-15	1.626E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.787E-14	1.962E-14	2.867E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138883	City Property	11/28/11	Gross Alpha/Beta	Gross Alpha	1.59E-14	1.635E-14	2.344E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.254E-14	2.752E-14	4.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD138884	City Property	11/29/11	Gross Alpha/Beta	Gross Alpha	9.546E-15	7.497E-15	9.334E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.653E-14	1.187E-14	1.67E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138885	City Property	11/30/11	Gross Alpha/Beta	Gross Alpha	2.105E-15	5.034E-15	9.578E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.977E-14	1.25E-14	1.714E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD138886	City Property	12/06/11	Gross Alpha/Beta	Gross Alpha	1.163E-14	8.731E-15	1.01E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.251E-14	1.869E-14	2.42E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD138887	City Property	12/07/11	Gross Alpha/Beta	Gross Alpha	-1.662E-15	4.156E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.248E-14	1.538E-14	2.42E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138888	City Property	12/08/11	Gross Alpha/Beta	Gross Alpha	-5.54E-16	4.71E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.248E-14	1.538E-14	2.42E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD138889	City Property	12/27/11	Gross Alpha/Beta	Gross Alpha	-2.304E-15	4.202E-15	1.229E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.13E-14	2.027E-14	2.96E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD138890	City Property	12/28/11	Gross Alpha/Beta	Gross Alpha	-1.947E-15	3.552E-15	1.039E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.434E-14	1.696E-14	2.502E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139222	6WH LOADOUT	10/04/11	Gross Alpha/Beta	Gross Alpha	2.299E-15	5.863E-15	1.086E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.351E-14	1.826E-14	2.473E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139223	6WH LOADOUT	10/04/11	Gross Alpha/Beta	Gross Alpha	5.572E-15	7.034E-15	1.104E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.364E-14	2.069E-14	2.513E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139224	6WH LOADOUT	10/04/11	Gross Alpha/Beta	Gross Alpha	-2.879E-15	3.296E-15	1.04E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.071E-14	1.813E-14	2.367E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139225	6WH LOADOUT	10/05/11	Gross Alpha/Beta	Gross Alpha	7.729E-15	7.668E-15	1.104E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.462E-14	1.935E-14	2.513E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139226	6WH LOADOUT	10/05/11	Gross Alpha/Beta	Gross Alpha	1.77E-16	5.027E-15	1.084E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.345E-14	1.823E-14	2.468E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139227	6WH LOADOUT	10/05/11	Gross Alpha/Beta	Gross Alpha	-1.898E-15	3.945E-15	1.06E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.892E-14	1.901E-14	2.412E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139228	6WH LOADOUT	10/05/11	Gross Alpha/Beta	Gross Alpha	1.181E-15	5.213E-15	1.036E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.18E-14	1.887E-14	2.359E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139229	6WH LOADOUT	10/06/11	Gross Alpha/Beta	Gross Alpha	6.289E-15	6.24E-15	8.981E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.121E-14	1.68E-14	2.045E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139230	6WH LOADOUT	10/06/11	Gross Alpha/Beta	Gross Alpha	2.264E-15	5.773E-15	1.069E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.665E-14	1.899E-14	2.435E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139231	6WH LOADOUT	10/06/11	Gross Alpha/Beta	Gross Alpha	2.633E-15	5.848E-15	1.05E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.116E-14	1.573E-14	1.671E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139232	6WH LOADOUT	10/06/11	Gross Alpha/Beta	Gross Alpha	1.737E-15	5.998E-15	1.155E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.8E-14	1.736E-14	1.837E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139233	Plant 7W	10/05/11	Gross Alpha/Beta	Gross Alpha	-5.96E-16	5.17E-15	1.188E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.934E-14	1.598E-14	1.89E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139234	Plant 7W	10/11/11	Gross Alpha/Beta	Gross Alpha	-1.965E-15	1.953E-14	3.381E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.249E-14	4.862E-14	5.409E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139235	Plant 7W	10/12/11	Gross Alpha/Beta	Gross Alpha	3.399E-15	7.005E-15	9.984E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.684E-14	1.524E-14	1.597E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139236	Plant 7W	10/13/11	Gross Alpha/Beta	Gross Alpha	4.72E-16	6.947E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.192E-14	1.673E-14	1.819E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139237	6WH LOADOUT	10/10/11	Gross Alpha/Beta	Gross Alpha	1.376E-14	8.363E-15	9.017E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	7.381E-14	1.934E-14	2.239E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139238	6WH LOADOUT	10/10/11	Gross Alpha/Beta	Gross Alpha	2.741E-15	5.128E-15	9.206E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.515E-14	1.756E-14	2.286E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139239	6WH LOADOUT	10/10/11	Gross Alpha/Beta	Gross Alpha	2.313E-15	4.328E-15	7.77E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.624E-14	1.616E-14	1.929E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139240	6WH LOADOUT	10/10/11	Gross Alpha/Beta	Gross Alpha	6.272E-15	6.724E-15	9.914E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.862E-14	1.891E-14	2.461E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139241	6WH LOADOUT	10/11/11	Gross Alpha/Beta	Gross Alpha	-1.517E-15	3.392E-15	1.019E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.518E-14	1.984E-14	2.53E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139242	6WH LOADOUT	10/11/11	Gross Alpha/Beta	Gross Alpha	4.441E-15	5.459E-15	8.526E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.487E-14	1.724E-14	2.117E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139243	6WH LOADOUT	10/11/11	Gross Alpha/Beta	Gross Alpha	5.26E-15	6.466E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.038E-14	1.773E-14	2.507E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139244	6WH LOADOUT	10/11/11	Gross Alpha/Beta	Gross Alpha	4.271E-15	6.261E-15	1.043E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.117E-14	1.99E-14	2.59E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139245	6WH LOADOUT	10/12/11	Gross Alpha/Beta	Gross Alpha	-3.94E-16	4.242E-15	1.059E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.261E-14	1.865E-14	2.628E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139246	6WH LOADOUT	10/12/11	Gross Alpha/Beta	Gross Alpha	1.879E-15	5.152E-15	1.01E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.142E-14	1.863E-14	2.507E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139247	6WH LOADOUT	10/12/11	Gross Alpha/Beta	Gross Alpha	7.62E-15	7.312E-15	1.024E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.424E-14	1.907E-14	2.542E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139248	6WH LOADOUT	10/12/11	Gross Alpha/Beta	Gross Alpha	8.313E-15	6.711E-15	8.593E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.465E-14	1.658E-14	2.133E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139249	6WH LOADOUT	10/13/11	Gross Alpha/Beta	Gross Alpha	3.706E-15	5.433E-15	9.054E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.374E-14	1.722E-14	2.248E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139250	6WH LOADOUT	10/13/11	Gross Alpha/Beta	Gross Alpha	4.04E-15	5.923E-15	9.87E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.545E-14	1.78E-14	2.45E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139251	6WH LOADOUT	10/13/11	Gross Alpha/Beta	Gross Alpha	2.935E-15	8.202E-15	1.219E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.782E-14	2.077E-14	1.951E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139252	6WH LOADOUT	10/13/11	Gross Alpha/Beta	Gross Alpha	4.072E-15	8.393E-15	1.196E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.4E-14	1.857E-14	1.914E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139253	6WH LOADOUT	10/17/11	Gross Alpha/Beta	Gross Alpha	6.106E-15	6.292E-15	8.552E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.335E-14	1.743E-14	2.405E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139254	6WH LOADOUT	10/17/11	Gross Alpha/Beta	Gross Alpha	1.142E-14	7.462E-15	7.765E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.361E-14	1.535E-14	2.184E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139255	6WH LOADOUT	10/17/11	Gross Alpha/Beta	Gross Alpha	7.55E-16	4.248E-15	8.988E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.484E-14	1.655E-14	2.528E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139256	6WH LOADOUT	10/17/11	Gross Alpha/Beta	Gross Alpha	6.06E-16	3.411E-15	7.217E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.936E-14	1.324E-14	2.03E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139257	6WH LOADOUT	10/18/11	Gross Alpha/Beta	Gross Alpha	6.45E-16	3.627E-15	7.673E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.005E-14	1.49E-14	2.158E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139258	6WH LOADOUT	10/18/11	Gross Alpha/Beta	Gross Alpha	1.979E-15	5.048E-15	9.424E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.07E-14	1.776E-14	2.65E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139259	6WH LOADOUT	10/18/11	Gross Alpha/Beta	Gross Alpha	3.048E-15	5.371E-15	9.072E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.089E-14	1.538E-14	2.551E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139260	6WH LOADOUT	10/18/11	Gross Alpha/Beta	Gross Alpha	8.261E-15	6.993E-15	8.552E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	3.913E-14	1.708E-14	2.405E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139261	6WH LOADOUT	10/19/11	Gross Alpha/Beta	Gross Alpha	7.28E-16	4.097E-15	8.667E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.254E-14	1.49E-14	2.437E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139262	6WH LOADOUT	10/19/11	Gross Alpha/Beta	Gross Alpha	-3.76E-16	3.578E-15	8.946E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.221E-14	1.531E-14	2.516E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139263	6WH LOADOUT	10/19/11	Gross Alpha/Beta	Gross Alpha	-1.437E-15	2.656E-15	8.552E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.027E-14	1.45E-14	2.405E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139264	6WH LOADOUT	10/19/11	Gross Alpha/Beta	Gross Alpha	7.41E-16	4.171E-15	8.824E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.413E-15	1.475E-14	2.482E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139265	6WH LOADOUT	10/20/11	Gross Alpha/Beta	Gross Alpha	4.291E-15	5.977E-15	9.289E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.211E-15	1.475E-14	2.612E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139266	6WH LOADOUT	10/20/11	Gross Alpha/Beta	Gross Alpha	4.566E-15	5.367E-15	7.765E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.929E-15	1.253E-14	2.184E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139267	6WH LOADOUT	10/20/11	Gross Alpha/Beta	Gross Alpha	-2.801E-15	4.211E-15	9.963E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.158E-14	1.095E-14	1.662E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139268	6WH LOADOUT	10/20/11	Gross Alpha/Beta	Gross Alpha	-6.89E-16	5.671E-15	1.085E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.018E-15	1.049E-14	1.809E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139269	Plant 7W	10/17/11	Gross Alpha/Beta	Gross Alpha	1.57E-15	6.177E-15	1.018E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.397E-14	1.146E-14	1.698E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139270	Plant 7W	10/18/11	Gross Alpha/Beta	Gross Alpha	1.022E-15	1.276E-14	2.254E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.507E-14	2.707E-14	3.759E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139271	Plant 7W	10/19/11	Gross Alpha/Beta	Gross Alpha	5.01E-16	6.26E-15	1.105E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.997E-15	1.165E-14	1.844E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139272	Plant 7W	10/20/11	Gross Alpha/Beta	Gross Alpha	1.721E-15	6.771E-15	1.116E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.084E-15	1.176E-14	1.861E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139273	Plant 7W	10/24/11	Gross Alpha/Beta	Gross Alpha	-5.79E-16	4.416E-15	1.056E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.498E-14	1.143E-14	1.786E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139274	Plant 7W	10/25/11	Gross Alpha/Beta	Gross Alpha	6.374E-15	7.194E-15	1.056E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.247E-14	1.458E-14	1.786E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139275	Plant 7W	10/26/11	Gross Alpha/Beta	Gross Alpha	1.763E-15	5.577E-15	1.071E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.833E-14	1.532E-14	1.811E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139276	Plant 7W	10/27/11	Gross Alpha/Beta	Gross Alpha	3.851E-15	7.934E-15	1.404E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.855E-14	1.855E-14	2.374E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139277	6WH LOADOUT	10/24/11	Gross Alpha/Beta	Gross Alpha	5.417E-15	5.874E-15	8.427E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.863E-14	1.827E-14	2.485E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139278	6WH LOADOUT	10/24/11	Gross Alpha/Beta	Gross Alpha	4.584E-15	5.783E-15	8.951E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.021E-14	2.011E-14	2.639E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139279	6WH LOADOUT	10/24/11	Gross Alpha/Beta	Gross Alpha	2.151E-15	4.545E-15	8.582E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.688E-14	1.759E-14	2.531E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139280	6WH LOADOUT	10/24/11	Gross Alpha/Beta	Gross Alpha	4.606E-15	5.811E-15	8.994E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.201E-14	1.875E-14	2.652E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139281	6WH LOADOUT	10/25/11	Gross Alpha/Beta	Gross Alpha	4.606E-15	5.811E-15	8.994E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.355E-14	1.888E-14	2.652E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139282	6WH LOADOUT	10/25/11	Gross Alpha/Beta	Gross Alpha	1.817E-15	3.841E-15	7.251E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.491E-14	1.735E-14	2.138E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139283	6WH LOADOUT	10/25/11	Gross Alpha/Beta	Gross Alpha	3.334E-15	5.164E-15	8.742E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.351E-14	1.998E-14	2.578E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139284	6WH LOADOUT	10/25/11	Gross Alpha/Beta	Gross Alpha	4.335E-15	5.469E-15	8.465E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.471E-14	1.957E-14	2.496E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139285	6WH LOADOUT	10/26/11	Gross Alpha/Beta	Gross Alpha	6.375E-15	6.137E-15	8.242E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	4.763E-14	1.863E-14	2.43E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139286	6WH LOADOUT	10/26/11	Gross Alpha/Beta	Gross Alpha	-9.6E-17	3.345E-15	8.825E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.196E-14	1.925E-14	2.602E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139287	6WH LOADOUT	10/26/11	Gross Alpha/Beta	Gross Alpha	5.81E-15	6.3E-15	9.038E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.069E-14	2.031E-14	2.665E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139288	6WH LOADOUT	10/26/11	Gross Alpha/Beta	Gross Alpha	1.161E-14	7.326E-15	7.454E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.027E-14	1.811E-14	2.198E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139289	6WH LOADOUT	10/27/11	Gross Alpha/Beta	Gross Alpha	5.545E-15	5.337E-15	7.168E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.857E-14	1.519E-14	2.114E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139290	6WH LOADOUT	10/27/11	Gross Alpha/Beta	Gross Alpha	2.265E-15	4.787E-15	9.038E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.367E-14	1.813E-14	2.665E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139291	6WH LOADOUT	10/27/11	Gross Alpha/Beta	Gross Alpha	1.139E-14	8.299E-15	9.881E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.68E-14	1.105E-14	1.671E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139292	6WH LOADOUT	10/27/11	Gross Alpha/Beta	Gross Alpha	4.132E-15	6.523E-15	1.076E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.283E-14	1.259E-14	1.82E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139293	6WH LOADOUT	10/31/11	Gross Alpha/Beta	Gross Alpha	3.883E-15	6.101E-15	8.404E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.369E-14	1.593E-14	2.381E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139294	6WH LOADOUT	10/31/11	Gross Alpha/Beta	Gross Alpha	7.247E-15	7.31E-15	8.628E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.432E-14	1.635E-14	2.444E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139295	6WH LOADOUT	10/31/11	Gross Alpha/Beta	Gross Alpha	4.151E-15	5.425E-15	7.059E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.642E-14	1.307E-14	2E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139296	6WH LOADOUT	10/31/11	Gross Alpha/Beta	Gross Alpha	3.121E-15	6.323E-15	9.289E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.236E-14	1.727E-14	2.631E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139297	6WH LOADOUT	11/01/11	Gross Alpha/Beta	Gross Alpha	3.048E-15	6.175E-15	9.072E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.245E-14	1.939E-14	2.57E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139298	6WH LOADOUT	11/01/11	Gross Alpha/Beta	Gross Alpha	2.548E-15	5.162E-15	7.583E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.135E-14	1.602E-14	2.148E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139299	6WH LOADOUT	11/01/11	Gross Alpha/Beta	Gross Alpha	-3.83E-16	4.761E-15	9.114E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.845E-14	1.835E-14	2.582E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139300	6WH LOADOUT	11/01/11	Gross Alpha/Beta	Gross Alpha	1.788E-15	5.384E-15	8.515E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.732E-14	1.726E-14	2.412E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139301	6WH LOADOUT	11/02/11	Gross Alpha/Beta	Gross Alpha	8.189E-15	7.494E-15	8.477E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	7.484E-14	2.002E-14	2.401E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139302	6WH LOADOUT	11/02/11	Gross Alpha/Beta	Gross Alpha	4.095E-15	6.435E-15	8.864E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.606E-14	2.078E-14	2.511E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139303	6WH LOADOUT	11/02/11	Gross Alpha/Beta	Gross Alpha	1.805E-14	9.345E-15	7.673E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.9E-14	1.821E-14	2.174E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139304	6WH LOADOUT	11/02/11	Gross Alpha/Beta	Gross Alpha	6.6E-15	7.477E-15	9.244E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.704E-14	2.151E-14	2.619E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139305	6WH LOADOUT	11/03/11	Gross Alpha/Beta	Gross Alpha	1.923E-15	5.79E-15	9.157E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.677E-14	1.655E-14	2.594E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139306	6WH LOADOUT	11/03/11	Gross Alpha/Beta	Gross Alpha	6.63E-16	4.577E-15	7.892E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.445E-14	1.426E-14	2.236E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139307	6WH LOADOUT	11/03/11	Gross Alpha/Beta	Gross Alpha	9.755E-15	8.005E-15	9.515E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.319E-14	1.229E-14	1.795E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139308	6WH LOADOUT	11/03/11	Gross Alpha/Beta	Gross Alpha	3.705E-15	5.704E-15	8.902E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.859E-14	1.223E-14	1.679E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139309	Plant 7W	10/31/11	Gross Alpha/Beta	Gross Alpha	2.801E-15	5.639E-15	9.515E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.176E-14	1.436E-14	1.795E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139310	Plant 7W	11/01/11	Gross Alpha/Beta	Gross Alpha	1.081E-14	8.259E-15	9.428E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	3.883E-14	1.498E-14	1.778E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139311	Plant 7W	11/09/11	Gross Alpha/Beta	Gross Alpha	5.883E-15	7.845E-15	1.1E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.441E-14	1.393E-14	1.94E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139312	Plant 7W	11/08/11	Gross Alpha/Beta	Gross Alpha	6.073E-15	9.733E-15	1.438E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.569E-14	1.748E-14	2.536E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139313	Plant 7W	11/10/11	Gross Alpha/Beta	Gross Alpha	3.277E-15	6.754E-15	1.058E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.043E-14	1.305E-14	1.866E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139314	6WH LOADOUT	11/10/11	Gross Alpha/Beta	Gross Alpha	4.987E-15	7.992E-15	1.181E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.047E-14	1.543E-14	2.082E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139315	6WH LOADOUT	11/10/11	Gross Alpha/Beta	Gross Alpha	3.324E-15	6.851E-15	1.073E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.7E-14	1.503E-14	1.893E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139316	6WH LOADOUT	11/10/11	Gross Alpha/Beta	Gross Alpha	3.638E-15	7.496E-15	1.175E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.438E-14	1.468E-14	2.072E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139317	6WH LOADOUT	11/10/11	Gross Alpha/Beta	Gross Alpha	2.39E-15	7.241E-15	1.213E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-4.596E-15	1.119E-14	2.139E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139318	6WH LOADOUT	11/14/11	Gross Alpha/Beta	Gross Alpha	3.079E-15	5.735E-15	8.937E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.918E-14	2.067E-14	2.789E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139319	6WH LOADOUT	11/14/11	Gross Alpha/Beta	Gross Alpha	8.981E-15	7.687E-15	8.494E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	4.199E-14	2.002E-14	2.651E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139320	6WH LOADOUT	11/14/11	Gross Alpha/Beta	Gross Alpha	7.927E-15	7.442E-15	8.666E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.347E-14	1.883E-14	2.704E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139321	6WH LOADOUT	11/14/11	Gross Alpha/Beta	Gross Alpha	3.178E-15	5.92E-15	9.225E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.787E-14	2.113E-14	2.879E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139322	6WH LOADOUT	11/15/11	Gross Alpha/Beta	Gross Alpha	-7.24E-16	3.568E-15	8.71E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.17E-14	1.961E-14	2.718E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139323	6WH LOADOUT	11/15/11	Gross Alpha/Beta	Gross Alpha	9.701E-15	8.304E-15	9.176E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.631E-14	1.919E-14	2.863E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139324	6WH LOADOUT	11/15/11	Gross Alpha/Beta	Gross Alpha	1.925E-15	5.48E-15	9.532E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.872E-14	2.01E-14	2.975E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139325	6WH LOADOUT	11/15/11	Gross Alpha/Beta	Gross Alpha	-1.927E-15	2.512E-15	8.536E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.551E-14	1.875E-14	2.664E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139326	6WH LOADOUT	11/16/11	Gross Alpha/Beta	Gross Alpha	5.144E-15	6.193E-15	8.171E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.441E-14	1.795E-14	2.55E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139327	6WH LOADOUT	11/16/11	Gross Alpha/Beta	Gross Alpha	4.308E-15	6.211E-15	8.844E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.89E-14	1.964E-14	2.76E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139328	6WH LOADOUT	11/16/11	Gross Alpha/Beta	Gross Alpha	4.077E-15	5.878E-15	8.37E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.501E-14	1.839E-14	2.612E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139329	6WH LOADOUT	11/16/11	Gross Alpha/Beta	Gross Alpha	1.566E-14	9.796E-15	8.844E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	1.489E-14	1.843E-14	2.76E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139330	6WH LOADOUT	11/17/11	Gross Alpha/Beta	Gross Alpha	-8.02E-16	3.949E-15	9.639E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.586E-14	2.258E-14	3.008E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139331	6WH LOADOUT	11/17/11	Gross Alpha/Beta	Gross Alpha	8.348E-15	7.838E-15	9.127E-15	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.472E-14	1.983E-14	2.848E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139332	6WH LOADOUT	11/17/11	Gross Alpha/Beta	Gross Alpha	-8.02E-16	3.949E-15	9.639E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.79E-14	2.11E-14	3.008E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139333	6WH LOADOUT	11/17/11	Gross Alpha/Beta	Gross Alpha	-7.43E-16	3.661E-15	8.937E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.086E-14	1.998E-14	2.789E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139334	Plant 7W	11/14/11	Gross Alpha/Beta	Gross Alpha	9.62E-16	6.297E-15	1.139E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.021E-14	1.498E-14	2.008E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139335	Plant 7W	11/15/11	Gross Alpha/Beta	Gross Alpha	-3.13E-16	5.609E-15	1.111E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.946E-14	1.46E-14	1.959E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139336	Plant 7W	11/16/11	Gross Alpha/Beta	Gross Alpha	7.228E-15	8.35E-15	1.116E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.188E-14	1.257E-14	1.968E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139337	Plant 7W	11/17/11	Gross Alpha/Beta	Gross Alpha	9.29E-16	6.081E-15	1.1E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.489E-14	1.279E-14	1.94E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139338	Plant 7W	11/22/11	Gross Alpha/Beta	Gross Alpha	1.302E-14	1.62E-14	2.419E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.701E-14	5.518E-14	6.815E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139339	Plant 7W	11/23/11	Gross Alpha/Beta	Gross Alpha	1.604E-15	4.829E-15	9.297E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-3.822E-15	2.047E-14	2.619E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139340	6WH LOADOUT	11/21/11	Gross Alpha/Beta	Gross Alpha	1.75E-15	5.268E-15	1.014E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.053E-14	2.471E-14	2.857E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139341	6WH LOADOUT	11/21/11	Gross Alpha/Beta	Gross Alpha	3.999E-15	5.99E-15	9.608E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.74E-14	2.331E-14	2.707E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139342	6WH LOADOUT	11/21/11	Gross Alpha/Beta	Gross Alpha	1.75E-15	5.268E-15	1.014E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.843E-14	2.391E-14	2.857E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139343	6WH LOADOUT	11/21/11	Gross Alpha/Beta	Gross Alpha	1.619E-15	4.874E-15	9.384E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.468E-14	2.392E-14	2.643E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139344	6WH LOADOUT	11/22/11	Gross Alpha/Beta	Gross Alpha	-1.801E-15	2.83E-15	9.34E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.106E-15	2.099E-14	2.631E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139345	6WH LOADOUT	11/22/11	Gross Alpha/Beta	Gross Alpha	-7.17E-16	3.923E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-4.952E-15	2.216E-14	2.843E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139346	6WH LOADOUT	11/22/11	Gross Alpha/Beta	Gross Alpha	-1.946E-15	3.057E-15	1.009E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.111E-14	2.329E-14	2.843E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139347	6WH LOADOUT	11/22/11	Gross Alpha/Beta	Gross Alpha	-6.83E-16	3.735E-15	9.608E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.37E-16	2.148E-14	2.707E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139348	6WH LOADOUT	11/23/11	Gross Alpha/Beta	Gross Alpha	5.05E-16	4.561E-15	9.941E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.332E-14	2.311E-14	2.8E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139349	6WH LOADOUT	11/23/11	Gross Alpha/Beta	Gross Alpha	-7.55E-16	4.13E-15	1.063E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.537E-14	2.611E-14	2.993E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139350	6WH LOADOUT	11/23/11	Gross Alpha/Beta	Gross Alpha	1.904E-15	5.731E-15	1.103E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.058E-14	2.671E-14	3.108E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139351	6WH LOADOUT	11/23/11	Gross Alpha/Beta	Gross Alpha	1.682E-15	5.064E-15	9.748E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.159E-14	2.324E-14	2.746E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139352	6WH LOADOUT	11/28/11	Gross Alpha/Beta	Gross Alpha	-4.05E-16	6.29E-15	1.289E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.116E-14	1.248E-14	1.89E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139353	6WH LOADOUT	11/28/11	Gross Alpha/Beta	Gross Alpha	-4.39E-16	6.814E-15	1.397E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.559E-15	1.32E-14	2.047E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139354	6WH LOADOUT	11/28/11	Gross Alpha/Beta	Gross Alpha	-3.07E-15	5.708E-15	1.397E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.221E-14	1.473E-14	2.047E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139355	6WH LOADOUT	11/28/11	Gross Alpha/Beta	Gross Alpha	-2.89E-15	5.373E-15	1.315E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.17E-14	1.396E-14	1.927E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139356	6WH LOADOUT	11/29/11	Gross Alpha/Beta	Gross Alpha	8.137E-15	9.039E-15	1.296E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.033E-14	1.674E-14	1.899E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139357	6WH LOADOUT	11/29/11	Gross Alpha/Beta	Gross Alpha	2.171E-15	7.684E-15	1.382E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.951E-14	1.647E-14	2.026E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139358	6WH LOADOUT	11/29/11	Gross Alpha/Beta	Gross Alpha	4.432E-15	7.911E-15	1.283E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.738E-14	1.431E-14	1.881E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139359	6WH LOADOUT	11/29/11	Gross Alpha/Beta	Gross Alpha	4.954E-15	8.841E-15	1.434E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.619E-14	1.761E-14	2.102E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139360	6WH LOADOUT	11/30/11	Gross Alpha/Beta	Gross Alpha	3.437E-15	8.031E-15	1.368E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.506E-14	1.481E-14	2.006E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139361	6WH LOADOUT	11/30/11	Gross Alpha/Beta	Gross Alpha	-5.289E-15	4.016E-15	1.296E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.451E-14	1.411E-14	1.899E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139362	6WH LOADOUT	11/30/11	Gross Alpha/Beta	Gross Alpha	-2.862E-15	5.32E-15	1.302E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.149E-14	1.382E-14	1.908E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139363	6WH LOADOUT	11/30/11	Gross Alpha/Beta	Gross Alpha	2.159E-15	7.645E-15	1.375E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.353E-14	1.47E-14	2.016E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139364	6WH LOADOUT	12/01/11	Gross Alpha/Beta	Gross Alpha	7.739E-15	9.737E-15	1.45E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.231E-14	1.736E-14	2.125E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139365	6WH LOADOUT	12/01/11	Gross Alpha/Beta	Gross Alpha	-4.36E-16	6.779E-15	1.39E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.72E-14	1.63E-14	2.037E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139366	6WH LOADOUT	12/01/11	Gross Alpha/Beta	Gross Alpha	9.06E-16	7.54E-15	1.442E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.77E-14	1.46E-14	2.113E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139367	6WH LOADOUT	12/01/11	Gross Alpha/Beta	Gross Alpha	8.38E-16	6.978E-15	1.334E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.089E-14	1.514E-14	1.956E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139368	Plant 7W	11/28/11	Gross Alpha/Beta	Gross Alpha	2.374E-15	5.676E-15	1.08E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.623E-15	1.207E-14	1.932E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139369	Plant 7W	11/29/11	Gross Alpha/Beta	Gross Alpha	9.616E-15	8.151E-15	1.059E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	2.576E-14	1.426E-14	1.895E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139370	Plant 7W	11/30/11	Gross Alpha/Beta	Gross Alpha	7.051E-15	7.251E-15	1.039E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.833E-14	1.432E-14	1.859E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139371	Plant 7W	12/01/11	Gross Alpha/Beta	Gross Alpha	-1.244E-15	3.445E-15	1.001E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.773E-14	1.273E-14	1.792E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139372	Plant 7W	12/05/11	Gross Alpha/Beta	Gross Alpha	4.273E-15	7.127E-15	1.113E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.025E-14	1.831E-14	2.667E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139373	Plant 7W	12/06/11	Gross Alpha/Beta	Gross Alpha	5.77E-16	5.42E-15	1.051E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.266E-14	1.85E-14	2.52E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139374	Plant 7W	12/07/11	Gross Alpha/Beta	Gross Alpha	-5.72E-16	4.86E-15	1.042E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.392E-14	1.593E-14	2.497E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD139375	Plant 7W	12/08/11	Gross Alpha/Beta	Gross Alpha	5.64E-16	5.299E-15	1.028E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.645E-14	1.598E-14	2.464E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139376	6WH LOADOUT	12/05/11	Gross Alpha/Beta	Gross Alpha	3.275E-15	7.183E-15	1.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.975E-14	2.178E-14	2.862E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139377	6WH LOADOUT	12/05/11	Gross Alpha/Beta	Gross Alpha	-6.16E-16	5.241E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.549E-14	1.97E-14	2.693E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139378	6WH LOADOUT	12/05/11	Gross Alpha/Beta	Gross Alpha	7.859E-15	8.208E-15	1.102E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.909E-14	1.806E-14	2.642E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139379	6WH LOADOUT	12/05/11	Gross Alpha/Beta	Gross Alpha	4.585E-15	7.646E-15	1.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.484E-14	1.978E-14	2.862E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139380	6WH LOADOUT	12/06/11	Gross Alpha/Beta	Gross Alpha	5.894E-15	8.083E-15	1.194E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.737E-14	1.914E-14	2.862E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139381	6WH LOADOUT	12/06/11	Gross Alpha/Beta	Gross Alpha	-6.02E-16	5.116E-15	1.097E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.866E-14	2.036E-14	2.629E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139382	6WH LOADOUT	12/06/11	Gross Alpha/Beta	Gross Alpha	6.16E-16	5.792E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.19E-14	2.097E-14	2.693E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139383	6WH LOADOUT	12/06/11	Gross Alpha/Beta	Gross Alpha	4.609E-15	7.686E-15	1.2E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.095E-14	2.196E-14	2.877E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139384	6WH LOADOUT	12/07/11	Gross Alpha/Beta	Gross Alpha	-6.69E-16	5.687E-15	1.219E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.173E-14	2.07E-14	2.923E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139385	6WH LOADOUT	12/07/11	Gross Alpha/Beta	Gross Alpha	1.886E-15	6.421E-15	1.146E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.87E-14	1.774E-14	2.747E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139386	6WH LOADOUT	12/07/11	Gross Alpha/Beta	Gross Alpha	6.69E-16	6.285E-15	1.219E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.325E-14	1.999E-14	2.923E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139387	6WH LOADOUT	12/07/11	Gross Alpha/Beta	Gross Alpha	5.548E-15	7.607E-15	1.123E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.22E-14	1.862E-14	2.693E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139388	6WH LOADOUT	12/08/11	Gross Alpha/Beta	Gross Alpha	3.052E-15	6.695E-15	1.113E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.733E-14	2.048E-14	2.667E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139389	6WH LOADOUT	12/08/11	Gross Alpha/Beta	Gross Alpha	1.985E-15	6.759E-15	1.206E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.79E-14	2.102E-14	2.892E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139390	6WH LOADOUT	12/08/11	Gross Alpha/Beta	Gross Alpha	1.985E-15	6.759E-15	1.206E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.531E-14	1.999E-14	2.892E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139391	6WH LOADOUT	12/08/11	Gross Alpha/Beta	Gross Alpha	-6.23E-16	5.293E-15	1.135E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.498E-14	2.136E-14	2.72E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139392	6WH LOADOUT	12/12/11	Gross Alpha/Beta	Gross Alpha	6.504E-15	7.353E-15	8.964E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.689E-14	2.093E-14	2.704E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139393	6WH LOADOUT	12/12/11	Gross Alpha/Beta	Gross Alpha	2.872E-15	6.152E-15	9.238E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.736E-14	1.904E-14	2.787E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139394	6WH LOADOUT	12/12/11	Gross Alpha/Beta	Gross Alpha	3.16E-16	4.931E-15	9.145E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.26E-14	1.932E-14	2.759E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139395	6WH LOADOUT	12/12/11	Gross Alpha/Beta	Gross Alpha	3.911E-15	6.279E-15	8.707E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.361E-14	1.865E-14	2.627E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139396	6WH LOADOUT	12/13/11	Gross Alpha/Beta	Gross Alpha	6.258E-15	7.075E-15	8.625E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.302E-14	1.926E-14	2.602E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139397	6WH LOADOUT	12/13/11	Gross Alpha/Beta	Gross Alpha	2.98E-16	4.65E-15	8.625E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.168E-14	1.835E-14	2.602E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139398	6WH LOADOUT	12/13/11	Gross Alpha/Beta	Gross Alpha	5.481E-15	7.207E-15	9.332E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.636E-14	2.154E-14	2.815E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139399	6WH LOADOUT	12/13/11	Gross Alpha/Beta	Gross Alpha	7.593E-15	7.61E-15	8.791E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.56E-14	2.053E-14	2.652E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139400	6WH LOADOUT	12/14/11	Gross Alpha/Beta	Gross Alpha	4.007E-15	6.433E-15	8.921E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.843E-14	1.859E-14	2.691E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139401	6WH LOADOUT	12/14/11	Gross Alpha/Beta	Gross Alpha	5.344E-15	7.027E-15	9.099E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.202E-14	1.834E-14	2.745E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139402	6WH LOADOUT	12/14/11	Gross Alpha/Beta	Gross Alpha	6.287E-15	7.108E-15	8.666E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.152E-14	1.573E-14	2.614E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139403	6WH LOADOUT	12/14/11	Gross Alpha/Beta	Gross Alpha	2.682E-15	5.744E-15	8.625E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.808E-14	1.719E-14	2.602E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139404	6WH LOADOUT	12/15/11	Gross Alpha/Beta	Gross Alpha	1.169E-14	9.047E-15	9.145E-15	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.182E-14	2.086E-14	2.759E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139405	6WH LOADOUT	12/15/11	Gross Alpha/Beta	Gross Alpha	3.802E-15	6.103E-15	8.464E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.244E-14	2.117E-14	2.553E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139406	6WH LOADOUT	12/15/11	Gross Alpha/Beta	Gross Alpha	6.199E-15	7.008E-15	8.544E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.198E-14	2.056E-14	2.577E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139407	6WH LOADOUT	12/15/11	Gross Alpha/Beta	Gross Alpha	3.617E-15	5.806E-15	8.052E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.855E-14	1.943E-14	2.429E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139408	Plant 7W	12/12/11	Gross Alpha/Beta	Gross Alpha	3.752E-15	8.422E-15	1.296E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.875E-14	1.639E-14	2.01E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139409	Plant 7W	12/13/11	Gross Alpha/Beta	Gross Alpha	-2.552E-15	6.423E-15	1.322E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.726E-14	1.547E-14	2.051E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139410	Plant 7W	12/14/11	Gross Alpha/Beta	Gross Alpha	6.223E-15	9.09E-15	1.29E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	-2.925E-15	1.154E-14	2E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139411	Plant 7W	12/15/11	Gross Alpha/Beta	Gross Alpha	3.171E-15	7.118E-15	1.096E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	5.579E-14	1.596E-14	1.699E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139412	Plant 7W	12/19/11	Gross Alpha/Beta	Gross Alpha	1.397E-15	5.265E-15	1.044E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.657E-14	1.721E-14	2.513E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139413	Plant 7W	12/20/11	Gross Alpha/Beta	Gross Alpha	-2.001E-15	3.648E-15	1.067E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.486E-14	1.655E-14	2.57E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139414	Plant 7W	12/21/11	Gross Alpha/Beta	Gross Alpha	-2.001E-15	3.648E-15	1.067E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	9.059E-15	1.604E-14	2.57E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139415	Plant 7W	12/22/11	Gross Alpha/Beta	Gross Alpha	-1.914E-15	3.49E-15	1.021E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.506E-15	1.496E-14	2.458E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD139416	Plant 7W	12/27/11	Gross Alpha/Beta	Gross Alpha	-3.897E-15	1.538E-15	9.703E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.416E-14	1.511E-14	2.336E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD139417	Plant 7W	12/28/11	Gross Alpha/Beta	Gross Alpha	-1.811E-15	3.303E-15	9.664E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.985E-14	1.636E-14	2.327E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139418	Plant 7W	12/29/11	Gross Alpha/Beta	Gross Alpha	4.587E-15	6.311E-15	1.008E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.566E-14	1.662E-14	2.427E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD139419	6WH LOADOUT	12/19/11	Gross Alpha/Beta	Gross Alpha	1.257E-14	9.403E-15	1.142E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
				Gross Beta	6.517E-14	1.828E-14	1.766E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139420	6WH LOADOUT	12/19/11	Gross Alpha/Beta	Gross Alpha	8.36E-15	8.632E-15	1.209E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	7.773E-14	2.007E-14	1.87E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD139421	6WH LOADOUT	12/19/11	Gross Alpha/Beta	Gross Alpha	1.073E-14	9.227E-15	1.198E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
				Gross Beta	5.418E-14	1.796E-14	1.852E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141634	6WH LOADOUT	12/19/11	Gross Alpha/Beta	Gross Alpha	2.303E-15	7.032E-15	1.285E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	8.343E-14	2.139E-14	1.987E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141635	6WH LOADOUT	12/20/11	Gross Alpha/Beta	Gross Alpha	5.798E-15	7.774E-15	1.192E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.922E-14	1.746E-14	1.843E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141636	6WH LOADOUT	12/20/11	Gross Alpha/Beta	Gross Alpha	6.25E-15	8.381E-15	1.285E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.909E-14	2.022E-14	1.987E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141637	6WH LOADOUT	12/20/11	Gross Alpha/Beta	Gross Alpha	3.202E-15	6.644E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.472E-14	1.645E-14	1.758E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141638	6WH LOADOUT	12/20/11	Gross Alpha/Beta	Gross Alpha	2.066E-15	6.309E-15	1.153E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	6.275E-14	1.82E-14	1.783E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141639	6WH LOADOUT	12/21/11	Gross Alpha/Beta	Gross Alpha	2.189E-15	6.684E-15	1.221E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.998E-14	1.489E-14	1.889E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141640	6WH LOADOUT	12/21/11	Gross Alpha/Beta	Gross Alpha	-1.455E-15	4.737E-15	1.137E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.113E-14	1.304E-14	1.758E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
SLD141641	6WH LOADOUT	12/21/11	Gross Alpha/Beta	Gross Alpha	2.303E-15	7.032E-15	1.285E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.849E-14	1.539E-14	1.987E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141642	6WH LOADOUT	12/21/11	Gross Alpha/Beta	Gross Alpha	8.85E-16	5.85E-15	1.153E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.096E-14	1.531E-14	1.783E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141643	6WH LOADOUT	12/22/11	Gross Alpha/Beta	Gross Alpha	2.957E-15	6.135E-15	1.05E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	1.993E-14	1.31E-14	1.624E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141644	6WH LOADOUT	12/22/11	Gross Alpha/Beta	Gross Alpha	5.634E-15	7.555E-15	1.158E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	4.632E-14	1.683E-14	1.791E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141645	6WH LOADOUT	12/22/11	Gross Alpha/Beta	Gross Alpha	-1.014E-15	5.093E-15	1.263E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.272E-14	2.002E-14	3.04E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141646	6WH LOADOUT	12/22/11	Gross Alpha/Beta	Gross Alpha	3.682E-15	6.224E-15	1.058E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.621E-14	1.738E-14	2.547E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141647	6WH LOADOUT	12/27/11	Gross Alpha/Beta	Gross Alpha	1.367E-15	5.15E-15	1.021E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.184E-14	1.649E-14	2.458E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141648	6WH LOADOUT	12/27/11	Gross Alpha/Beta	Gross Alpha	2.844E-15	6.467E-15	1.18E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.604E-14	1.912E-14	2.841E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141649	6WH LOADOUT	12/27/11	Gross Alpha/Beta	Gross Alpha	-3.621E-15	3.275E-15	1.229E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.548E-14	2.061E-14	2.96E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141650	6WH LOADOUT	12/27/11	Gross Alpha/Beta	Gross Alpha	1.699E-15	6.403E-15	1.269E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.801E-14	2.057E-14	3.056E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141651	6WH LOADOUT	12/28/11	Gross Alpha/Beta	Gross Alpha	-2.047E-15	3.733E-15	1.092E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.113E-14	1.745E-14	2.63E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141652	6WH LOADOUT	12/28/11	Gross Alpha/Beta	Gross Alpha	4.548E-15	6.258E-15	9.992E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.63E-14	1.735E-14	2.406E-14	uCi/mL	=		SLDS (General Area) Perimeter Air
SLD141653	6WH LOADOUT	12/28/11	Gross Alpha/Beta	Gross Alpha	2.68E-16	4.564E-15	9.992E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.748E-14	1.664E-14	2.406E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141654	6WH LOADOUT	12/28/11	Gross Alpha/Beta	Gross Alpha	2.77E-16	4.725E-15	1.035E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.845E-14	1.723E-14	2.491E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141655	6WH LOADOUT	12/29/11	Gross Alpha/Beta	Gross Alpha	3.364E-15	5.686E-15	9.664E-15	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.904E-14	1.708E-14	2.327E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

Table B-1. SLDS Perimeter Air Data Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD141656	6WH LOADOUT	12/29/11	Gross Alpha/Beta	Gross Alpha	-1.956E-15	3.567E-15	1.044E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.295E-14	1.773E-14	2.513E-14	uCi/mL	J	T04	SLDS (General Area) Perimeter Air
SLD141657	6WH LOADOUT	12/29/11	Gross Alpha/Beta	Gross Alpha	1.504E-15	5.668E-15	1.124E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	2.403E-14	1.814E-14	2.705E-14	uCi/mL	U	T04, T05	SLDS (General Area) Perimeter Air
SLD141658	6WH LOADOUT	12/29/11	Gross Alpha/Beta	Gross Alpha	2.45E-15	5.571E-15	1.017E-14	uCi/mL	UJ	T06	SLDS (General Area) Perimeter Air
				Gross Beta	3.969E-14	1.787E-14	2.448E-14	uCi/mL	=		SLDS (General Area) Perimeter Air

µCi/mL--microcurie(s) per milliliter

Table B-2. SLDS TLD (External Gamma Radiation) Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD133420	DA-1	04/05/11	Radiological	External gamma radiation	18.4	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133420-1	DA-1 dup	04/05/11	Radiological	External gamma radiation	18	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133421	DA-2	04/05/11	Radiological	External gamma radiation	19.7	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133422	DA-3	04/05/11	Radiological	External gamma radiation	18.6	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133423	DA-6	04/05/11	Radiological	External gamma radiation	17.7	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133426	DA-1	07/06/11	Radiological	External gamma radiation	19.7	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133426-1	DA-1dup	07/06/11	Radiological	External gamma radiation	20.1	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133427	DA-2	07/06/11	Radiological	External gamma radiation	20.5	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133428	DA-3	07/06/11	Radiological	External gamma radiation	18.4	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133429	DA-6	07/06/11	Radiological	External gamma radiation	18.3	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133432	DA-1	10/04/11	Radiological	External gamma radiation	18.4	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133432-1	DA-1dup	10/04/11	Radiological	External gamma radiation	17.7	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133433	DA-2	10/04/11	Radiological	External gamma radiation	20	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133434	DA-3	10/04/11	Radiological	External gamma radiation	17.9	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD133435	DA-6	10/04/11	Radiological	External gamma radiation	18.3	0	0.1	mrem	=	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD141532	DA-1	01/10/12	Radiological	External gamma radiation	16.2	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD141532-1	DA-1 dup	01/10/12	Radiological	External gamma radiation	16.4	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD141533	DA-2	01/10/12	Radiological	External gamma radiation	21.7	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD141534	DA-3	01/10/12	Radiological	External gamma radiation	18.8	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD141535	DA-6	01/10/12	Radiological	External gamma radiation	19.3	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring

mrem--millirem

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Table B-3. SLDS Radon-222 Results for CY 2011

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	Detection Limit	Units	Validation Qualifier	Validation Reason Code	Sampling Event Name
SLD141314	DA-1	01/10/12	Radiological	Radon-222	0.2	0	0.2	pCi/L	UJ	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD133490	DA-1	07/06/11	Radiological	Radon-222	0.2	0	0.2	pCi/L	U	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD141314-1	DA-1 dup	01/10/12	Radiological	Radon-222	0.2	0	0.2	pCi/L	UJ	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD133490-1	DA-1dup	07/06/11	Radiological	Radon-222	0.2	0	0.2	pCi/L	U	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD133491	DA-2	07/06/11	Radiological	Radon-222	0.2	0	0.2	pCi/L	U	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD141315	DA-2	01/10/12	Radiological	Radon-222	0.2	0	0.2	pCi/L	J	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD133492	DA-3	07/06/11	Radiological	Radon-222	0.2	0	0.2	pCi/L	U	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD141316	DA-3	01/10/12	Radiological	Radon-222	0.2	0	0.2	pCi/L	UJ	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD133493	DA-6	07/06/11	Radiological	Radon-222	0.2	0	0.2	pCi/L	U	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring
SLD141317	DA-6	01/10/12	Radiological	Radon-222	0.2	0	0.2	pCi/L	UJ	Y01	SLDS Air (Alpha Tracks)-Environmental Monitoring

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APPENDIX C

STORM-WATER, WASTE-WATER AND EXCAVATION-WATER DATA
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Table C-1. First Quarter Self Monitoring Report for Excavation-Water Discharge at SLDS During CY 2011

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (gallons)	Total Activity per Discharge[b] (Ci)	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK476	02/23/11 - 02/28/11 (6WH)	39	pCi/L	41,056	6.1E-06	3,000	pCi/L	0.01
Gross Beta			<26	pCi/L		2.0E-06	N/A		
Th-228			<0.4	pCi/L		3.4E-08	2,000	pCi/L	
Th-230			3.0	pCi/L		4.7E-07	1,000	pCi/L	
Th-232			<0.5	pCi/L		4.2E-08	300	pCi/L	
Uranium (KPA)			14	pCi/L		2.2E-06	3,000	pCi/L	
Ra-226[d]			3.0	pCi/L		4.7E-07	10	pCi/L	
Ra-228[c,e]			<0.4	pCi/L		3.4E-08	30	pCi/L	
Total Suspended Solids			72	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK477	03/07/11 - 03/29/11 (6WH)	35	pCi/L	82,044	1.1E-05	3,000	pCi/L	0.02
Gross Beta			<26	pCi/L		4.0E-06	N/A		
Th-228			<0.4	pCi/L		6.5E-08	2,000	pCi/L	
Th-230			5.0	pCi/L		1.6E-06	1,000	pCi/L	
Th-232			<0.5	pCi/L		8.2E-08	300	pCi/L	
Uranium (KPA)			11	pCi/L		3.4E-06	3,000	pCi/L	
Ra-226[d]			5.0	pCi/L		1.6E-06	10	pCi/L	
Ra-228[c,e]			<0.4	pCi/L		6.5E-08	30	pCi/L	
Total Suspended Solids			101	mg/L		-	-	-	

Total Activity Discharged in 1st Quarter of CY 2011 (Ci)

Th-228	9.9E-08
Th-230	2.0E-06
Th-232	1.2E-07
Uranium (KPA)	5.6E-06
Ra-226	2.0E-06
Ra-228[b]	9.9E-08

Total Activity Discharged through 03/31/11 (Ci)

Th-228	9.9E-08
Th-230	2.0E-06
Th-232	1.2E-07
Uranium (KPA)	5.6E-06
Ra-226	2.0E-06
Ra-228[b]	9.9E-08

Total Volume Discharged in 1st Quarter of CY 2011 (gallons)

Gallons	123,100

Total Volume Discharged through 03/31/11 (gallons)

Gallons	123,100

NOTES:

[a] Non detect sample results are converted to half the detection limit.

[b] The weighted average was used to calculate the total activity.

[c] Ra-228 assumed to be in equilibrium with Th-228.

[d] 10 *CRF* 20 limit is 600 pCi/L for Ra-226.

[e] 10 *CRF* 20 limit is 600 pCi/L for Ra-228.

mg/L--milligram(s) per kilogram

N/A--Not applicable

SOR--sum of ratios

- No data/No limit

Table C-1. Second Quarter Self Monitoring Report for Excavation-Water Discharge at SLDS During CY 2011

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (gallons)	Total Activity per Discharge[b] (Ci)	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK478	04/11/11 - 04/28/11 (6WH)	13	pCi/L	110,280	5.4E-06	3,000	pCi/L	0.01
Gross Beta			<13	pCi/L		2.8E-06	N/A		
Th-228			<0.7	pCi/L		1.4E-07	2,000	pCi/L	
Th-230			2.0	pCi/L		8.3E-07	1,000	pCi/L	
Th-232			<0.5	pCi/L		9.6E-08	300	pCi/L	
Uranium (KPA)			8	pCi/L		3.3E-06	3,000	pCi/L	
Ra-226[d]			<2	pCi/L		4.1E-07	10	pCi/L	
Ra-228[c,e]			<0.7	pCi/L		1.4E-07	30	pCi/L	
Total Suspended Solids			54	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK479	05/03/11 - 05/18/11 (7N)	12	pCi/L	181,264	8.2E-06	3,000	pCi/L	0.01
Gross Beta			<13	pCi/L		4.5E-06	N/A		
Th-228			<0.5	pCi/L		1.7E-07	2,000	pCi/L	
Th-230			<0.6	pCi/L		2.2E-07	1,000	pCi/L	
Th-232			<0.5	pCi/L		1.7E-07	300	pCi/L	
Uranium (KPA)			12	pCi/L		8.2E-06	3,000	pCi/L	
Ra-226[d]			<2	pCi/L		7.9E-07	10	pCi/L	
Ra-228[c,e]			<0.5	pCi/L		1.7E-07	30	pCi/L	
Total Suspended Solids			10	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK480	05/09/11 - 05/26/11 (6WH)	18	pCi/L	66,400	4.5E-06	3,000	pCi/L	0.02
Gross Beta			<22	pCi/L		2.8E-06	N/A		
Th-228			<0.5	pCi/L		5.7E-08	2,000	pCi/L	
Th-230			3.0	pCi/L		7.5E-07	1,000	pCi/L	
Th-232			0.4	pCi/L		9.8E-08	300	pCi/L	
Uranium (KPA)			13	pCi/L		3.3E-06	3,000	pCi/L	
Ra-226[d]			4.0	pCi/L		1.0E-06	10	pCi/L	
Ra-228[c,e]			<0.5	pCi/L		5.7E-08	30	pCi/L	
Total Suspended Solids			177	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK481	06/15/11 - 06/27/11 (6WH)	<15	pCi/L	105,102	3.0E-06	3,000	pCi/L	0.00
Gross Beta			<22	pCi/L		4.5E-06	N/A		
Th-228			<0.5	pCi/L		1.1E-07	2,000	pCi/L	
Th-230			0.7	pCi/L		2.7E-07	1,000	pCi/L	
Th-232			<0.2	pCi/L		4.0E-08	300	pCi/L	
Uranium (KPA)			3	pCi/L		1.2E-06	3,000	pCi/L	
Ra-226[d]			<1.7	pCi/L		3.3E-07	10	pCi/L	
Ra-228[c,e]			<0.5	pCi/L		1.1E-07	30	pCi/L	
Total Suspended Solids			21	mg/L		-	-	-	

Total Activity Discharged in 2nd Quarter of CY 2011 (Ci)

Th-228	4.7E-07
Th-230	2.1E-06
Th-232	4.1E-07
Uranium (KPA)	1.6E-05
Ra-226	2.5E-06
Ra-228[b]	4.7E-07

Total Activity Discharged through 06/30/11 (Ci)

Th-228	5.7E-07
Th-230	4.1E-06
Th-232	5.3E-07
Uranium (KPA)	2.2E-05
Ra-226	4.6E-06
Ra-228[b]	5.7E-07

Total Volume Discharged in 2nd Quarter of CY 2011 (gallons)

Gallons	463,046

Total Volume Discharged through 06/30/11 (gallons)

Gallons	586,146

NOTES:

[a] Non detect sample results are converted to half the detection limit.

[b] The weighted average was used to calculate the total activity.

[c] Ra-228 assumed to be in equilibrium with Th-228.

[d] 10 *CRF* 20 limit is 600 pCi/L for Ra-226.

[e] 10 *CRF* 20 limit is 600 pCi/L for Ra-228.

mg/L--milligram(s) per kilogram

N/A--Not applicable

SOR--sum of ratios

- No data/No limit

Table C-1. Third Quarter Self Monitoring Report for Excavation-Water Discharge at SLDS During CY 2011

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (gallons)	Total Activity per Discharge[b] (Ci)	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK482	07/06/11 - 07/12/11 (6WH)	<8	pCi/L	61,022	9.0E-07	3,000	pCi/L	0.00
Gross Beta			<11	pCi/L		1.3E-06	N/A		
Th-228			<0.4	pCi/L		4.1E-08	2,000	pCi/L	
Th-230			0.9	pCi/L		2.1E-07	1,000	pCi/L	
Th-232			<0.2	pCi/L		2.1E-08	300	pCi/L	
Uranium (KPA)			3	pCi/L		6.9E-07	3,000	pCi/L	
Ra-226[d]			<1	pCi/L		1.3E-07	10	pCi/L	
Ra-228[c,e]			<0.4	pCi/L		4.1E-08	30	pCi/L	
Total Suspended Solids			25	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK483	07/25/11 - 07/26/11 (7N)	14	pCi/L	149,120	7.9E-06	3,000	pCi/L	0.01
Gross Beta			<11	pCi/L		1.3E-06	N/A		
Th-228			<0.7	pCi/L		8.4E-08	2,000	pCi/L	
Th-230			0.3	pCi/L		5.8E-08	1,000	pCi/L	
Th-232			<0.2	pCi/L		2.7E-08	300	pCi/L	
Uranium (KPA)			16	pCi/L		3.7E-06	3,000	pCi/L	
Ra-226[d]			<2	pCi/L		2.3E-07	10	pCi/L	
Ra-228[c,e]			<0.7	pCi/L		8.4E-08	30	pCi/L	
Total Suspended Solids			20	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK484	08/08/11 (6WH)	13	pCi/L	17,452	8.3E-07	3,000	pCi/L	0.01
Gross Beta			<11	pCi/L		3.7E-07	N/A		
Th-228			0.2	pCi/L		1.3E-08	2,000	pCi/L	
Th-230			<0.4	pCi/L		1.5E-08	1,000	pCi/L	
Th-232			<0.5	pCi/L		1.8E-08	300	pCi/L	
Uranium (KPA)			10	pCi/L		6.3E-07	3,000	pCi/L	
Ra-226[d]			<1.2	pCi/L		4.2E-08	10	pCi/L	
Ra-228[c,e]			0.2	pCi/L		1.3E-08	30	pCi/L	
Total Suspended Solids			4	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK485	09/07/11 - 09/22/11 (6WH)	16	pCi/L	94,331	5.7E-06	3,000	pCi/L	0.01
Gross Beta			<12	pCi/L		2.1E-06	N/A		
Th-228			<1	pCi/L		9.1E-08	2,000	pCi/L	
Th-230			2.1	pCi/L		7.6E-07	1,000	pCi/L	
Th-232			<0.4	pCi/L		6.4E-08	300	pCi/L	
Uranium (KPA)			17	pCi/L		6.1E-06	3,000	pCi/L	
Ra-226[d]			<2	pCi/L		2.7E-07	10	pCi/L	
Ra-228[c,e]			<1	pCi/L		9.1E-08	30	pCi/L	
Total Suspended Solids			22	mg/L		-	-	-	
Gross Alpha (raw water)	SLDS-BK486	09/09/11 - 09/28/11 (7N)	<9	pCi/L	119,780	2.1E-06	3,000	pCi/L	0.01
Gross Beta			<12	pCi/L		2.7E-06	N/A		
Th-228			<0.6	pCi/L		1.3E-07	2,000	pCi/L	
Th-230			3.6	pCi/L		1.6E-06	1,000	pCi/L	
Th-232			<0.6	pCi/L		1.3E-07	300	pCi/L	
Uranium (KPA)			5	pCi/L		2.3E-06	3,000	pCi/L	
Ra-226[d]			<2	pCi/L		4.2E-07	10	pCi/L	
Ra-228[c,e]			<0.6	pCi/L		0.0E+00	30	pCi/L	
Total Suspended Solids			20	mg/L		-	-	-	

Total Activity Discharged in 3rd Quarter of CY 2011 (Ci)		**Total Activity Discharged through 09/30/11 (Ci)**	
Th-228	3.6E-07	**Th-228**	9.4E-07
Th-230	2.7E-06	**Th-230**	6.7E-06
Th-232	2.6E-07	**Th-232**	8.0E-07
Uranium (KPA)	1.3E-05	**Uranium (KPA)**	3.5E-05
Ra-226	1.1E-06	**Ra-226**	5.7E-06
Ra-228[b]	2.3E-07	**Ra-228[b]**	8.0E-07

Total Volume Discharged in 3rd Quarter of CY 2011 (gallons)		**Total Volume Discharged through 09/30/11 (gallons)**	
Gallons	441,705	**Gallons**	1,027,851

NOTES:

[a] Non detect sample results are converted to half the detection limit.

[b] The weighted average was used to calculate the total activity.

[c] Ra-228 assumed to be in equilibrium with Th-228.

[d] 10 *CRF* 20 limit is 600 pCi/L for Ra-226.

[e] 10 *CRF* 20 limit is 600 pCi/L for Ra-228.

mg/L--milligram(s) per kilogram

N/A--Not applicable

SOR--sum of ratios

- No data/No limit

Table C-1. Fourth Quarter Self Monitoring Report for Excavation-Water Discharge at SLDS During CY 2011

Parameter	Batch Number	Date of Discharge	Batch Results[a]	Amount Discharged (gallons)	Total Activity per Discharge[b] (Ci)	MSD Discharge Limit	SOR
Gross Alpha (raw water)	SLDS-BK487	10/17/11 - 10/19/11 (6WH)	15 pCi/L	50,366	2.9E-06	3,000 pCi/L	0.01
Gross Beta			<12 pCi/L		1.1E-06	N/A	
Th-228			0.5 pCi/L		1.0E-07	2,000 pCi/L	
Th-230			3.9 pCi/L		7.5E-07	1,000 pCi/L	
Th-232			<0.5 pCi/L		4.7E-08	300 pCi/L	
Uranium (KPA)			12 pCi/L		2.3E-06	3,000 pCi/L	
Ra-226[d]			1.5 pCi/L		2.8E-07	10 pCi/L	
Ra-228[c,e]			0.5 pCi/L		1.0E-07	30 pCi/L	
Total Suspended Solids			119 mg/L		-	- -	
Gross Alpha (raw water)	SLDS-BK488	11/07/11 - 11/22/11 (6WH)	<17 pCi/L	57,068	1.8E-06	3,000 pCi/L	0.01
Gross Beta			<24 pCi/L		2.6E-06	N/A	
Th-228			<1 pCi/L		6.5E-08	2,000 pCi/L	
Th-230			3.3 pCi/L		7.0E-07	1,000 pCi/L	
Th-232			<0.4 pCi/L		4.6E-08	300 pCi/L	
Uranium (KPA)			12 pCi/L		2.6E-06	3,000 pCi/L	
Ra-226[d]			<2 pCi/L		2.2E-07	10 pCi/L	
Ra-228[c,e]			<1 pCi/L		6.5E-08	30 pCi/L	
Total Suspended Solids			189 mg/L		-	- -	
Gross Alpha (raw water)	SLDS-BK489	11/30/11 (City Property)	385 pCi/L	4,000	5.8E-06	3,000 pCi/L	0.40
Gross Beta			74 pCi/L		1.1E-06	N/A	
Th-228			0.6 pCi/L		9.5E-09	2,000 pCi/L	
Th-230			380.4 pCi/L		5.8E-06	1,000 pCi/L	
Th-232			0.6 pCi/L		9.2E-09	300 pCi/L	
Uranium (KPA)			8 pCi/L		1.2E-07	3,000 pCi/L	
Ra-226[d]			10.0 pCi/L		1.5E-07	10 pCi/L	
Ra-228[c,e]			0.6 pCi/L		9.5E-09	30 pCi/L	
Total Suspended Solids			141 mg/L		-	- -	
Gross Alpha (raw water)	SLDS-BK490	12/01/11 - 12/29/11 (City Property)	46 pCi/L	64,900	1.1E-05	3,000 pCi/L	0.06
Gross Beta			<12 pCi/L		1.5E-06	N/A	
Th-228			<1 pCi/L		9.8E-08	2,000 pCi/L	
Th-230			51.0 pCi/L		1.3E-05	1,000 pCi/L	
Th-232			<0.5 pCi/L		5.8E-08	300 pCi/L	
Uranium (KPA)			5 pCi/L		1.2E-06	3,000 pCi/L	
Ra-226[d]			<3 pCi/L		3.3E-07	10 pCi/L	
Ra-228[c,e]			<1 pCi/L		9.8E-08	30 pCi/L	
Total Suspended Solids			91 mg/L		-	- -	
Gross Alpha (raw water)	SLDS-BK491	12/08/11 - 12/29/11 (6WH)	<11 pCi/L	81,952	1.6E-06	3,000 pCi/L	0.01
Gross Beta			<12 pCi/L		1.9E-06	N/A	
Th-228			<1 pCi/L		8.5E-08	2,000 pCi/L	
Th-230			2.0 pCi/L		6.2E-07	1,000 pCi/L	
Th-232			<0.4 pCi/L		5.6E-08	300 pCi/L	
Uranium (KPA)			12 pCi/L		3.7E-06	3,000 pCi/L	
Ra-226[d]			<2 pCi/L		2.8E-07	10 pCi/L	
Ra-228[c,e]			<1 pCi/L		8.5E-08	30 pCi/L	
Total Suspended Solids			67 mg/L		-	- -	

Total Activity Discharged in 4th Quarter of CY 2011 (Ci)	
Th-228	3.6E-07
Th-230	2.0E-05
Th-232	2.2E-07
Uranium (KPA)	1.0E-05
Ra-226	1.3E-06
Ra-228[b]	3.6E-07

Total Activity Discharged through 12/31/11 (Ci)	
Th-228	1.3E-06
Th-230	2.7E-05
Th-232	1.0E-06
Uranium (KPA)	4.5E-05
Ra-226	6.9E-06
Ra-228[b]	1.2E-06

Total Volume Discharged in 4th Quarter of CY 2011 (gallons)	
Gallons	258,286

Total Volume Discharged through 12/31/11 (gallons)	
Gallons	1,286,137

NOTES:

[a] Non detect sample results are converted to half the detection limit.

[b] The weighted average was used to calculate the total activity.

[c] Ra-228 assumed to be in equilibrium with Th-228.

[d] 10 *CRF* 20 limit is 600 pCi/L for Ra-226.

[e] 10 *CRF* 20 limit is 600 pCi/L for Ra-228.

mg/L--milligram(s) per kilogram

N/A--Not applicable

SOR--sum of ratios

- No data/No limit

APPENDIX D

GROUND-WATER FIELD PARAMETER DATA FOR CY 2011, ANALYTICAL DATA RESULTS FOR CY 2011
(On CD-ROM at the end of this document)

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Table D-1. Ground-Water Monitoring
First Quarter 2011 - Field Parameters for SLDS

Site	Station ID	Date Sampled	Purge Rate (mL/min)	mL Removed (mL)	pH	Conductivity (uS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 03/23/11
SLDS	B16W06D	---	---	---	---	---	---	---	---	---	---	23.2
SLDS	B16W06S	---	---	---	---	---	---	---	---	---	---	23.81
SLDS	B16W07D	03/23/11	250	4,500	6.74	0.298	54.7	0.38	17.4	-158	25.56	25.46
SLDS	B16W08D	---	---	---	---	---	---	---	---	---	---	25.67
SLDS	B16W08S	---	---	---	---	---	---	---	---	---	---	21.68
SLDS	B16W09D	---	---	---	---	---	---	---	---	---	---	21.22
SLDS	B16W12S	---	---	---	---	---	---	---	---	---	---	16.21
SLDS	DW14	---	---	---	---	---	---	---	---	---	---	16.39
SLDS	DW15	---	---	---	---	---	---	---	---	---	---	26.84
SLDS	DW16	---	---	---	---	---	---	---	---	---	---	22.39
SLDS	DW17	---	---	---	---	---	---	---	---	---	---	21.1
SLDS	DW18	---	---	---	---	---	---	---	---	---	---	27.01
SLDS	DW19	03/23/11	250	4,500	6.66	0.192	73.9	0.5	19.2	-143	23.24	23.24
SLDS	DW21	03/23/11	50	600	6.76	0.195	52.1	1.48	15.8	-154	10.4	10.06
SLDS	DW22R	---	---	---	---	---	---	---	---	---	---	24.24

--- monitoring well was not sampled during this event.

BTOC--below top of casing

°C--Celsius

mg/L--milligram(s) per Liter

mL--milliliter(s)

mL/min--milliliter(s) per minute

mV--millivolt(s)

NTU--nephelometric turbidity unit

uS/cm--microSiemen(s) per centimeter

Table D-1. Ground-Water Monitoring
Second Quarter 2011 - Field Parameters for SLDS

Site	Station ID	Date Sampled	Purge Rate (mL/min)	mL Removed (mL)	pH	Conductivity (uS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 06/06/11
SLDS	B16W06D	---	---	---	---	---	---	---	---	---	---	10.1
SLDS	B16W06S	---	---	---	---	---	---	---	---	---	---	14.34
SLDS	B16W07D	---	---	---	---	---	---	---	---	---	---	12.4
SLDS	B16W08D	---	---	---	---	---	---	---	---	---	---	12.45
SLDS	B16W08S	---	---	---	---	---	---	---	---	---	---	12.33
SLDS	B16W09D	---	---	---	---	---	---	---	---	---	---	8.8
SLDS	B16W12S	---	---	---	---	---	---	---	---	---	---	12.89
SLDS	DW14	---	---	---	---	---	---	---	---	---	---	5.48
SLDS	DW15	---	---	---	---	---	---	---	---	---	---	14.17
SLDS	DW16	06/06/11	250	4,500	6.51	0.153	333	0.43	18.9	-48	9.52	9.52
SLDS	DW17	---	---	---	---	---	---	---	---	---	---	7.87
SLDS	DW18	06/06/11	250	3,750	6.67	0.177	200	0.5	18.7	-172	14.35	14.35
SLDS	DW19	---	---	---	---	---	---	---	---	---	---	10.56
SLDS	DW21	---	---	---	---	---	---	---	---	---	---	8.33
SLDS	DW22R	---	---	---	---	---	---	---	---	---	---	11.75

--- monitoring well was not sampled during this event.

BTOC--below top of casing

°C--Celsius

mg/L--milligram(s) per Liter

mL--milliliter(s)

mL/min--milliliter(s) per minute

mV--millivolt(s)

NTU--nephelometric turbidity unit

uS/cm--microSiemen(s) per centimeter

Table D-1. Ground-Water Monitoring
Third Quarter 2011 - Field Parameters for SLDS

Site	Station ID	Date Sampled	Purge Rate (mL/min)	mL Removed (mL)	pH	Conductivity (uS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 08/25/11
SLDS	B16W06D	---	---	---	---	---	---	---	---	---	---	22.26
SLDS	B16W06S	---	---	---	---	---	---	---	---	---	---	23.72
SLDS	B16W07D	---	---	---	---	---	---	---	---	---	---	24.61
SLDS	B16W08D	---	---	---	---	---	---	---	---	---	---	24.75
SLDS	B16W08S	---	---	---	---	---	---	---	---	---	---	21.72
SLDS	B16W09D	---	---	---	---	---	---	---	---	---	---	20.54
SLDS	B16W12S	---	---	---	---	---	---	---	---	---	---	13.65
SLDS	DW14	---	---	---	---	---	---	---	---	---	---	14.52
SLDS	DW15	---	---	---	---	---	---	---	---	---	---	26.12
SLDS	DW16	---	---	---	---	---	---	---	---	---	---	21.62
SLDS	DW17	---	---	---	---	---	---	---	---	---	---	---
SLDS	DW18	---	---	---	---	---	---	---	---	---	---	26.16
SLDS	DW19	---	---	---	---	---	---	---	---	---	---	22.5
SLDS	DW21	---	---	---	---	---	---	---	---	---	---	8.72
SLDS	DW22R	---	---	---	---	---	---	---	---	---	---	23.64

--- monitoring well was not sampled during this event.

BTOC--below top of casing

°C--Celsius

mg/L--milligram(s) per Liter

mL--milliliter(s)

mL/min--milliliter(s) per minute

mV--millivolt(s)

NTU--nephelometric turbidity unit

uS/cm--microSiemen(s) per centimeter

Table D-1. Ground-Water Monitoring
Fourth Quarter 2011 - Field Parameters for SLDS

Site	Station ID	Date Sampled	Purge Rate (mL/min)	mL Removed (mL)	pH	Conductivity (uS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 11/17/11
SLDS	B16W06D	---	---	---	---	---	---	---	---	---	---	35.53
SLDS	B16W06S	11/21/11	100	2,400	6.59	0.191	71.6	0.66	15.4	-180	36.23	35.32
SLDS	B16W07D	---	---	---	---	---	---	---	---	---	---	37.83
SLDS	B16W08D	11/17/11	280	4,200	6.53	0.178	47.3	1.08	15.2	-158	38.04	38.04
SLDS	B16W08S	---	---	---	---	---	---	---	---	---	---	32.95
SLDS	B16W09D	11/21/11	290	5,220	6.57	0.216	15.2	0.61	17.8	-169	34.72	34.72
SLDS	B16W12S	---	---	---	---	---	---	---	---	---	---	17.61
SLDS	DW14	11/18/11	150	2,250	6.64	0.551	17.1	0.58	18.1	-174	28.45	28.03
SLDS	DW15	---	---	---	---	---	---	---	---	---	---	39.29
SLDS	DW16	---	---	---	---	---	---	---	---	---	---	30.5
SLDS	DW17	---	---	---	---	---	---	---	---	---	---	33.48
SLDS	DW18	11/18/11	300	3,600	6.73	0.174	30.2	2.04	15.6	-165	39.54	39.29
SLDS	DW19	11/17/11	290	5,220	6.56	0.195	81.2	0.47	18.4	-156	35.59	35.59
SLDS	DW21	11/18/11	53	636	6.65	0.181	28.5	1.44	15.3	-175	12.15	11.48
SLDS	DW22R	---	---	---	---	---	---	---	---	---	---	36.49

--- monitoring well was not sampled during this event.

BTOC--below top of casing

°C--Celsius

mg/L--milligram(s) per Liter

mL--milliliter(s)

mL/min--milliliter(s) per minute

mV--millivolt(s)

NTU--nephelometric turbidity unit

uS/cm--microSiemen(s) per centimeter

Table D-2. CY 2011 Ground-Water Sampling Data for the SLDS - Unfiltered

Site: SLDS										
Sample Name	**Station Name**	**Sample Collect Date**	**Analytical Method**	**Analyte**	**Analytical Result**	**Measurement Error**	**Detection Limit**	**Units**	**Validation Qualifier**	**Validation Reason Code(s)**
SLD139797	B16W06S	11/21/11	SW846 6010B	Arsenic	146		2.7	ug/L	=	
SLD139797	B16W06S	11/21/11	SW846 6010B	Cadmium	0.91		0.91	ug/L	U	
SLD135299	B16W07D	03/23/11	SW846 6010B	Arsenic	23.1		2.7	ug/L	=	
SLD135299	B16W07D	03/23/11	SW846 6010B	Cadmium	1.3		0.91	ug/L	=	
SLD139801	B16W08D	11/17/11	SW846 6010B	Arsenic	25.5		2.7	ug/L	=	
SLD139801	B16W08D	11/17/11	SW846 6010B	Cadmium	0.91		0.91	ug/L	U	
SLD139801	B16W08D	11/17/11	ML-006	Radium-226	1.13	1.03	1.23	pCi/L	U	T04, T05
SLD139801	B16W08D	11/17/11	ML-005	Thorium-228	0.343	0.4	0.31	pCi/L	J	T02
SLD139801	B16W08D	11/17/11	ML-005	Thorium-230	0.4	0.477	0.686	pCi/L	UJ	T06
SLD139801	B16W08D	11/17/11	ML-005	Thorium-232	0.0571	0.256	0.685	pCi/L	UJ	T06
SLD139801	B16W08D	11/17/11	ML-015	Uranium-234	0.127	0.182	0.173	pCi/L	UJ	T06
SLD139801	B16W08D	11/17/11	ML-015	Uranium-235	0	0	0.213	pCi/L	U	
SLD139801	B16W08D	11/17/11	ML-015	Uranium-238	0.254	0.257	0.172	pCi/L	J	F01, T02
SLD139801-1	B16W08D	11/17/11	SW846 6010B	Arsenic	26.7		2.7	ug/L	=	
SLD139801-1	B16W08D	11/17/11	SW846 6010B	Cadmium	0.91		0.91	ug/L	U	
SLD139801-1	B16W08D	11/17/11	ML-006	Radium-226	1.93	1.49	1.77	pCi/L	J	F01, T04
SLD139801-1	B16W08D	11/17/11	ML-005	Thorium-228	0.252	0.254	0.17	pCi/L	J	T02
SLD139801-1	B16W08D	11/17/11	ML-005	Thorium-230	0.157	0.228	0.378	pCi/L	UJ	T06
SLD139801-1	B16W08D	11/17/11	ML-005	Thorium-232	0.126	0.179	0.17	pCi/L	UJ	T06
SLD139801-1	B16W08D	11/17/11	ML-015	Uranium-234	0.134	0.251	0.492	pCi/L	UJ	T06
SLD139801-1	B16W08D	11/17/11	ML-015	Uranium-235	0	0	0.224	pCi/L	U	
SLD139801-1	B16W08D	11/17/11	ML-015	Uranium-238	0.1	0.201	0.4	pCi/L	UJ	T06
SLD139801-2	B16W08D	11/17/11	SW846 6020	Arsenic	25		0.61	ug/L	=	
SLD139801-2	B16W08D	11/17/11	SW846 6020	Cadmium	1.3		0.27	ug/L	=	
SLD139801-2	B16W08D	11/17/11	SW846 9315 MODL	Radium-226	0.4	0.16	0.17	pCi/L	=	
SLD139801-2	B16W08D	11/17/11	SW846 9320 MODL	Radium-228	0.95	0.31	0.38	pCi/L	=	
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Thorium-228	0.05	0.12	0.23	pCi/L	UJ	T06
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Thorium-230	0.12	0.12	0.12	pCi/L	=	
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Thorium-232	0.014	0.054	0.13	pCi/L	UJ	T06
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Uranium-234	0.16	0.13	0.15	pCi/L	J	T04
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Uranium-235	0.077	0.099	0.13	pCi/L	UJ	T06
SLD139801-2	B16W08D	11/17/11	EML A-01-R MOD	Uranium-238	0.18	0.13	0.11	pCi/L	J	T04
SLD139799	B16W09D	11/21/11	SW846 6010B	Arsenic	7.1		2.7	ug/L	=	
SLD139799	B16W09D	11/21/11	SW846 6010B	Cadmium	1.1		0.91	ug/L	=	
SLD139799	B16W09D	11/21/11	ML-006	Radium-226	2.86	1.67	1.37	pCi/L	J	F01, T04
SLD139799	B16W09D	11/21/11	ML-005	Thorium-228	0.214	0.305	0.526	pCi/L	UJ	T06
SLD139799	B16W09D	11/21/11	ML-005	Thorium-230	0.572	0.414	0.194	pCi/L	J	F01, T04
SLD139799	B16W09D	11/21/11	ML-005	Thorium-232	0.0714	0.143	0.193	pCi/L	UJ	T06
SLD139799	B16W09D	11/21/11	ML-015	Uranium-234	0	0	0.236	pCi/L	U	
SLD139799	B16W09D	11/21/11	ML-015	Uranium-235	-0.0538	0.108	0.646	pCi/L	UJ	T06
SLD139799	B16W09D	11/21/11	ML-015	Uranium-238	0.0869	0.175	0.235	pCi/L	UJ	T06
SLD139800	DW14	11/18/11	SW846 6010B	Arsenic	124		2.7	ug/L	=	
SLD139800	DW14	11/18/11	SW846 6010B	Cadmium	1.4		0.91	ug/L	=	
SLD139800	DW14	11/18/11	ML-006	Radium-226	3.25	1.83	1.45	pCi/L	J	F01, T04
SLD139800	DW14	11/18/11	ML-005	Thorium-228	1.06	0.579	0.541	pCi/L	J	T04
SLD139800	DW14	11/18/11	ML-005	Thorium-230	0.644	0.419	0.175	pCi/L	J	F01, T04
SLD139800	DW14	11/18/11	ML-005	Thorium-232	0.193	0.225	0.174	pCi/L	J	T02
SLD139800	DW14	11/18/11	ML-015	Uranium-234	0.405	0.37	0.219	pCi/L	J	T04

Table D-2. CY 2011 Ground-Water Sampling Data for the SLDS - Unfiltered

Site: SLDS										
Sample Name	**Station Name**	**Sample Collect Date**	**Analytical Method**	**Analyte**	**Analytical Result**	**Measurement Error**	**Detection Limit**	**Units**	**Validation Qualifier**	**Validation Reason Code(s)**
SLD139800	DW14	11/18/11	ML-015	Uranium-235	0	0	0.271	pCi/L	U	
SLD139800	DW14	11/18/11	ML-015	Uranium-238	0.201	0.293	0.483	pCi/L	UJ	T06
SLD137277	DW16	06/06/11	ML-006	Radium-226	0.889	0.891	0.602	pCi/L	J	T02
SLD137277	DW16	06/06/11	ML-005	Thorium-228	0.325	0.27	0.147	pCi/L	J	T04
SLD137277	DW16	06/06/11	ML-005	Thorium-230	0.597	0.394	0.4	pCi/L	J	T04
SLD137277	DW16	06/06/11	ML-005	Thorium-232	-0.0271	0.0543	0.325	pCi/L	UJ	T06
SLD137277	DW16	06/06/11	ML-015	Uranium-234	1.08	0.527	0.155	pCi/L	=	
SLD137277	DW16	06/06/11	ML-015	Uranium-235	0.0704	0.141	0.191	pCi/L	UJ	T06
SLD137277	DW16	06/06/11	ML-015	Uranium-238	0.426	0.334	0.341	pCi/L	J	T04
SLD137278	DW18	06/06/11	ML-006	Radium-226	0.85	0.997	1.56	pCi/L	UJ	T06
SLD137278	DW18	06/06/11	ML-005	Thorium-228	0.184	0.214	0.166	pCi/L	J	T02
SLD137278	DW18	06/06/11	ML-005	Thorium-230	0.491	0.355	0.166	pCi/L	J	T04
SLD137278	DW18	06/06/11	ML-005	Thorium-232	0	0	0.166	pCi/L	U	
SLD137278	DW18	06/06/11	ML-015	Uranium-234	0.19	0.271	0.467	pCi/L	UJ	T06
SLD137278	DW18	06/06/11	ML-015	Uranium-235	0.0391	0.175	0.469	pCi/L	UJ	T06
SLD137278	DW18	06/06/11	ML-015	Uranium-238	0.126	0.18	0.171	pCi/L	UJ	T06
SLD139798	DW18	11/18/11	SW846 6010B	Arsenic	74		2.7	ug/L	=	
SLD139798	DW18	11/18/11	SW846 6010B	Cadmium	0.91		0.91	ug/L	U	
SLD139798	DW18	11/18/11	ML-006	Radium-226	1.57	1.31	1.76	pCi/L	U	T04, T05
SLD139798	DW18	11/18/11	ML-005	Thorium-228	0.0942	0.244	0.528	pCi/L	UJ	T06
SLD139798	DW18	11/18/11	ML-005	Thorium-230	0.252	0.254	0.171	pCi/L	J	F01, T02
SLD139798	DW18	11/18/11	ML-005	Thorium-232	0	0	0.17	pCi/L	U	
SLD139798	DW18	11/18/11	ML-015	Uranium-234	0.389	0.324	0.176	pCi/L	J	T04
SLD139798	DW18	11/18/11	ML-015	Uranium-235	-0.04	0.0802	0.479	pCi/L	UJ	T06
SLD139798	DW18	11/18/11	ML-015	Uranium-238	0.484	0.38	0.387	pCi/L	J	F01, T04
SLD135300	DW19	03/23/11	SW846 6010B	Arsenic	17.1		2.7	ug/L	=	
SLD135300	DW19	03/23/11	SW846 6010B	Cadmium	4.3		0.91	ug/L	=	
SLD139802	DW19	11/17/11	ML-006	Radium-226	1.36	1.24	1.76	pCi/L	U	T04, T05
SLD139802	DW19	11/17/11	ML-005	Thorium-228	0.612	0.45	0.5	pCi/L	J	T04
SLD139802	DW19	11/17/11	ML-005	Thorium-230	0.306	0.315	0.408	pCi/L	UJ	T06
SLD139802	DW19	11/17/11	ML-005	Thorium-232	0	0	0.184	pCi/L	U	
SLD139802	DW19	11/17/11	ML-015	Uranium-234	43.6	8.09	0.175	pCi/L	=	
SLD139802	DW19	11/17/11	ML-015	Uranium-235	1.52	0.741	0.216	pCi/L	=	
SLD139802	DW19	11/17/11	ML-015	Uranium-238	39.4	7.37	0.175	pCi/L	=	
SLD135301	DW21	03/23/11	SW846 6010B	Arsenic	104		2.7	ug/L	=	
SLD135301	DW21	03/23/11	SW846 6010B	Cadmium	5.3		0.91	ug/L	=	
SLD139803	DW21	11/18/11	ML-006	Radium-226	0.199	1.05	2.39	pCi/L	UJ	T06
SLD139803	DW21	11/18/11	ML-005	Thorium-228	0.685	0.469	0.206	pCi/L	J	T04
SLD139803	DW21	11/18/11	ML-005	Thorium-230	0.572	0.447	0.457	pCi/L	J	F01, T04
SLD139803	DW21	11/18/11	ML-005	Thorium-232	-0.0761	0.108	0.56	pCi/L	UJ	T06
SLD139803	DW21	11/18/11	ML-015	Uranium-234	0.0908	0.182	0.246	pCi/L	UJ	T06
SLD139803	DW21	11/18/11	ML-015	Uranium-235	0	0	0.303	pCi/L	U	
SLD139803	DW21	11/18/11	ML-015	Uranium-238	8.37E-06	0.221	0.665	pCi/L	UJ	T06

µg/L--microgram(s) per Liter

APPENDIX E

DOSE ASSESSMENT ASSUMPTIONS

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DOSE ASSESSMENT ASSUMPTIONS

A. Dose from the SLDS to a Maximally Exposed Individual

An off-site, worker-based receptor is the most realistic choice to represent the hypothetical maximally exposed individual because of the proximity of the receptor, approximately 50 meters southeast of the Mallinckrodt fence line (DT-10), and because of the time the individual will spend at this location. Thus, a realistic assessment of dose can be performed using conservative assumptions of occupancy rate and distance from the source.

The following dose assessment is for a maximally exposed individual who works full-time (2,000 hours per year) at a location approximately 50 meters southeast of the external gamma and radon monitoring location and 75 to 340 meters from the SLDS excavation areas.

1. Airborne Radioactive Particulates

An EDE of 0.2 mrem/yr to the receptor was calculated by using activity fractions to determine a source term, and then combining the dose results for DT-2, DT-12, Plant 7, and Plant 6 Loadout. The USEPA CAP88-PC modeling code was used to calculate dose to the receptor at 75 to 340 meters from the SLDS excavation areas (SAIC 2012). Figure A-1 of Appendix A presents the distances and directions of the maximally exposed receptor from the excavated areas. Details related to calculation of EDE for the maximally exposed receptor are presented in Appendix A.

2. External Gamma Pathway

Because station DA-2 was the closest TLD to the receptor, the TLD results from this location were used for the dose calculations. The station DA-2 TLD measured an annual exposure, above background, of 6 mrem/yr, based on 8,760 hours of continuous detector exposure. The EDE due to gamma exposure for the maximally exposed individual is estimated by assuming that the site approximates a line source with a source strength (H_1) that is the average of the TLD measurements between the source and the receptor (Cember 1996).

$$H_1 = \frac{(6)\,\text{mrem/yr}}{1} = 6\ \text{mrem/yr}$$

Based on 100 percent occupancy rate, the exposure rate (H_2) to the receptor was calculated as follows:

$$H_2 = H_1 \times \frac{h_1}{h_2} \times \frac{\tan^{-1}(L/h_2)}{\tan^{-1}(L/h_1)}$$

$$H_2 = 0.2\ \text{mrem/yr}$$

where:

- H_2 = exposure rate to the receptor
- H_1 = exposure rate to the TLDs
- h_2 = distance from the source to the receptor = 50 meters
- h_1 = distance from the source to the TLDs = 1.6 meters
- L = average distance from centerline of the line source (H_1) to the end of the line source = 150 meters

The actual dose to the maximally exposed individual who is only present during a normal work year is calculated as follows:

$$H_{MEI} = H_2 \times \frac{2{,}000 \text{ hours/work year}}{8{,}760 \text{ hours/total year}}$$

$$H_{MEI} = <0.1 \text{ mrem/yr}$$

3. Airborne Radon Pathway

For the SLDS, evaluation of environmental radon results indicated that the annual exposure at station DA-2 was 0.0 pCi/L above the annual average background. Therefore, EDE to the receptor due to exposure from radon (and progeny) was 0.0 mrem/yr.

4. Total Effective Dose Equivalent

TEDE = CEDE (airborne particulates) + H_{MEI} (external gamma) + S_{MEI} (airborne radon)

TEDE = 0.2 mrem/yr + <0.1 mrem/yr + 0.0 mrem/yr = 0.2 mrem/yr

where:

CEDE = committed effective dose equivalent

REFERENCES

Cember, H., 1996. *Introduction to Health Physics*, Mcgraw-Hill, New York, NY.

SAIC 2012. *Total Effective Dose Equivalent (TEDE) to the Hypothetically Maximally Exposed Individual at SLDS*, February.

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