REVISION 0

ST. LOUIS DOWNTOWN SITE ANNUAL ENVIRONMENTAL MONITORING DATA AND ANALYSIS REPORT FOR CALENDAR YEAR 2016

ST. LOUIS, MISSOURI

JULY 21, 2017

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

with assistance from:
Leidos, Inc.
under Contract No. W912P9-12-D-0506, Delivery Order 0005

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ACRONYMS AND ABBREVIATIONS

AEC	U.S. Atomic Energy Commission
amsl	above mean sea level
ARAR	applicable or relevant and appropriate requirement
ATD	alpha track detector
BTOC	below top of casing
CEDE	committed effective dose equivalent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	*Code of Federal Regulations*
COC	contaminant of concern
CY	calendar year
DL	detection limit
DO	dissolved oxygen
DOD	U.S. Department of Defense
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*
EMICY16	*Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2016*
EMP	Environmental Monitoring Program
ER	Engineer Regulation
FUSRAP	Formerly Utilized Sites Remedial Action Program
Futura	Futura Coatings Company
GRAAA	ground-water remedial action alternative assessment
HISS	Hazelwood Interim Storage Site
HU	hydrostratigraphic unit
ICP	inductively coupled plasma
IL	investigative limit
K	potassium
KPA	kinetic phosphorescence analysis
Mallinckrodt	Mallinckrodt LLC
MARSSIM	*Multi-Agency Radiation Survey and Site Investigation Manual*
MDNR	Missouri Department of Natural Resources
MDC	minimum detectable concentration
MDL	method detection limit
MED	Manhattan Engineer District
MSD	Metropolitan St. Louis Sewer District
NAD	normalized absolute difference
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NRC	U.S. Nuclear Regulatory Commission
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
PDI	pre-design investigation
QA	quality assurance
QAPP	quality assurance program plan

ACRONYMS AND ABBREVIATIONS (Continued)

QC	quality control
QSM	*Department of Defense (DoD)/Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories*
Ra	radium
RA	remedial action
RL	reporting limit
RME	reasonably maximally exposed
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*
SLAPS	St. Louis Airport Site
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
TSS	total suspended solid(s)
U	uranium
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VP	vicinity property
VQ	validation qualifier
WL	working level
WRS	Wilcoxon Rank Sum

UNIT ABBREVIATIONS

Both English and metric units are used in this report. The units used in a specific situation are based on common unit usage or regulatory language (e.g., depths are given in feet, and areas are given in square meters). Units included in the following list are not defined at first use in this report.

°C	degree(s) Celsius (centigrade)
µCi/mL	microcurie(s) per milliliter
µg/L	microgram(s) per liter
µS/cm	microSiemen(s) per centimeter
Ci	curie(s)
ft	foot/feet
m	meter(s)
mg/L	milligram(s) per liter
mL	milliliter(s)
mrem	millirem
mV	millivolt(s)
pCi/L	picocuries per liter
yd^3	cubic yard(s)

EXECUTIVE SUMMARY

This annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2016 applies to the St. Louis Downtown Site (SLDS), which is within the St. Louis Sites (SLS) (Figure 1-1) and under the scope of the Formerly Utilized Sites Remedial Action Program (FUSRAP). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the SLDS. The SLDS consists of the Mallinckrodt LLC (Mallinckrodt) plant and surrounding vicinity properties (VPs) (Figure 1-2). Environmental monitoring of various media at the SLDS is required in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the commitments in the *Record of Decision for the St. Louis Downtown Site* (ROD) (USACE 1998a).

The purpose of this EMDAR is:

1) to document the environmental monitoring activities, and
2) to assess whether remedial actions (RAs) had a measurable environmental impact by:
    a) reporting the current condition of the SLDS,
    b) summarizing the data collection effort for CY 2016, 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 and 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 2016* (EMICY16) (USACE 2016) was conducted as planned during CY 2016. Evaluation of the environmental monitoring data for all SLDS properties demonstrates compliance with applicable or relevant and appropriate requirements (ARARs).

RADIOLOGICAL AIR MONITORING

Radiological air data were collected and evaluated at the SLDS through airborne radioactive particulate, radon (indoor and outdoor), and gamma radiation monitoring, as required in the EMICY16. In addition, for environmental monitoring purposes, radiological air data were 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 less than 0.1 mrem per year. The results of the radiological air monitoring conducted at the SLDS demonstrate compliance with ARARs for the SLDS.

EXCAVATION-WATER DISCHARGE MONITORING AT THE ST. LOUIS DOWNTOWN SITE

CY 2016 was the 18th year 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; May 10, 2010; May 24, 2012; June 23, 2014, and July 18, 2016 (MSD 2006, 2008, 2010, 2012, 2014, 2016). This authorization expires July 23, 2018 (MSD 2016). During CY 2016, no exceedances of the MSD limits occurred at the SLDS.

GROUND-WATER MONITORING

Ground water was sampled during CY 2016 at the SLDS following a protocol for individual wells and analytes. Samples were 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 EMICY16. 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) 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 of Subpart A). The ground-water criteria are presented in Table 2-6 of the EMICY16 and in Section 4.0 of this EMDAR. For those stations where an analyte exceeded the ground-water criteria at least once during CY 2016 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 2016, two hydrostratigraphic unit (HU)-A monitoring wells (B16W06S and DW21) were sampled (Figure 4-3). B16W06S was sampled for arsenic and cadmium during the second and fourth quarters. DW21 was sampled for arsenic and cadmium in the first, second, and third quarters, and for radionuclides (Ra-226, Ra-228, thorium [Th]-228, Th-230, Th-232, uranium [U]-234, U-235, and U-238) in the second quarter. 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 (Section 4.2.3), there is a downward trend in arsenic concentrations in B16W06S and DW21. Because the majority of their historical results were near or below their detection limits (DLs), a trend analysis was not performed for cadmium in B16W06S and DW21 or for U-234 and total U in DW21. The remaining SLDS contaminants of concern (COCs) (Ra-228, Th-228, Th-232, U-235, and U-238) were not detected in HU-A ground water during CY 2016.

During CY 2016, six SLDS wells completed in the Mississippi Alluvial Aquifer (HU-B) were sampled. Mann-Kendall Trend Tests were conducted for COCs that exceeded the ILs in HU-B wells during CY 2016: arsenic in DW14, DW16, and DW18, and cadmium in DW15. The results of the Mann-Kendall Trend Tests for arsenic indicate a statistically significant downward trend in DW14 and a statistically significant upward trend in DW16 and DW18. The Mann-Kendall Trend Test results also indicate a statistically significant upward trend for cadmium in DW15. Additionally, two HU-B ground-water monitoring wells, DW19 and DW22R, were decommissioned in CY 2016.

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. 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). In HU-B, ground-water flow and direction are strongly influenced by river stage, which indicates a hydraulic connection to the Mississippi River. The flow direction at the site is generally northeast 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) 2016 applies to the St. Louis Downtown Site (SLDS) which is within the St. Louis Sites (SLS) (Figure 1-1) and under the scope of the Formerly Utilized Sites Remedial Action Program (FUSRAP). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the SLDS. The SLDS consists of the Mallinckrodt LLC (Mallinckrodt) plant and surrounding vicinity properties (VPs) (Figure 1-2). Environmental monitoring of various media at the SLDS is required in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the commitments in the *Record of Decision for the St. Louis Downtown Site* (ROD) (USACE 1998a).

1.2 PURPOSE

The purpose of this EMDAR is to document the environmental monitoring activities and to assess whether remedial actions (RAs) at the SLDS had a measurable environmental impact. In addition, this EMDAR serves to enhance the reader's awareness of the current condition of the SLDS, summarize the data collection efforts for CY 2016, and provide analysis of the CY 2016 environmental monitoring data results. This EMDAR presents the following information:

- Sample collection data for various media at the SLDS and interpretation of CY 2016 EMP results;
- The compliance status of the SLDS with federal and state applicable or relevant and appropriate requirements (ARARs) or other benchmarks (e.g., *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for CY 2016* [EMICY16] [USACE 2016]);
- Dose assessments for radiological contaminants as appropriate at the SLDS;
- A summary of trends based on changes in contaminant concentrations to support RAs, ensure public safety, and maintain surveillance monitoring requirements at the SLDS; and
- The identification of data gaps and future EMP needs.

1.3 ST. LOUIS SITE PROGRAM AND SITE BACKGROUND

The 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. The 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: refinement of uranium 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 portions of the SLDS under contract to the MED/AEC between the early 1940s and the 1950s.

A detailed description and history of the SLDS can be found in the *Remedial Investigation Report for the St. Louis Site* (U.S. Department of Energy [DOE] 1994); the *Remedial Investigation Addendum for the St. Louis Site* (DOE 1995); the ROD (USACE 1998a); and the *Environmental Monitoring Guide for the St. Louis Sites* (EMG) (USACE 1999a).

During CY 2016, the following USACE SLDS documents were finalized:

- *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2016, St. Louis, Missouri* (January 29);
- *Post-Remedial Action Report and Final Status Survey Evaluation for the Accessible Soils Within the St. Louis Downtown Site Kiesel Riverfront Property, St. Louis, Missouri* (March 2);
- *CY 2015 Fourth Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories, St. Louis, Missouri* (March);
- *CY 2016 First Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories, St. Louis, Missouri* (May);
- *St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for CY 2015, St. Louis, Missouri* (June 21);
- *CY 2016 Second Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories, St. Louis, Missouri* (August);
- *Destrehan Street – East/Plant 7 West – North Remedial Action Work Area-Specific Description and Design Package, FUSRAP St. Louis Downtown Site, St. Louis, Missouri* (Revision 1, September 22);
- *Post-Remedial Action Report and Final Status Survey Evaluation for the Accessible Soil within the St. Louis Downtown Site Plant 6 East Property, St. Louis, Missouri* (September 26);
- *Post-Remedial Action Report and Final Status Survey Evaluation for the Accessible Soil within the St. Louis Downtown Site Plant 7 East Property, St. Louis, Missouri* (September 27);
- *CY 2016 Third Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories, St. Louis, Missouri* (November 29);
- *Remedial Action Work Plan for Selective Remediation at the St. Louis Downtown Site, FUSRAP St. Louis Downtown Site, St. Louis, Missouri* (December 6); and
- *Environmental Monitoring Implementation Plan for the North St. Louis Sites for Calendar Year 2017, St. Louis, Missouri* (December 29).

1.3.1 St. Louis Downtown Site Calendar Year 2016 Remedial Actions

During CY 2016, RAs were performed at the following SLDS properties (Figure 1-2): Plant 6 West Half (henceforth referred to as Plant 6WH) Building 101 and Destrehan Street. RAs at Plant 6WH Building 101 continued throughout the year and RAs at Plant 7 West (henceforth referred to as Plant 7W) and Destrehan Street started in the third quarter and continued through the fourth

quarter. A total of 17,851 yd^3 of contaminated material were shipped from the SLDS via railcar to US Ecology in Idaho for proper disposal.

Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (DOD 2000) Class 1 verifications were performed at Plant 6WH (survey unit [SU]-16 and SU-17) and Plant 7W (SU-5), and Destrehan Street (SU-1) during CY 2016.

No MARSSIM Class 2 or Class 3 verifications were performed during CY 2016. Verifications at the SLDS were performed to confirm that the remediation goals of the ROD were achieved. The SLDS is shown on Figure 1-2.

A characterization/pre-design investigation (PDI) was performed at Plants 1, 2, and 10, and Salisbury Street during CY 2016.

Two monitoring wells were decommissioned in CY 2016: DW19 and DW22R. DW19 was decommissioned on August 3, 2016 and DW22R was decommissioned on May 4, 2016.

In accordance with the Metropolitan St. Louis Sewer District (MSD) authorization letter for the SLDS, 4,742,100 gallons of excavation water were discharged in CY 2016. Since the beginning of the project, 25,905,348 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 monitoring conducted at the SLDS is conducted as part of the EMP. Radiological air data are 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 air monitoring conducted at the SLDS, potential sources of the contaminants to be measured (including natural background), and measurement techniques employed during CY 2016.

All radiological air monitoring required through implementation of the EMICY16 (USACE 2016) was conducted as planned during CY 2016. The evaluations of radiological air monitoring data for all SLDS properties demonstrate compliance with ARARs.

A total effective dose equivalent (TEDE) for the reasonably maximally exposed (RME) member of the public was calculated for the SLDS by summing the dose due to gamma radiation, radiological air particulates, and radon. The TEDE calculated for the RME individual at the SLDS was less than 0.1 mrem per year. 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 per year. 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 conducted at the SLS during CY 2016 are gamma radiation, airborne radioactive particulates, and airborne radon. Section 2.2 provides details of the air 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 the uranium decay series, the thorium decay series, and potassium (K)-40. Cosmic radiation originates in outer space and filters through the atmosphere to the earth. Together, these two sources comprise 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 per year, 35 mrem per year of which originates from sources on earth and 30 mrem per year 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 2016 using thermoluminescent dosimeters (TLDs). TLDs were placed at locations representative of areas accessible to the public (Figure 2-2) in order to provide input for calculation of the TEDE.

The TLDs were placed at the monitoring location approximately 5 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 soil disturbance (e.g., excavation). This airborne radioactive material includes naturally occurring background concentrations (Appendix B, Table B-1) 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., 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 2016 NESHAP report (Appendix A) presents 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 4.0 modeling code (USEPA 2014) to demonstrate compliance with the 10 mrem per year ARAR in 40 *CFR* 61, Subpart I.

CY 2016 monitoring results for the SLDS demonstrate compliance with the 10 mrem per year ARAR prescribed in 40 *CFR* 61, Subpart I. See Section 2.2.2 for further details.

2.1.3 Airborne Radon

Uranium (U)-238 is a naturally occurring radionuclide commonly found in soil and rock. Radon (Rn)-222 is a naturally occurring radioactive gas found in the uranium 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 elevation, season, time of day, or 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 (Figure 2-2). Outdoor ATDs were collected approximately every 6 months and sent to an off-site laboratory for analysis. Recorded radon concentrations are listed in 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)(2).

CY 2016 outdoor radon monitoring results for the SLDS demonstrate compliance with the 0.5 pCi/L ARAR prescribed in 40 *CFR* 192.02(b)(2). See Section 2.2.3 for further details.

At the SLDS, ATDs were also placed in locations within applicable structures (Building 26 at Plant 1 and the South Storage Building at DT-4 North) to monitor for indoor radon exposure. The ATDs were placed in areas that represent the highest likely exposure from indoor radon. ATD locations were selected with consideration given to known radium (Ra)-226 concentrations under applicable buildings and occupancy times at any one location within each building. Annual average indoor radon data in each applicable building were compared to the 40 *CFR* 192.12(b)(1) ARAR value of 0.02 working levels (WL). In accordance with 40 *CFR* 192.12(b)(1), reasonable effort shall be made to achieve, in each habitable or occupied building, an annual average (or equivalent) radon decay product concentration (including background) not to exceed 0.02 WL. In any case, the radon decay product concentration shall not exceed 0.03 WL. Background indoor radon monitors were not necessary, because the regulatory standard of 0.02 WL includes background. Indoor ATDs were also collected approximately every 6 months and sent to an off-site laboratory for analysis.

CY 2016 indoor radon monitoring results for the SLDS demonstrate compliance with the 0.02 WL ARAR prescribed by 40 *CFR* 192.12(b)(1). See Section 2.2.4 for further details.

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 2016 at four locations representative of areas accessible to the public (Figure 2-2) and at the background location (Figure 2-1) 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 2016 at the SLDS is shown in Table 2-1. TLD data are located in Appendix B, Table B-2, of this EMDAR.

Table 2-1. Summary of SLDS Gamma Radiation Data for CY 2016

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2016 Net TLD Data (mrem/year)
		(mrem/quarter)								
		Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	
SLDS Perimeter	DA-1	16.8	0	16.1	0	17.5	0	17.4	0	0
	DA-1[c]	17.4	0	18	0.5	17.7	0	17.4	0	0
	DA-2	19.1	0	20.6	0	19	0	18.9	1.7	0.5
	DA-3	18.2	0	18.8	0	18.9	0	19.2	0.2	0.2
	DA-6	20.9	1.6	19.4	0	20.8	0.6	19.7	0.8	3.0

Table 2-1. Summary of SLDS Gamma Radiation Data for CY 2016 (Continued)

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2016 Net TLD Data (mrem/year)
		(mrem/quarter)								
		Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	
Background	BA-1	19.4	---	20.1	---	20.3	---	19.0	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure above background.
[b] CY 2016 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 is not required.
Cor. – corrected
Rpt. – reported

2.2.2 Evaluation of Airborne Radioactive Particulate Data

Air sampling for radiological particulates during CY 2016 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). Air sampling for radiological particulates was not conducted at the SLDS perimeter locations during CY 2016 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. A summary of air particulate monitoring data from excavation perimeters is shown in Table 2-2. Airborne radioactive particulate data are contained in Appendix B, Table B-3, of this EMDAR.

Table 2-2. Summary of SLDS Airborne Radioactive Particulate Data for CY 2016

Monitoring Location	Average Concentration (µCi/mL)	
	Gross Alpha	Gross Beta
Plant 6	3.65E-15	2.32E-14
Plant 7	5.85E-15	3.95E-14
Plant 6 Loadout	4.04E-15	3.21E-14
Background Concentration[a] (BA-1)	3.61E-15	1.88E-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 on 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 (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 were used as an input for calculation of the TEDE to the critical receptor (Section 6.0) and compared to the 0.5 pCi/L average annual concentration above background value listed in 40 *CFR* 192.02(b)(2). The average annual radon concentration above background at the SLDS monitoring stations was 0.0 pCi/L, meeting 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 are contained in Appendix B, Table B-4, of this EMDAR.

Table 2-3. Summary of SLDS Outdoor Airborne Radon (Rn-222) Data for CY 2016

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/04/16 to 07/07/16[a] (uncorrected)	07/07/16 to 01/04/17[a] (uncorrected)	Average Annual Concentration[b]
SLDS	DA-1	0.2	0.2	0
	DA-1[c]	0.2	0.2	0
	DA-2	0.2	0.2	0
	DA-3	0.2	0.2	0
	DA-6	0.2	0.2	0
Background	BA-1	0.2	0.2	---

[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.
--- Result calculation is not required.

2.2.4 Evaluation of Indoor Airborne Radon Data

Indoor radon monitoring was performed at two SLDS buildings (Building 26 at Plant 1 and the South Storage Building at DT-4 North) using one ATD placed in each building at a height of 5 ft (to approximate breathing zone conditions) to measure radon concentrations (Figure 2-2). The ATDs were installed in January of CY 2016 at each monitoring location, collected for analysis after approximately 6 months of exposure, and replaced with another set that would represent radon exposure for the remainder of the year. Recorded radon concentrations (listed in pCi/L) were converted to radon WL, and an indoor radon equilibrium factor of 0.4 (NCRP 1988) was applied.

The results (including background) were evaluated based on the criteria contained in 40 *CFR* 192.12(b)(1). The average annual radon concentration was determined to be less than the 40 *CFR* 192.12(b)(1) criterion of 0.02 WL in each building (Leidos 2017). In addition, the concentrations at each indoor monitoring location were all less than 0.03 WL. Additional details of the data and calculation methodology used to determine indoor radon WL in SLDS buildings are contained in Table 2-4. Indoor ATD data are contained in Appendix B, Table B-4, of this EMDAR.

Table 2-4. Summary of SLDS Indoor Airborne Radon (Rn-222) Data for CY 2016

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)			WL[c]
		01/04/15 to 07/07/16[a]	07/07/16 to 01/04/17[a]	Annual Average[b]	
Plant 1 Building 26	DI-1	0.2	1.5	0.85	0.003
DT-4 North South Storage Building	DI-2	0.7	1.1	0.9	0.004

[a] Detectors were installed and removed on the dates listed. Data are as reported from the vendor.
[b] Results reported from vendor for two periods are averaged to estimate an annual average radon concentration (pCi/L).
[c] The average annual WL is calculated by dividing the average pCi/L by 100 pCi/L per WL and multiplying by 0.4. The average annual WL must be less than 0.02 (40 *CFR* 192.12(b)).

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3.0 EXCAVATION-WATER MONITORING DATA

This section provides a description of the excavation-water discharge monitoring activities conducted at the SLDS during CY 2016. Excavation water is storm water and ground water that accumulates in excavations 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. It then flows to the Bissell Point Sewage Treatment Plant under a special discharge authorization. This excavation water was collected, treated, and tested before being discharged to MSD manholes 17D4-353C, 17D3-019C, and 17D3-022C. These MSD manholes are depicted on Figure 3-1.

The purpose of excavation-water discharge monitoring 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 allowing discharges of excavation water that meets discharge-limit-based criteria (MSD 1998, 2001, 2004, 2006, 2008, 2010, 2012, 2014, 2016). 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 resulting 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 2-year extension to that authorization dated June 19, 2006 (MSD 2004, 2006). On May 22, 2008; May 10, 2010; May 24, 2012; and June 23, 2014, the MSD issued extensions to the special discharge authorization for the SLDS that remained in effect until July 23, 2010; July 23, 2012; and July 23, 2014; and July 23, 2016, respectively (MSD 2008, 2010, 2012, 2014). On July 18, 2016, the MSD issued an extension to the special discharge authorization for the SLDS that remains in effect until July 23, 2018 (MSD 2016). The results obtained from these monitoring activities are presented and evaluated with respect to the discharge limits described in the EMICY16 (USACE 2016).

Section 2.2.2 of the EMICY16 outlines the parameters and annual average discharge limits for the excavation-water discharges at the SLDS (USACE 2016). For cases in which 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 are used to calculate the sum of ratios (SOR) value for each discharge. Additionally, the SOR aids in the establishment of water management protocols.

3.1 EVALUATION OF EXCAVATION-WATER DISCHARGE MONITORING RESULTS AT THE ST. LOUIS DOWNTOWN SITE

During CY 2016, 4,742,100 gallons of excavation water from 12 batches were discharged to MSD manholes 17D4-353C, 17D3-019C, 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 2016 excavation-water discharges is provided in Table 3-1. All excavation-water discharge monitoring required through implementation of the EMICY16 was conducted as planned during CY 2016. The evaluation of monitoring data demonstrates compliance with all MSD criteria.

Table 3-1. Excavation Water Discharged at the SLDS in CY 2016

Quarter	Number of Discharges	Number of Gallons Discharged[a]	Total Activity (Ci)		
			Thorium[b]	Uranium (KPA)[c]	Radium[d]
1	3	1,475,147	4.8E-06	9.8E-04	8.7E-06
2	3	772,045	5.1E-06	2.4E-04	4.3E-06
3	3	1,952,240	9.8E-06	1.9E-04	8.5E-06
4	3	542,668	4.9E-06	6.6E-05	2.9E-06
Annual Totals	12	4,742,100	2.5E-05	1.5E-03	2.4E-05

[a] Quantities based on actual quarterly discharges from the SLDS.
[b] Calculated value based on the addition of isotopic analyses: thorium (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: Ra-226 and Ra-228.

4.0 GROUND-WATER MONITORING DATA

Eight (8) ground-water monitoring wells were sampled at the SLDS during CY 2016. 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 2016 sampling at the SLDS are presented in Appendix D, Table D-1. The SLDS ground-water analytical sampling results for CY 2016 are contained in Appendix D, Table D-2.

Stratigraphy at the St. Louis Downtown Site

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. St. Louis City Ordinance 66777 explicitly forbids the installation of wells into the subsurface for the purposes of using 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 Mississippi River. HU-A overlies HU-B on the eastern side of the SLDS and 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 19 ft on the western side of the SLDS to 80 ft near the Mississippi River.

Ground-Water Criteria

The CY 2016 monitoring data for HU-B ground water at the SLDS are compared to the following ground-water criteria established in the ROD: 50 µg/L arsenic, 5 µg/L cadmium, 20 µg/L total U, and 5 pCi/L combined Ra-226 and Ra-228 (USACE 1998a). 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 Calendar Year 2016 Ground-Water Monitoring Results for the St. Louis Downtown Site

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 trend in arsenic concentrations observed in HU-A wells B16W06S and DW21. No other significant changes in the concentrations of the COCs occurred in shallow ground water during CY 2016.

Two COCs (arsenic and cadmium) were detected at concentrations above the ROD ground-water criteria in HU-B ground water during CY 2016. The arsenic concentration exceeded the investigative limit (IL) (50 µg/L) in HU-B wells DW14 (130 µg/L in the second quarter), DW16 (190 µg/L in the second quarter, 81 µg/L in the third quarter, and 87 µg/L in the fourth quarter) and DW18 (100 µg/L in the fourth quarter). The cadmium concentration exceeded the IL (5 µg/L) in

the second-quarter sample from DW14 (6.7 µg/L) and the first-, second-, and fourth-quarter samples from DW15 (17.0 µg/L, 8.0 µg/L, and 7.6 µg/L, respectively).

The Mann-Kendall Trend Test results for the HU-B wells indicate a statistically significant upward trend in arsenic concentrations in DW16 and DW18, and a statistically significant downward trend in the arsenic concentration in DW14. The Mann-Kendall Trend Test results also indicate there is a statistically significant upward trend for cadmium in HU-B well DW15. No other significant changes in the concentrations of the COCs occurred in deep ground water during CY 2016.

4.1 GROUND-WATER MONITORING AT THE ST. LOUIS DOWNTOWN SITE

The selected remedy presented in the ROD involves excavation and disposal of radiologically contaminated accessible soil and ground-water monitoring. The goal of the ground-water portion of the SLDS remedy is to maintain protection of 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 there are no significant impacts to HU-B from COCs. 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 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. Based on the results of 8 consecutive rounds of quarterly sampling conducted between 1999 and 2001, total U concentrations were above the IL in HU-B well DW19 over an extended period, leading to the initiation of 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.

Because HU-A is not considered a potential source of drinking water, the ROD did not establish criteria for HU-A ground water. An evaluation of concentration trends is conducted for select COCs detected in HU-A ground water to support assessment of the effectiveness of the RA in the CERCLA 5-year reviews. The results of the trend analysis are presented in Section 4.2.3.

4.2 EVALUATION OF GROUND-WATER MONITORING DATA

St. Louis Downtown Site 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 monitoring of HU-B, as specified by the ROD (USACE 1998a), there was no EMP sampling performed at the SLDS. In CY 2016, eight monitoring wells (two HU-A and six 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 2016. As a result of RA, ground-water monitoring well DW19 was decommissioned in CY 2016. Additionally, ground-water monitoring well DW22R was also decommissioned in CY 2016 due to accidental damage by the property owner. Ground-water sampling at the SLDS was conducted on February 26 (first quarter); June 7 and 8 (second quarter); August 16 (third quarter); and November 9 and 10 (fourth quarter) of CY 2016. The CY 2016 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 2016 sampling events at the SLDS are presented separately for HU-A and HU-B. Appendix E provides the well maintenance checklists for the annual inspection of the SLDS ground-water monitoring wells conducted in March 2016, as well as the well abandonment forms for DW19 and DW22R.

Table 4-1. Screened HUs for SLDS Ground-Water Monitoring Wells in CY 2016

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

[a] Wells sampled in CY 2016.
[b] DW19 was decommissioned in August 2016. Installation of a replacement well is planned after remediation activities are completed at Plant 6.
[c] DW22R was damaged in CY 2014. It was decommissioned in CY 2016.

4.2.1 Evaluation of HU-A Ground-Water Monitoring Data

The results of the CY 2016 ground-water sampling of HU-A ground water at the SLDS are summarized in Table 4-2. During CY 2016, two HU-A monitoring wells (B16W06S and DW21) were sampled. B16W06S was sampled in the second and fourth quarter for arsenic and cadmium. DW21 was sampled for arsenic and cadmium in the first, second, and third quarters, and for radionuclides (Ra-226, Ra-228, thorium [Th]-228, Th-230, Th-232, U-234, U-235, and U-238) in the second quarter.

Table 4-2. Analytes Detected in HU-A Ground Water at the SLDS in CY 2016

Analyte	Units	Station[a]	Minimum Detected	Maximum Detected	Mean Detected	Frequency of Detection
Arsenic	µg/L	B16W06S	220	230	225	2/2
		DW21	81	130	103	3/3
Cadmium	µg/L	B16W06S	0.21	0.24	0.23	2/2
		DW21	0.74	22	8.1	3/3
U-234	pCi/L	DW21	0.33 J	0.33 J	0.33 J	1/1
Total U[b]	µg/L	DW21	0.4	0.4	0.4	1/1

[a] Table lists only those stations at which the analyte was detected in HU-A ground water.
[b] Total U values were calculated from isotopic concentrations in pCi/L and converted to µg/L using radionuclide-specific activities and assuming secular equilibrium.
Validation qualifier (VQ) symbol indicates: "J" analyte was identified as estimated quantity.

The analytes detected in HU-A ground water in CY 2016 are listed in Table 4-2. The remaining SLDS COCs (Ra-226, Ra-228, Th-228, Th-230, Th-232, U-235, and U-238) were not detected in the two HU-A ground-water wells monitored during CY 2016. Because the majority of their historical results was near or below their detection limits (DLs), a trend analysis was not performed for cadmium in B16W06S and DW21 or for U-234 and total U in DW21. 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 (Section 4.2.3), there is a statistically significant downward trend in arsenic concentrations in B16W06S and DW21 (Figure 4-4). Figure 4-6 provides an expanded version of the time-versus-concentration plots for arsenic in B16W06S and DW21.

4.2.2 Evaluation of HU-B Ground-Water Monitoring Data

During CY 2016, six SLDS wells completed in the 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 detected in HU-B ground water during CY 2016 and compares the results with the ROD ground-water criteria.

Table 4-3. Analytes Detected in HU-B Ground Water at the SLDS in CY 2016

Analyte	ROD Ground-Water Criteria		Units	Station[b]	Minimum Detected	Maximum Detected	Mean Detected	Number of Detects > ROD Ground-Water Criteria	Frequency of Detection
	IL[a]	40 *CFR* 192.02, Table 1, Subpart A							
Arsenic	50	NA	µg/L	B16W08D	30	30	30	0	1/1
				B16W09D	37	37	37	0	1/1
				DW14	130	130	130	1	1/1
				DW15	4.5	21	13.7	0	3/3
				DW16	81	190	119	3	3/3
				DW18	100	100	100	1	1/1
Cadmium	5	NA	µg/L	B16W08D	0.64	0.64	0.64	0	1/1
				B16W09D	0.2	0.2	0.2	0	1/1
				DW14	6.7	6.7	6.7	1	1/1
				DW15	7.6	17	10.9	3	3/3
				DW16	0.49	1.6	0.97	0	3/3
Ra-226	NA[c]	5[d]	pCi/L	DW14	1.54 J	1.54 J	1.54 J	0	1/1
				DW16	2.33 J	2.33 J	2.33 J	0	1/1
Th-228	NA	NA	pCi/L	DW14	0.73 J	0.73 J	0.73 J	NA	1/1
Th-230	NA	NA	pCi/L	B16W09D	0.56 J	0.56 J	0.56 J	NA	1/1
				DW14	0.46 J	0.46 J	0.46 J	NA	1/1
U-234	NA	NA	pCi/L	B16W08D	0.75 J	0.75 J	0.75 J	NA	1/1
				DW14	1.06	1.06	1.06	NA	1/1
				DW16	1.19 J	1.19 J	1.19 J	NA	1/1
				DW18	0.48 J	0.48 J	0.48 J	NA	1/1
U-238	NA	NA	pCi/L	B16W08D	0.68 J	0.68 J	0.68 J	NA	1/1
				DW14	0.72 J	0.72 J	0.72 J	NA	1/1
				DW16	0.90	0.90	0.90	NA	1/1

Table 4-3. Analytes Detected in HU-B Ground Water at the SLDS in CY 2016 (Continued)

Analyte	ROD Ground-Water Criteria		Units	Station[b]	Minimum Detected	Maximum Detected	Mean Detected	Number of Detects > ROD Ground-Water Criteria	Frequency of Detection
	IL[a]	40 *CFR* 192.02, Table 1, Subpart A							
Total U[e]	20	NA	µg/L	B16W08D	2.04	2.04	2.04	0	1/1
				DW14	2.16	2.16	2.16	0	1/1
				DW16	2.68	2.68	2.68	0	1/1

[a] USACE 1998a.
[b] Table lists only those stations at which the analyte was detected in HU-B ground water.
[c] Although the ROD does not reference an IL for Ra-226, it does reference the maximum constituent concentration listed in Table 1 of 40 *CFR* 192.02, 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.
NA – not appropriate (No IL is specified or the concentration limits specified in Table 1 of 40 *CFR* 192.02, Subpart A, are the same or less stringent than the IL and thus not relevant or appropriate.)
VQ symbol indicates: "J" analyte was identified as estimated quantity.

Two inorganic SLDS COCs (arsenic and cadmium) were detected at concentrations above their ROD ground-water criteria in HU-B ground water during CY 2016. The concentration of arsenic exceeded the IL (50 µg/L) in the June, August, and November 2016 samples from DW16 (190 µg/L, 81 µg/L, and 87 µg/L, respectively). The concentration of arsenic also exceeded the IL in the June 2016 sample from DW14 (130 µg/L) and the November 2016 sample from DW18 (100 µg/L). Figure 4-6 provides the time-versus-concentration plots for arsenic in DW14, DW16, and DW18. The concentration of cadmium in the June 2016 sample from DW14 (6.7 µg/L) and the February, June, and November 2016 samples from DW15 (17 µg/L, 8.0 µg/L, and 7.6 µg/L, respectively) exceeded the IL (5 µg/L).

No radiological COCs exceeded the ROD ground-water criteria in HU-B ground water at the SLDS during CY 2016. The concentration of total U has exceeded the IL (20 µg/L) in the annual ground-water samples collected from one HU-B well at the SLDS, DW19, since installation of the well in CY 1999. Results of the CY 2015 trend analysis indicated that the total U concentrations in DW19 were decreasing. No groundwater sampling was conducted at DW19 during CY 2016. On August 3, 2016, DW19 was plugged and abandoned so that remediation activities could be conducted in that area. When remediation and backfill activities are completed at Plant 6, a replacement well will be installed to allow continued assessment of contaminant concentration trends in this area. Figure 4-5 shows the total U concentration trends in unfiltered ground water at the SLDS.

Based on the time-versus-concentrations plots and quantitative evaluation of trends using the Mann-Kendall Trend Test (Section 4.2.3), four statistically significant trends were identified in HU-B ground water. There are statistically significant downward trends in arsenic concentrations in DW14 and statistically significant upward trends in arsenic concentrations in DW16 and DW18. In addition, there is a statistically significant upward trend for cadmium in DW15. Figure 4-6 provides an expanded version of the time-versus-concentration plots for arsenic in DW14, DW16, and DW18 and for cadmium in DW15.

4.2.3 Comparison of Historical Ground-Water Data at the St. Louis Downtown Site

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 2016. The Mann-Kendall Trend Test was used to evaluate possible trends for those COCs detected in HU-A

and for those COCs that exceeded ROD ground-water criteria in HU-B during CY 2016. The Mann-Kendall Trend Test was not conducted for those COCs with insufficient sampling data (fewer than six sampling results for the period from January 1999 to December 2016), a detection frequency less than 50 percent, or historical results generally within the range of measurement error of their DLs. For HU-A, a trend analysis was conducted for arsenic in B16W06S and DW21. A trend analysis was not conducted for cadmium, U-234 or total U in DW21 because the historical results were generally below or only slightly above the DLs. The Mann-Kendall Trend Test was conducted for two COCs that exceeded the ILs in HU-B wells during CY 2016: arsenic in DW14, DW16, and DW18, and cadmium in DW15. For cadmium in DW15, the dataset was restricted to the time period CY 2003 through CY 2016 in order to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. Trend analysis was not conducted for cadmium in DW14 because the historical results were generally within the range of measurement error of their DLs.

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 (WRS) 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 with detect values) 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 less than or equal to 10, then the p value is computed. If the p value is less than or equal to 0.05, the test concludes that the trend is statistically significant. If the p value is greater than 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 statistical 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. Thus, for datasets for which

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 and not actual values, it is generally valid even in cases in which 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 for which 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 this analysis, graphs are generated to depict the trends, if present, and the associated error bars.

Results of Trend Analysis for Ground Water at the St. Louis Downtown Site

The Mann-Kendall Trend Test results are provided in Table 4-4. 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, DW16, DW18, and DW21, and cadmium in DW15) are provided on Figure 4-6.

Table 4-4. Results of Mann-Kendall Trend Test for SLDS Ground Water in CY 2016

Analyte	Station	HU	N[a]	Test Statistics[b,c]		Trend[d]
				S	Z	
Arsenic	B16W06S	HU-A	22	-63	-1.75	Downward Trend
	DW14	HU-B	22	111	-3.11	Downward Trend
	DW16	HU-B	21	121	3.6	Upward Trend
	DW18	HU-B	27	185	3.84	Upward Trend
	DW21	HU-A	26	-164	-3.60	Downward Trend
Cadmium	DW15	HU-B	11	33	2.63	Upward Trend

[a] N is the number of unfiltered ground-water sample results for a particular analyte at the well over a particular time period. With the exception of cadmium at DW15, the time period is between January of 1999 and December of 2016. For cadmium at DW15, the dataset was restricted to the period between January of 2003 and December of 2016 to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent.

[b] 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.

[c] Test Statistics: S – 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 significant downward trends for arsenic (two HU-A wells, B16W06S and DW21, and one HU-B well, DW14), and two wells exhibit significant upward trends for arsenic (HU-B wells DW16 and 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, DW16, 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. The Mann-Kendall Trend Test results also indicate a statistically significant upward trend for cadmium in HU-B well DW15 for the period between January 2003 and December 2016. No other significant changes in the concentrations of the inorganic COCs occurred in HU-A or HU-B ground water during CY 2016.

Radionuclides

One radiological COC, U-234, was detected in HU-A ground water. However, a trend analysis was not conducted for U-234 in DW21 because the historical results were generally below or only slightly above the DLs. No radiological COCs exceeded the ILs in HU-B ground water. Therefore, the Mann-Kendall Trend Test was not conducted for any radionuclides in HU-A or HU-B ground-water.

4.2.4 Evaluation of Potentiometric Surface at the St. Louis Downtown Site

Ground-water elevations were measured in monitoring wells at the SLDS in February, June, August, and November of CY 2016. 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 northeast 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 hydraulic gradient is much higher (steeper) during the dry season. During CY 2016, the HU-A potentiometric surface elevations showed some seasonal fluctuation in ground-water elevations, with elevations averaging approximately 2.8 ft higher during the wet season (June) than during the dry season (November).

As shown on 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 6.6 ft higher on June 7 than on November 9; this generally corresponds to the difference in the daily river stage, which was 6.8 ft higher on June 7 (400.6 ft above mean sea level [amsl]) than on November 9 (393.8 ft amsl). The flow direction in HU-B at the SLDS is generally northeast toward the Mississippi River.

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 all SLS and at subcontracted vendor laboratories. This section describes the environmental monitoring standards of the FUSRAP and the goals for these programs, plans, and procedures.

The environmental QA program provides the FUSRAP with reliable, accurate, and precise monitoring data. The program furnishes guidance and directives to detect and prevent problems from the time a sample identification numbers are issued until the associated data are evaluated. The Missouri Department of Natural Resources (MDNR) conducted site visits on March 22, 2016, October 17, 2016, and November 9, 2016, to observe and participate in the environmental monitoring activities. USEPA Region 7 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:

- 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 SLDS 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 SLDS.

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 Engineer Manual (EM) 200-1-3, *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 identified sampling and monitoring structures are delineated in programmatic documents such as the EMG (USACE 1999a), which is an upper tier companion document to the SAG (USACE 2000). The EMICY16 outlines the analyses to be performed at each site for various media (USACE 2016).

Flexibility to address non-periodic environmental sampling (e.g., 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 7 on a quarterly basis.

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 completion of 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 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 (Leidos 2015a). Data entered into the St. Louis FUSRAP database may be flagged accordingly.

5.5 PERFORMANCE AND SYSTEM AUDITS

Performance and system audits of both field and laboratory activities were 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 the EMICY16 (USACE 2016).

5.5.1 Field Assessments

Internal assessments (audit or surveillance) of field activities (sampling and measurements) were conducted by the QA/QC Officer (or designee). Assessments included an examination of field sampling records; field instrument operating records; sample collection, handling, and packaging procedures; and 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 7, or the MDNR.

5.5.2 Laboratory Audits

The on-site USACE St. Louis District FUSRAP Radioanalytical Laboratory locations are subject to periodic review(s) by the local USACE Chemist to demonstrate compliance with the *Department of Defense/Department of Energy Consolidated Quality Systems Manual for Environmental Laboratories* (QSM) (U.S. Department of Defense [DOD] and DOE 2013). In conjunction, the on-site laboratories participate in blind, third-party performance evaluation studies (performance audits) at least twice per year, with results reported to the local USACE point(s) of contact. In addition, contract laboratories are required to be accredited under the DOD Environmental Laboratory Accreditation Program (ELAP). The DOD ELAP requires an annual audit and re-accreditation every 3 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 Quality Assurance Plan for the FUSRAP St. Louis Radioanalytical Laboratory* (USACE 2013). 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 were 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 follow the guidance presented in the QSM (DOD and DOE 2013).

5.6 SUBCONTRACTED LABORATORY PROGRAMS

All samples collected during environmental monitoring activities were analyzed by USACE-approved subcontractor laboratories. QA samples were collected for ground water and soil, and samples 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 the USEPA methods contained in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846,* (USEPA 1993) and by other documented USEPA or nationally recognized methods. Laboratory SOPs are based on the QSM (DOD and DOE 2013).

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 USACE St. Louis FUSRAP 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 across the SLS. Precision is measured by the relative percent difference (RPD) for non-radiological analyses.

The RPDs for non-radiological analyses are presented in Table 5-1. The overall precision for the CY 2016 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-1. Non-Radiological Duplicate Sample Analysis for CY 2016 – Ground Water

Ground-Water Sample Name[a]	Arsenic	Cadmium
	RPD[b]	RPD[b]
SLD193771 / SLD193771-1	9.52	NC

[a] Ground-water samples ending in "-1" are duplicate ground-water samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent.
NC – not calculated (due to one or both concentrations being below DLs)

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 analytes across the SLS. The RPDs for non-radiological analyses are presented in Table 5-2. The overall accuracy for CY 2016 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-2. Non-Radiological Split Sample Analysis for CY 2016 – Ground Water

Ground-Water Sample Name[a]	Arsenic	Cadmium
	RPD[b]	RPD[b]
SLD193771 / SLD193771-2	25.64	NC

[a] Ground-water samples ending in "-2" are split ground-water samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent.
NC – not calculated (due to one or both concentrations being below DLs)

5.7.3 Equipment Rinsate Blanks

Equipment rinsate blank samples are typically taken from the rinsate water collected from equipment decontamination activities. These samples consist of analyte-free water that has been

rinsed over sampling equipment for the purposes of evaluating the effectiveness of equipment decontamination. All of the monitoring wells have dedicated sampling equipment, rendering decontamination unnecessary. Because decontamination does not apply, equipment rinsate blanks were not employed.

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 *Data Verification and Validation* (Leidos 2015b), and/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 is provided in EM-200-1-6 (USACE 1997).

One hundred (100) 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 from various QC failures; it does not determine data usability, nor does it include assignment of data validation qualifier (VQ) flags. The data evaluation or validation 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 were validated.

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

The data evaluation process considers precision, accuracy, representativeness, completeness, comparability, and sensitivity. This section provides detail to the particular parameters and to how the data were evaluated for each, with discussion and tables to present the associated data. An evaluation of the overall precision, accuracy, representativeness, completeness, comparability, and sensitivity of the CY 2016 environmental monitoring activities was acceptable and complete.

Accuracy and precision can be measured by the RPD using the following equation:

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

where:

S = parent sample result
D = duplicate/split sample result

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. The equation is not used when the analyte in one or both of the

samples is not detected. In cases in which the equation cannot 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 between the two results was calculated and used as an indication of the precision of the analyses performed (Table 5-1). Sample collection precision was measured in the laboratory by the analyses of duplicates. The overall precision for the CY 2016 environmental monitoring 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 between the two results was calculated and used as an indication of the accuracy of the analyses performed (Table 5-2). For this EMDAR, 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. The overall accuracy for CY 2016 environmental monitoring activities was acceptable.

Representativeness expresses the degree to which data accurately and precisely represent 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 EMICY16, 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 2016 environmental monitoring activities was acceptable.

Comparability expresses the confidence with which one dataset 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. For example, post-CY 1997 analytical data may not be directly comparable to data collected before CY 1997, because of differences in DQOs. Additionally, some sample media (e.g., storm-water and radiological monitoring) have values that are primarily useful in the present, thus the comparison to historic data is not as relevant. However, the overall comparability of the applicable environmental monitoring data met the project DQOs.

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 2016 environmental monitoring activities, the data completeness was 100 percent (St. Louis 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 an analytical result in comparison to the magnitude or level of analyte concentration observed. For this EMDAR, MDC is a term generically used to represent the method detection limit (MDL) for non-radiological analytes. The closer a measured value 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 inductively coupled plasma (ICP) for metals. 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 that exceed the MDC of the analyte are desired.

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 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 Table 5-3.

Table 5-3. Non-Radiological Parent Samples and Associated Duplicate and Split Samples for CY 2016 – Ground Water

Ground-Water Sample Name[a]	Arsenic[b]			Cadmium[b]		
	Result	DL	VQ	Result	DL	VQ
SLD193771	220.00	4.00	=	0.21	0.20	=
SLD193771-1	200.00	4.00	=	0.20	0.20	U
SLD193771-2	170.00	5.00	=	0.60	0.60	U

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Result values are expressed in µg/L.
VQ symbols indicate: "=" for positively identified results, "U" for not detected.

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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 per year, 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 St. Louis FUSRAP cleanup operations. Compliance with the dose limit in §20.1301 can be demonstrated by one of the two following methods (§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 per year); 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 1 of Appendix B of 10 *CFR* 20; and (*ii*) if an individual were continuously present in an unrestricted area, the dose from external sources would not exceed 2 mrem per hour.

The 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). 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 EMDAR.

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 "St. Louis Downtown Site 2016 Radionuclide Emissions NESHAP Report Submitted in Accordance with Requirements of 40 *CFR* 61, Subpart I").

6.1 SUMMARY OF ASSESSMENT RESULTS

The TEDE from the SLDS to the receptor from all complete/applicable pathways combined was less than 0.1 mrem per year, 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 2016 at the SLDS. Figure 6-2 provides a comparison of the maximum annual dose from CY 2000 to CY 2016 at the SLDS to the annual average natural background dose of approximately 300 mrem per year.

6.2 PATHWAY ANALYSIS

Table 6-1 lists the four complete pathways for exposure from SLDS 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 SLDS. Of the four complete pathways, three were applicable in CY 2016 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 2016 Dose Estimate
Liquid A	Ingestion of ground water from local wells downgradient from the site.	NA
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 the SLDS storm-water discharges and MSD discharges are not applicable to the hypothesized recreational receptor; therefore, those data are not evaluated in this section.
NA – 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 if a potential for exposure was present during CY 2016. If potential for exposure was present, the pathway is termed applicable. Only applicable pathways are considered in estimates of dose.

Table 6-1 shows the pathways applicable to the CY 2016 dose estimates for the SLDS. The Liquid A exposure pathway was not applicable in CY 2016, because 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 (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 herein. 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 2016 monitoring data. Calculations for dose scenarios are provided in Appendix F. Dose equivalent estimates are well below the

standards set by the U.S. Nuclear Regulatory Commission (NRC) for annual public exposure and USEPA NESHAP limits.

The CY 2016 TEDE for a hypothetical maximally exposed individual near the SLDS is less than 0.1 mrem per year.

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 in Section 6.2. No private residences are adjacent to the site areas where uranium processing activities occurred. 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 include:

- 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 (Leidos 2017).
- 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 CAP88-PC modeling code to estimate dose to the receptor (Leidos 2017).
- Exposure from Rn-222 (and progeny) was calculated using a dispersion factor and Rn-222 (ATD) monitoring data at the site locations representative of areas accessible to the public between the source and receptor (Leidos 2017).

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 per year from external gamma, less than 0.1 mrem per year from airborne radioactive particulates, and 0.0 mrem per year from Rn-222, for a TEDE of less than 0.1 mrem per year (Leidos 2017). In comparison, the average exposure to natural background radiation in the United States results in a TEDE of approximately 300 mrem per year (NCRP 2009).

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7.0 REFERENCES

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

City of St. Louis 2005. City Ordinance 66777, effective August 2005.

DOD 2000. U.S. Department of Defense, U.S. Department of Energy, U.S. Environmental Protection Agency, and U.S. Nuclear Regulatory Commission. *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM).* NUREG 1575. EPA 402-R-97-016. August.

DOD and DOE 2013. U.S. Department of Defense and U.S. Department of Energy. *Department of Defense (DoD)/Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories*. DOD Quality Systems Manual Version 5.0 and DOE Quality Systems for Analytical Services Version 3.0. July 2013.

DOE 1994. U.S. Department of Energy. *Remedial Investigation Report for the St. Louis Site,* St. Louis, Missouri, DOE/OR/21949-280, January.

DOE 1995. U.S. Department of Energy. *Remedial Investigation Addendum for the St. Louis Site,* St. Louis, Missouri, DOE/OR/ 21950-132, September.

DOE 1998. U.S. Department of Energy. *Internal Dosimetry Program Technical Basis Manual,* DOE/OR/21548-241, Oak Ridge Operations Office, Rev. 5, November.

Gibbons, Robert D. 1994. *Statistical Methods for Groundwater Monitoring*, John Wiley and Sons, Inc., New York, January.

Leidos 2015a. Leidos, Inc. Environmental Science & Engineering Operation, Standard Operating Procedure. "Control of Nonconforming Items," ESE A15.1, Rev. 0, January 31.

Leidos 2015b. Leidos, Inc. *Data Verification and Validation.* Environmental Science & Engineering Operation. Standard Operating Procedure. ESE DM-05. Revision 0. January 31, 2015.

Leidos 2017. Leidos, Inc. *Total Effective Dose Equivalent (TEDE) to the Hypothetically Maximally Exposed Individual at SLDS,* Calculation Package. March.

MSD 1998. Metropolitan St. Louis Sewer District. Letter dated October 30, 1998. From Bruce H. Litzsinger, Civil Engineer, to Ken Axetel, International Technology Corporation.

MSD 2001. Metropolitan St. Louis Sewer District. Letter dated July 23, 2001. From Bruce H. Litzsinger, Civil Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: St. Louis Downtown Site. File: IU – Mallinckrodt 21120596-00.

MSD 2004. Metropolitan St. Louis Sewer District. Letter dated October 13, 2004. From Roland A. Biehl, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. File: IU – Mallinckrodt 21120596-00.

MSD 2006. Metropolitan St. Louis Sewer District. Letter dated June 19, 2006. From Roland A. Biehl, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 2112059600, SP809.

MSD 2008. Metropolitan St. Louis Sewer District. Letter dated May 22, 2008. From Steven M. Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 2112059600, SP809.

MSD 2010. Metropolitan St. Louis Sewer District. Letter dated May 10, 2010. From Steven M. Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 2112059600, SP809.

MSD 2012. Metropolitan St. Louis Sewer District. Letter dated May 24, 2012. From Steven M. Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 2112059600, SP809.

MSD 2014. Metropolitan St. Louis Sewer District. Letter dated June 23, 2014. From Steven M. Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 1011728100, SP809.

MSD 2016. Metropolitan St. Louis Sewer District. Letter dated July 18, 2016. From Steven M. Grace, Environmental Assistant Engineer, to Bruce Munholand, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Downtown Site, File: IU-Mallinckrodt 1011728100, SP809.

NCRP 1988. National Council on Radiation Protection and Measurements. *Measurement of Radon and Radon Daughters in Air*, NCRP Report No. 97. November.

NCRP 2009. National Council on Radiation Protection and Measurements. *Ionizing Radiation Exposure of the Population of the United States*, NCRP Report No. 160. 3 March.

UNSCEAR 1982. *United Nations Scientific Committee on the Effects of Atomic Radiation, 37th Session, Supplement No. 45 (A/37/45).* United Nations, New York, NY.

USACE 1997. U.S. Army Corps of Engineers. *Engineering and Design – Chemical Data Quality Management for Hazardous, Toxic, and Radioactive Waste (HTRW) Projects,* Engineer Manual, EM-200-1-6, October.

USACE 1998a. U.S. Army Corps of Engineers. *Record of Decision for the St. Louis Downtown Site,* St. Louis, Missouri, Final, July.

USACE 1998b. U.S. Army Corps of Engineers. *Engineering and Design – Chemical Data Quality Management for Hazardous, Toxic, and Radioactive Waste Activities,* Engineer Regulation, ER-1110-1-263, April.

USACE 1999a. U.S. Army Corps of Engineers. *Environmental Monitoring Guide for the St. Louis Sites,* Final, December.

USACE 1999b. U.S. Army Corps of Engineers. *FUSRAP Laboratory Data Management Process for the St. Louis Site,* St. Louis, Missouri, June.

USACE 2000. U.S. Army Corps of Engineers. *Sampling and Analysis Guide for the St. Louis Site,* Final, October.

USACE 2001. U.S. Army Corps of Engineers. *Requirements for the Preparation of Sampling and Analysis Plans,* Engineer Manual, EM 200-1-3, February.

USACE 2003. U.S. Army Corps of Engineers. *Phase 1 Ground-Water Remedial Action Alternative Assessment (GRAAA) at SLDS,* St. Louis Missouri, Final, June.

USACE 2013. U.S. Army Corps of Engineers. *Laboratory Quality Assurance Plan for the FUSRAP St. Louis Radiological Laboratory*, Berkeley, Missouri. Revision 8. April 2013.

USACE 2016. U.S. Army Corps of Engineers. *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2016,* St. Louis, Missouri, Revision 0, January 29.

USEPA 1987. U.S. Environmental Protection Agency. *Environmental Radon; Volume 35,* New York.

USEPA 1989. U.S. Environmental Protection Agency. *Exposure Factor Handbook EPA/600/8-89/043,* Office of Health and Environmental Assessment, Washington D.C., July.

USEPA 1991. U.S. Environmental Protection Agency. *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans,* QAMS-005/80.

USEPA 1993. U.S. Environmental Protection Agency. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846,* Third Edition, Revision 1, Updates 1, 2, and 3.

USEPA 1994. U.S. Environmental Protection Agency. *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations,* EPA QA/R-5, January.

USEPA 2000. U.S. Environmental Protection Agency. *Guidance for Data Quality Assessment - Practical Methods for Data Analysis,* EPA QA/G-9, QA00 Update, July.

USEPA 2014. U.S. Environmental Protection Agency. CAP88-PC Version 4.0 Modeling Code, September.

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.*

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FIGURES

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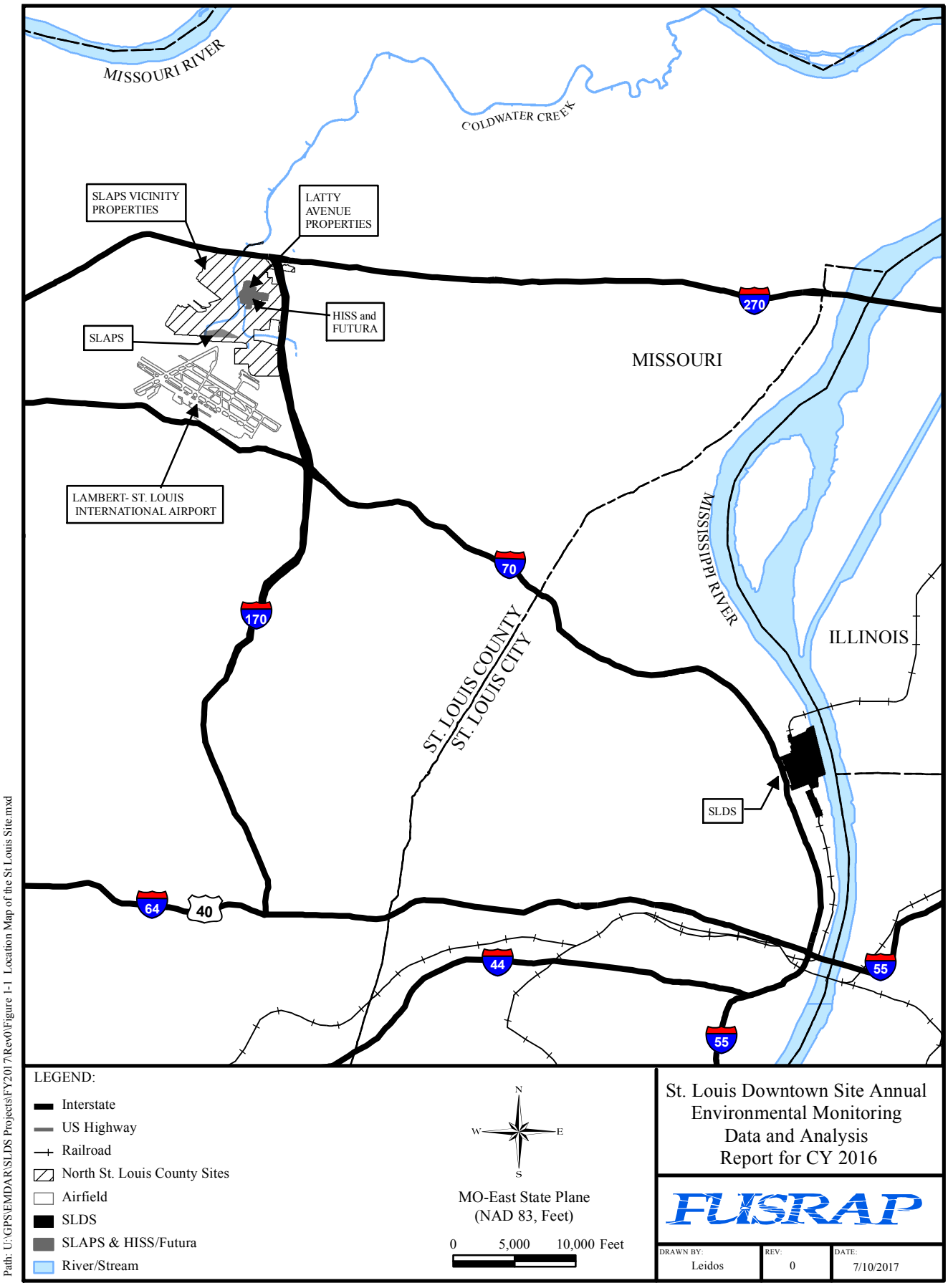


Figure 1-1. Location Map of the St. Louis Sites

Path: U:\GPS\EMDAR\SLDS Projects\FY2017\Rev0\Figure 1-2 Plan View of the SLDS.mxd

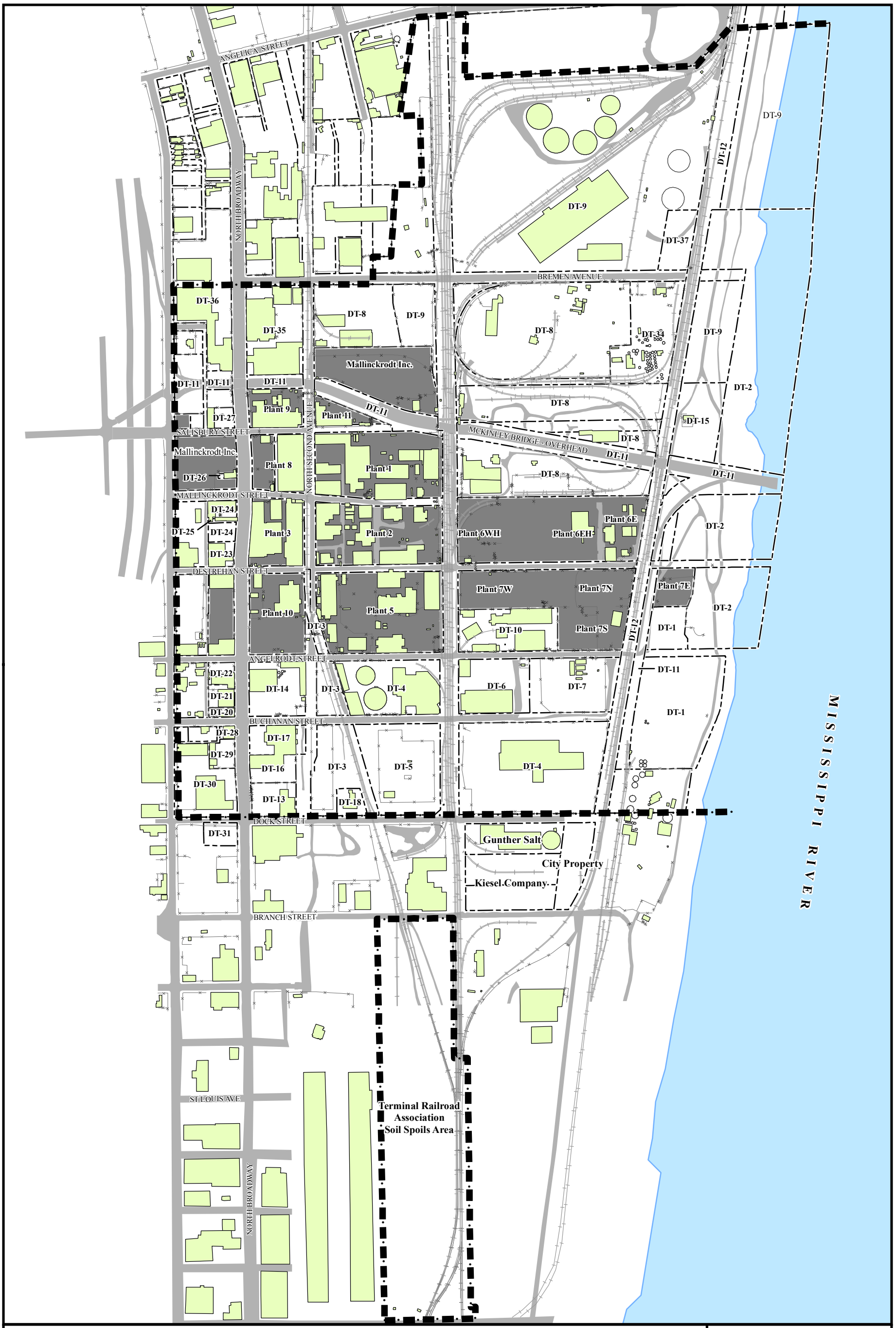


Figure 1-2. Plan View of the SLDS

6/08/2016

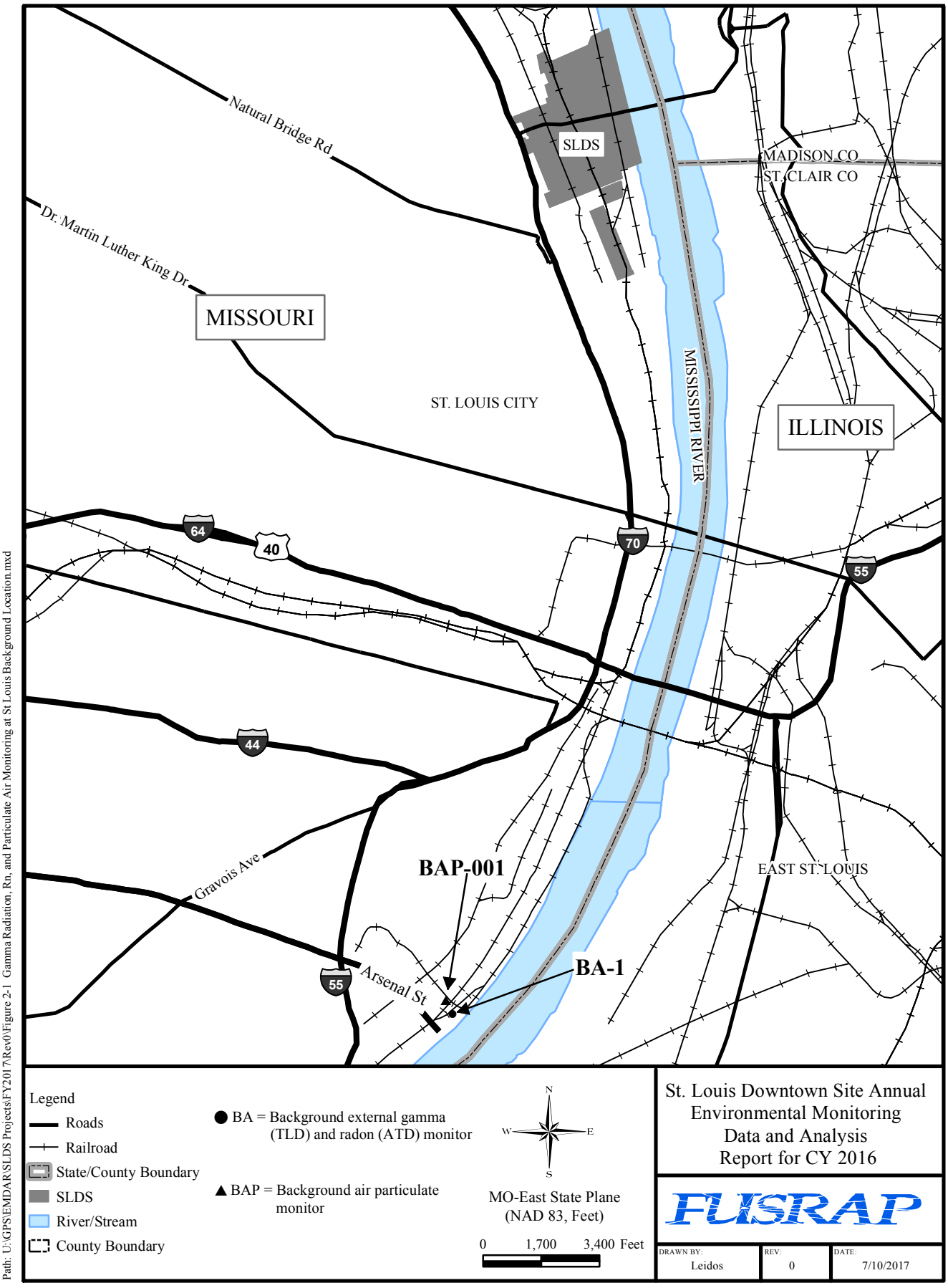


Figure 2-1. Gamma Radiation, Radon, and Particulate Air Monitoring at St. Louis Background Location - USACE Service Base

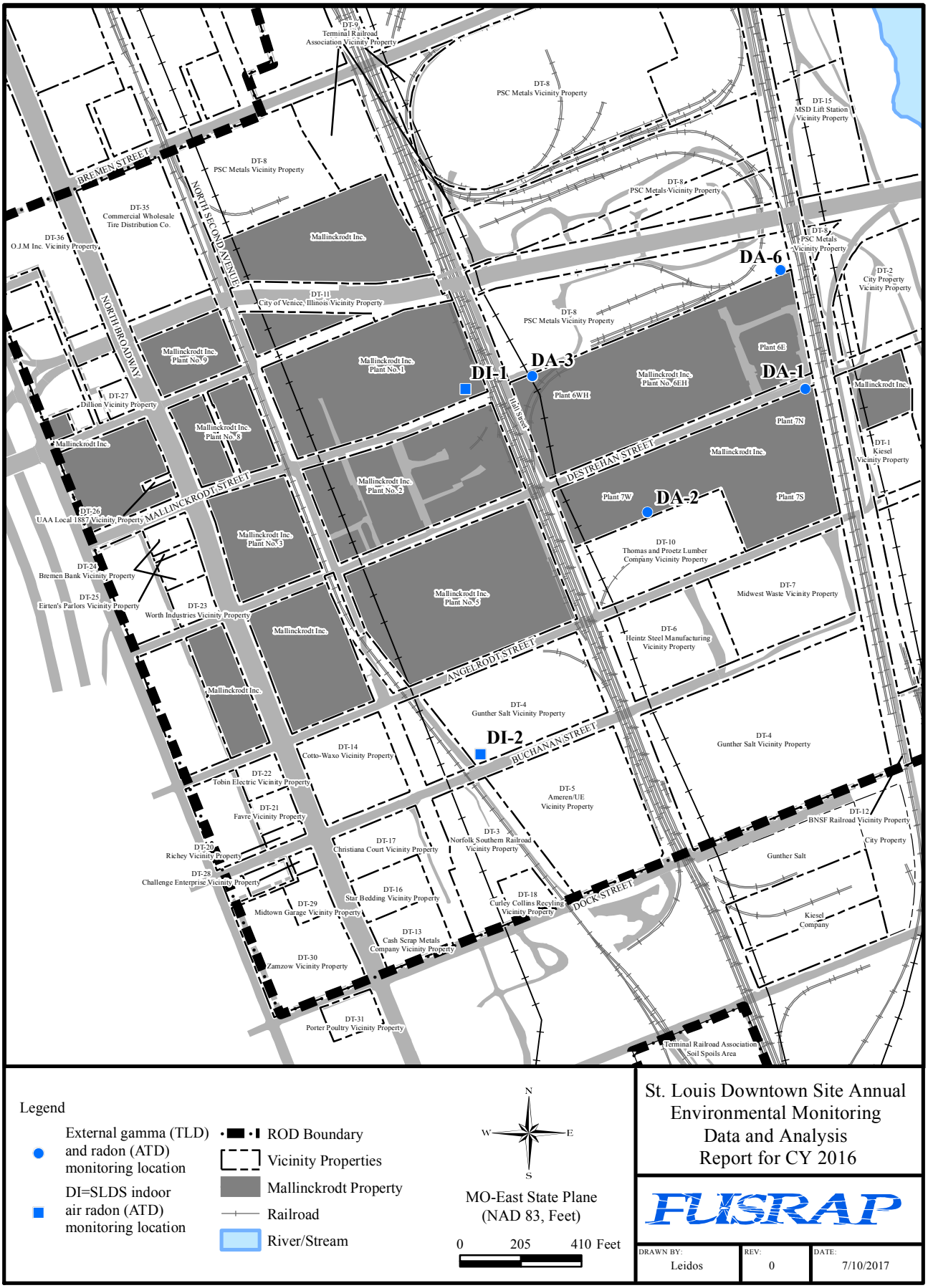
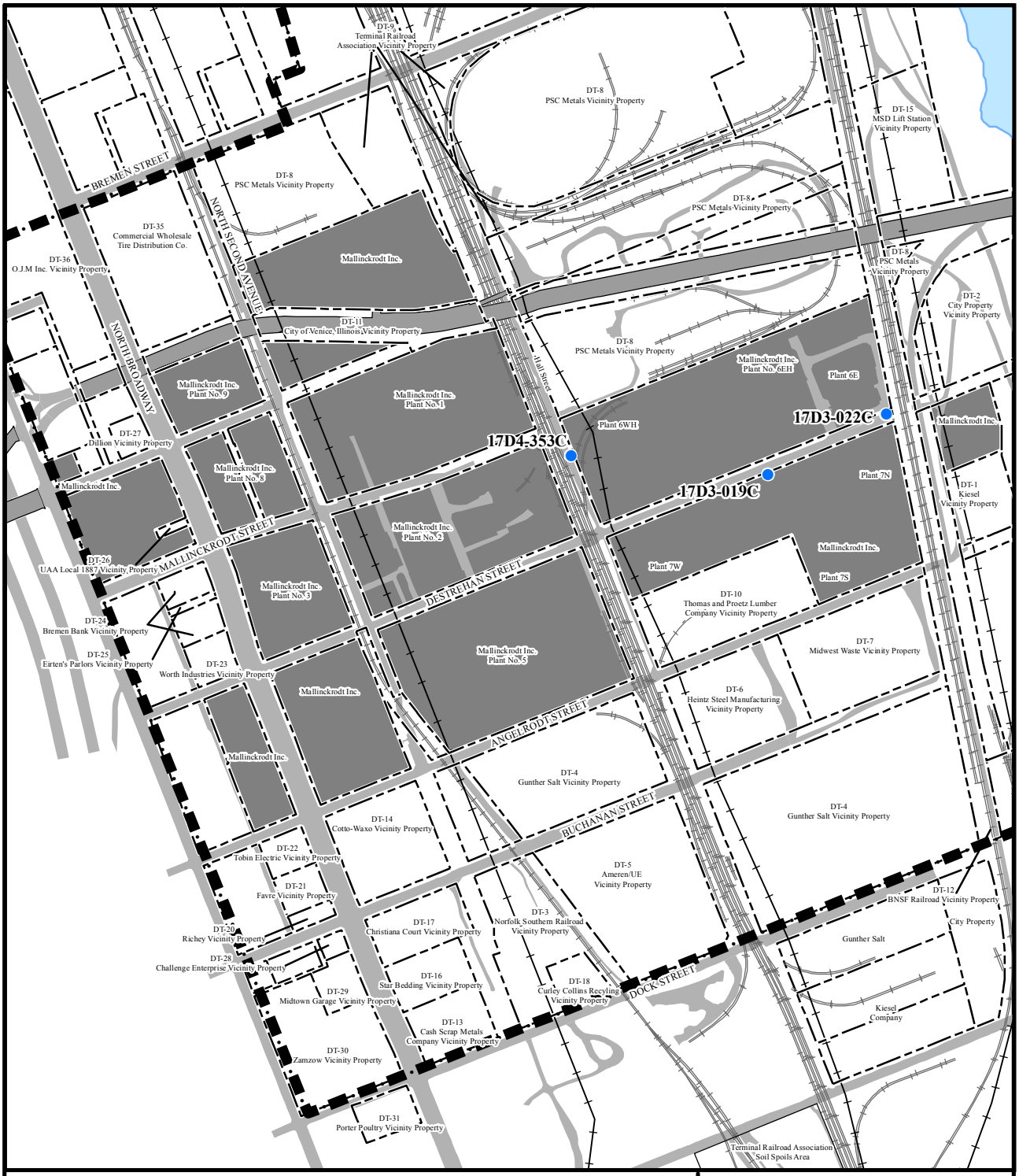


Figure 2-2. Gamma Radiation and Radon Monitoring Locations at the SLDS



Path: U:\GPS\EMDAR\SLDS Projects\FY2017\Rev0\Figure 3-1 Excavation-Water Discharge Stations at the SLDS.mxd

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

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 to 6 ft and saturated at 10 to 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

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St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for CY 2016

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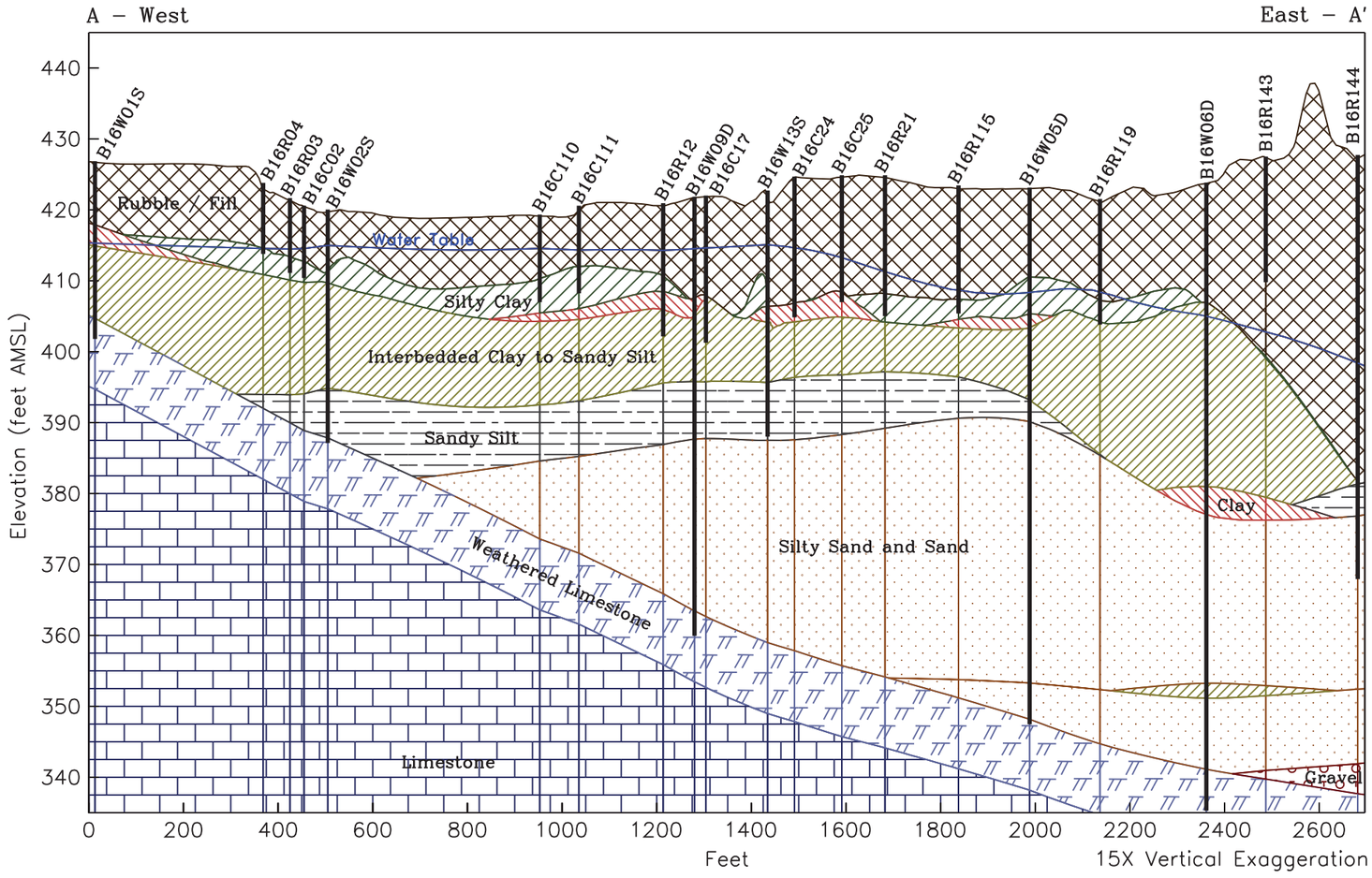
Figure 4-1. Generalized Stratigraphic Column for the SLDS



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

Cross Section Location Map

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St. Louis Downtown Site
Annual Environmental Monitoring
Data and Analysis Report for
CY 2016

Drawn By: R. Smith

Date: 03/24/99, rev04/01/16

File: SLDSGlg01XSectA.sho

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

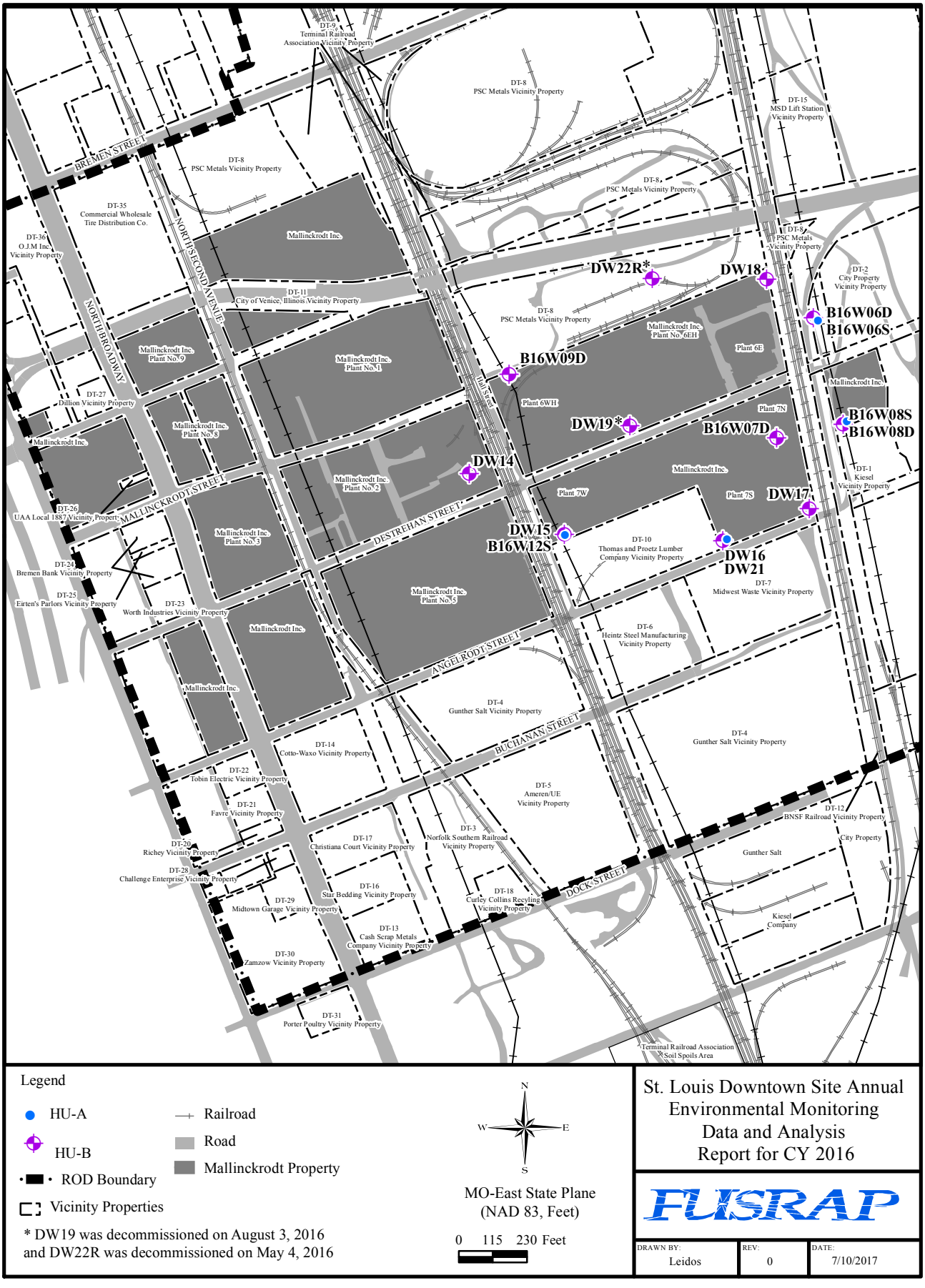
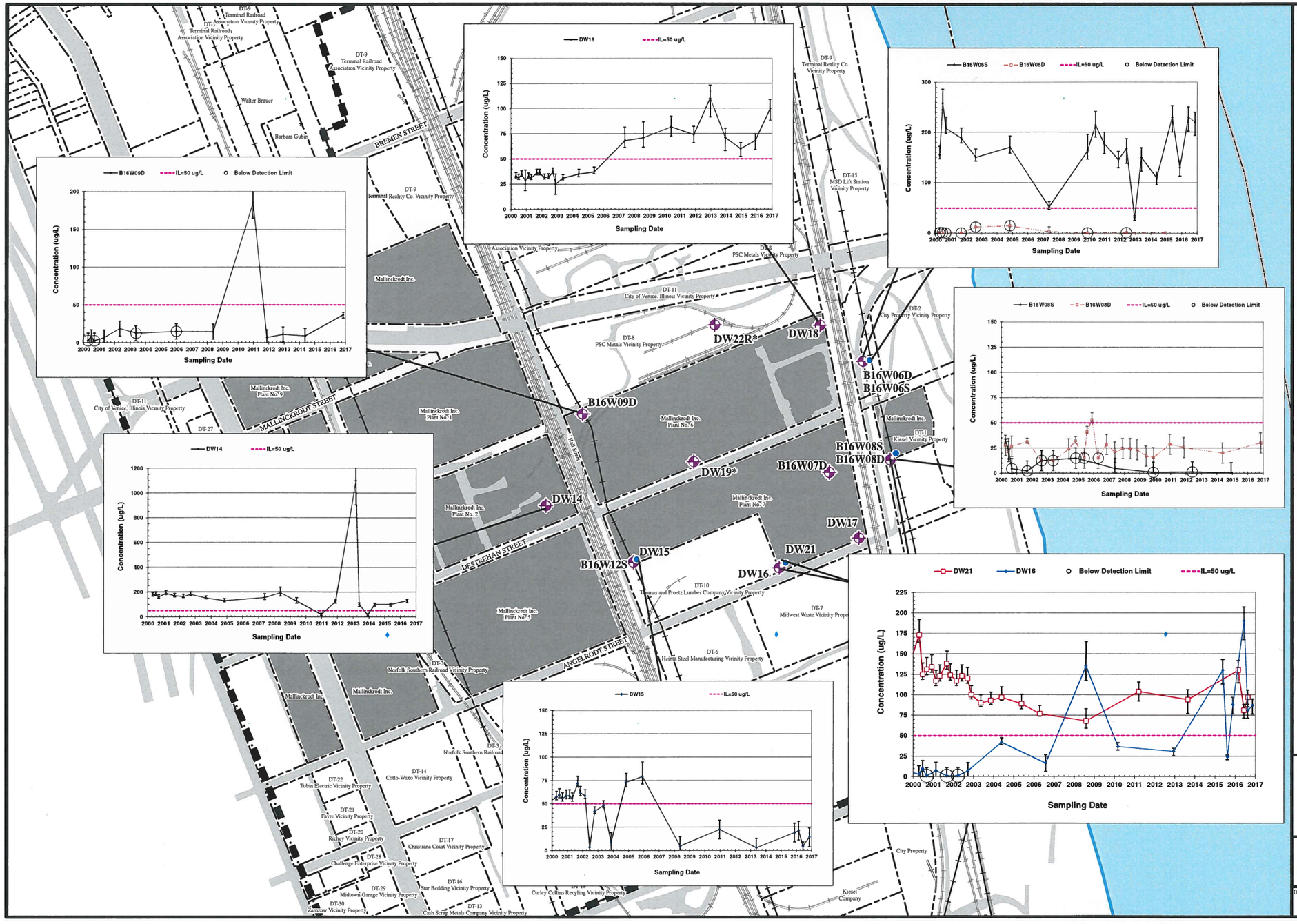


Figure 4-3. Ground-Water Monitoring Well Locations at the SLDS

Path: U:\GPS\EMDAR\SLDS Projects\FY2017\Rev0\Figure 4-4 Arsenic Concentration Trends in Unfiltered Ground Water at the SLDS.mxd



Legend

- Existing HU-A Monitoring Well
- Existing HU-B Monitoring Well
- ROD Boundary
- Vicinity Properties
- Railroad
- Road
- Mallinckrodt Property
- River/Stream
- Error Bars

* **DW19** was decommissioned on August 3, 2016 and **DW22R** was decommissioned on May 4, 2016

MO-East State Plane
(NAD 83, Feet)

0 150 300 Feet

St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for CY 2016

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

Path: U:\GPS\EMDAR\SLDS Projects\FY2017\Rev0\Figure 4-5 Total Uranium Concentrations in Unfiltered HZ-A Ground Water at the Latty Avenue Properties.mxd

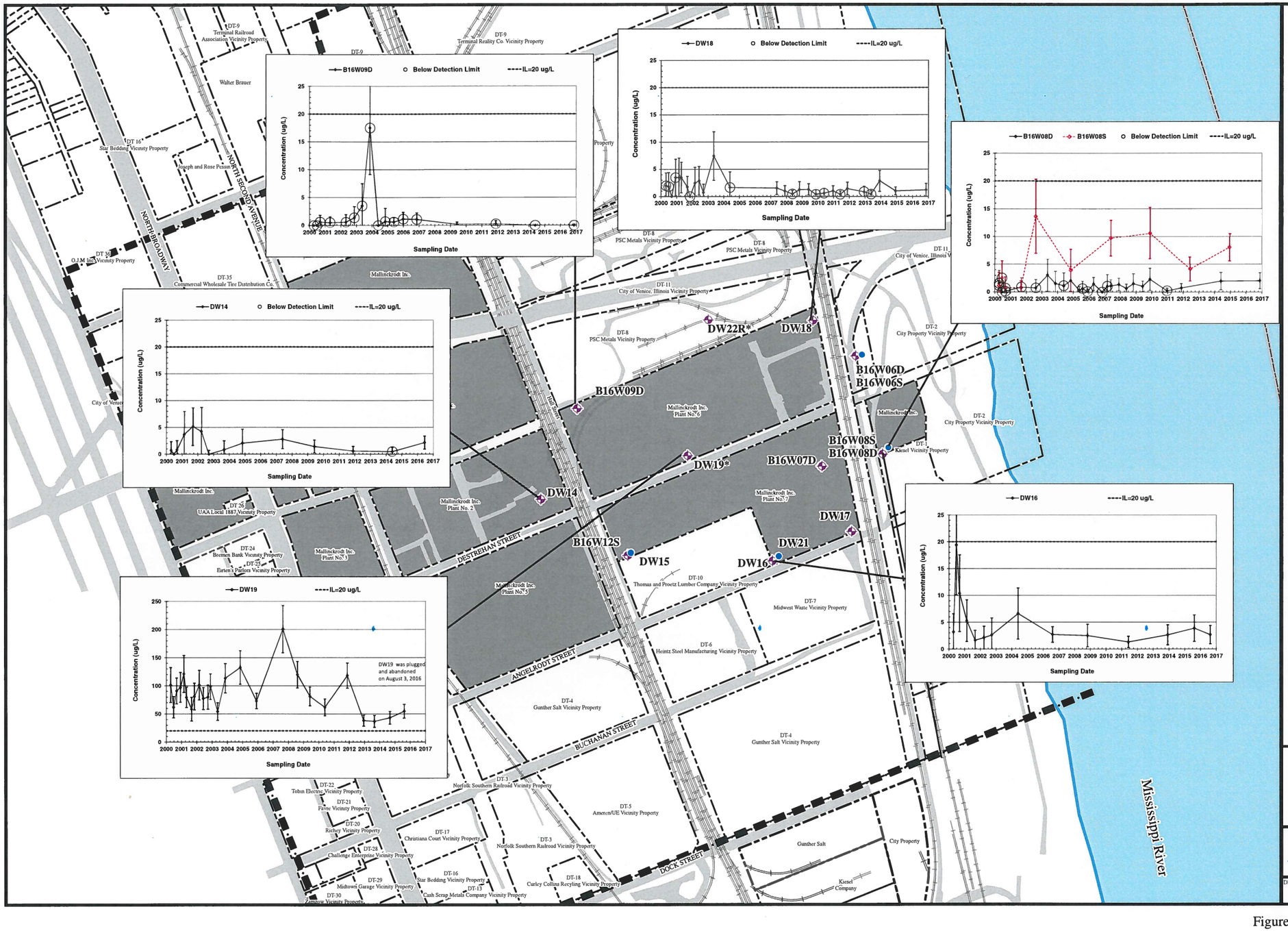
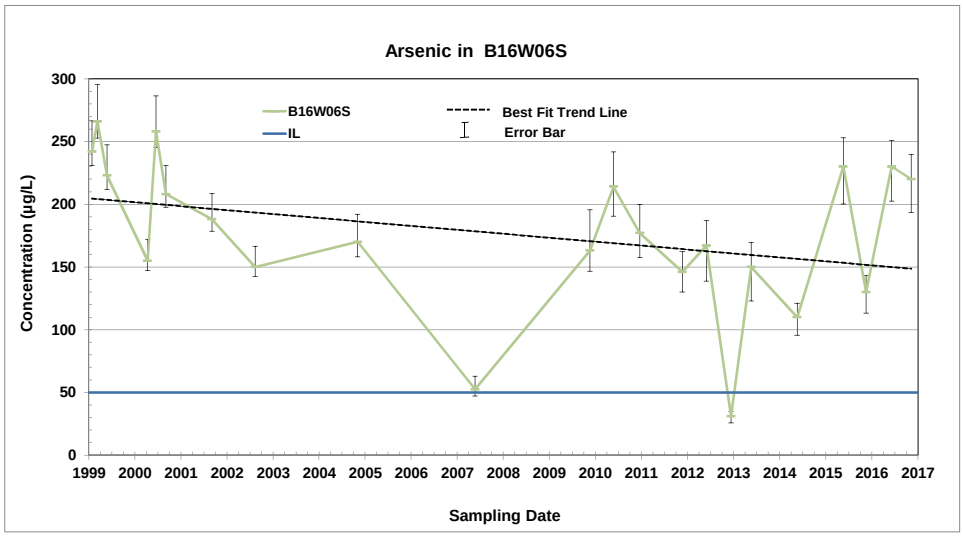
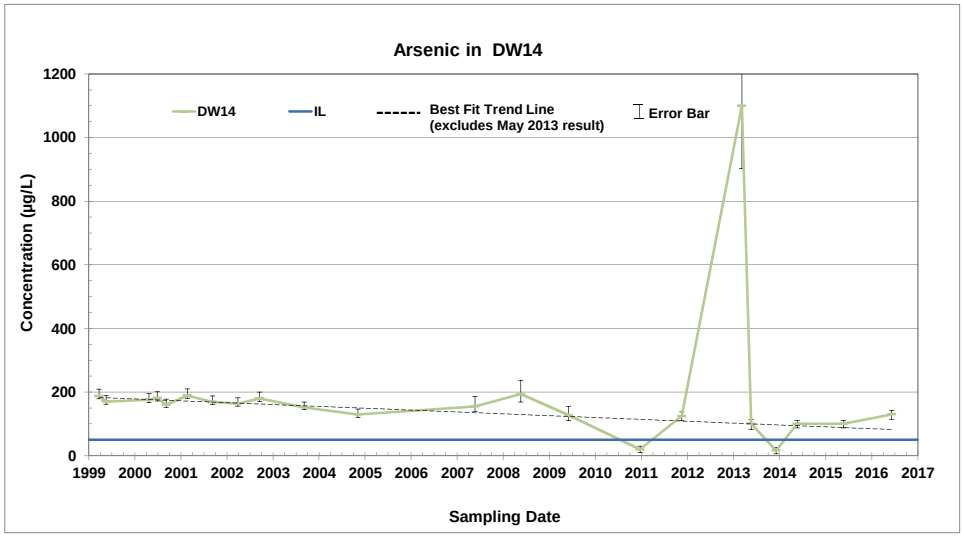
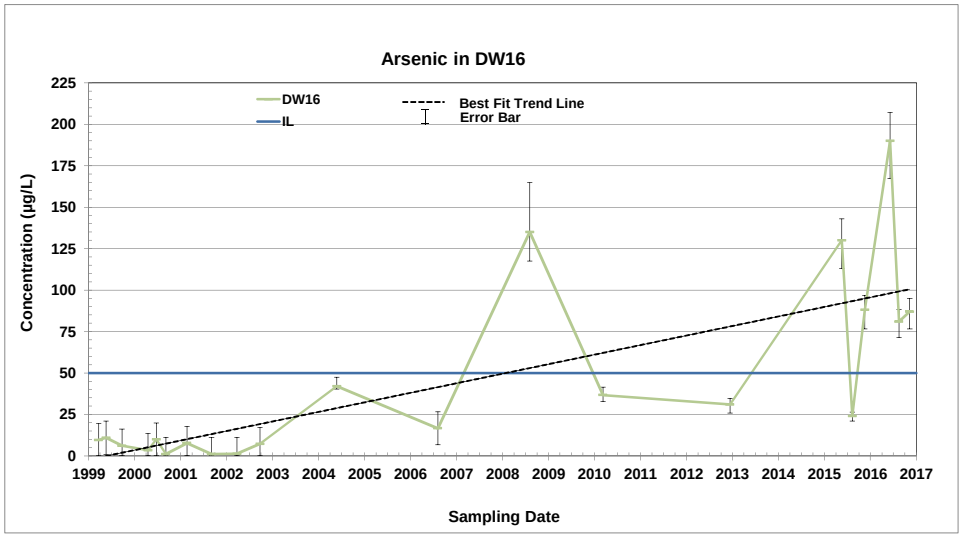


Figure 4-5. Total U Concentration Trends in Unfiltered Ground Water at the SLDS





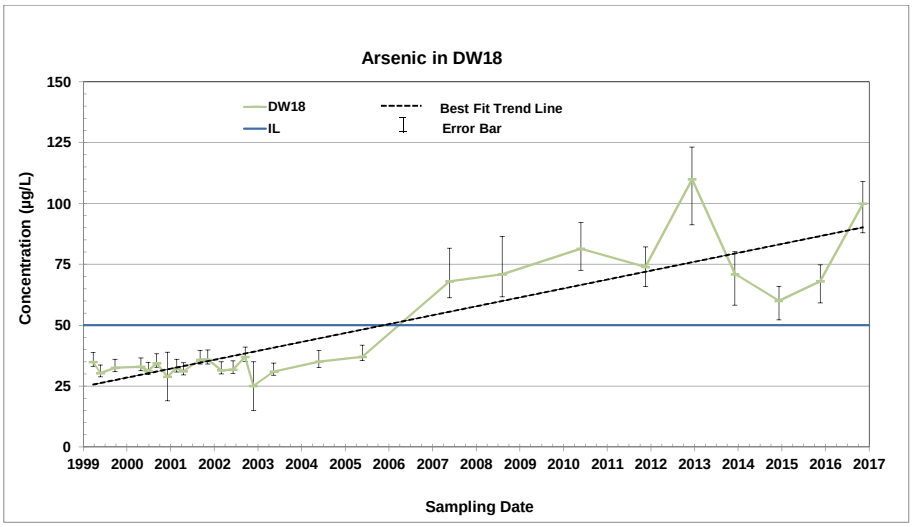


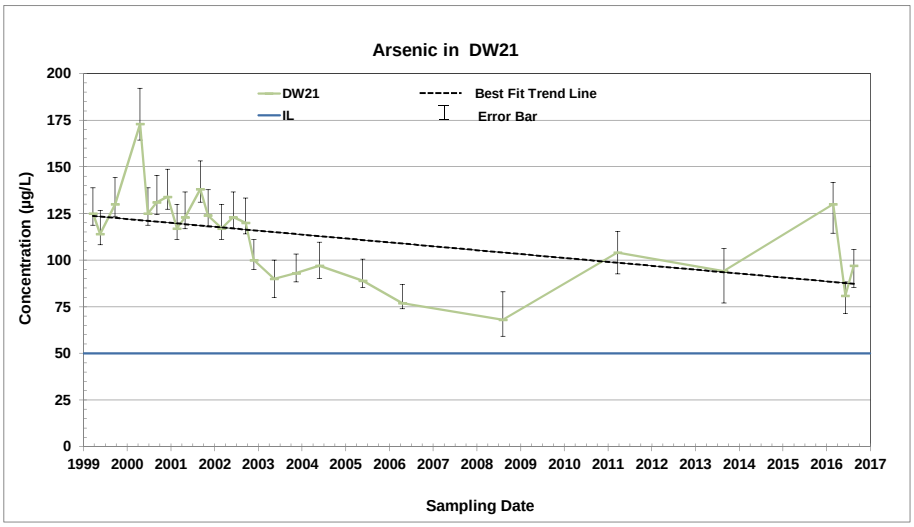
Notes:

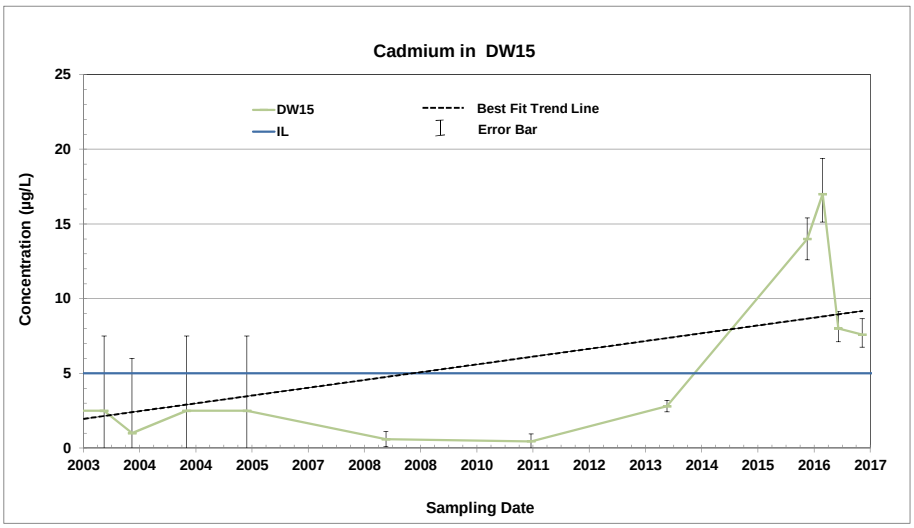
For results less than 3 times the reporting limit (RL), the error bar represents ± RL.
For results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.

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 Arsenic and Cadmium in Ground-Water Monitoring Wells at the SLDS







Notes:

For results less than 3 times the RL, the error bar represents ± RL.

For results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
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 Arsenic and Cadmium in Ground-Water Monitoring Wells at the SLDS (Continued)

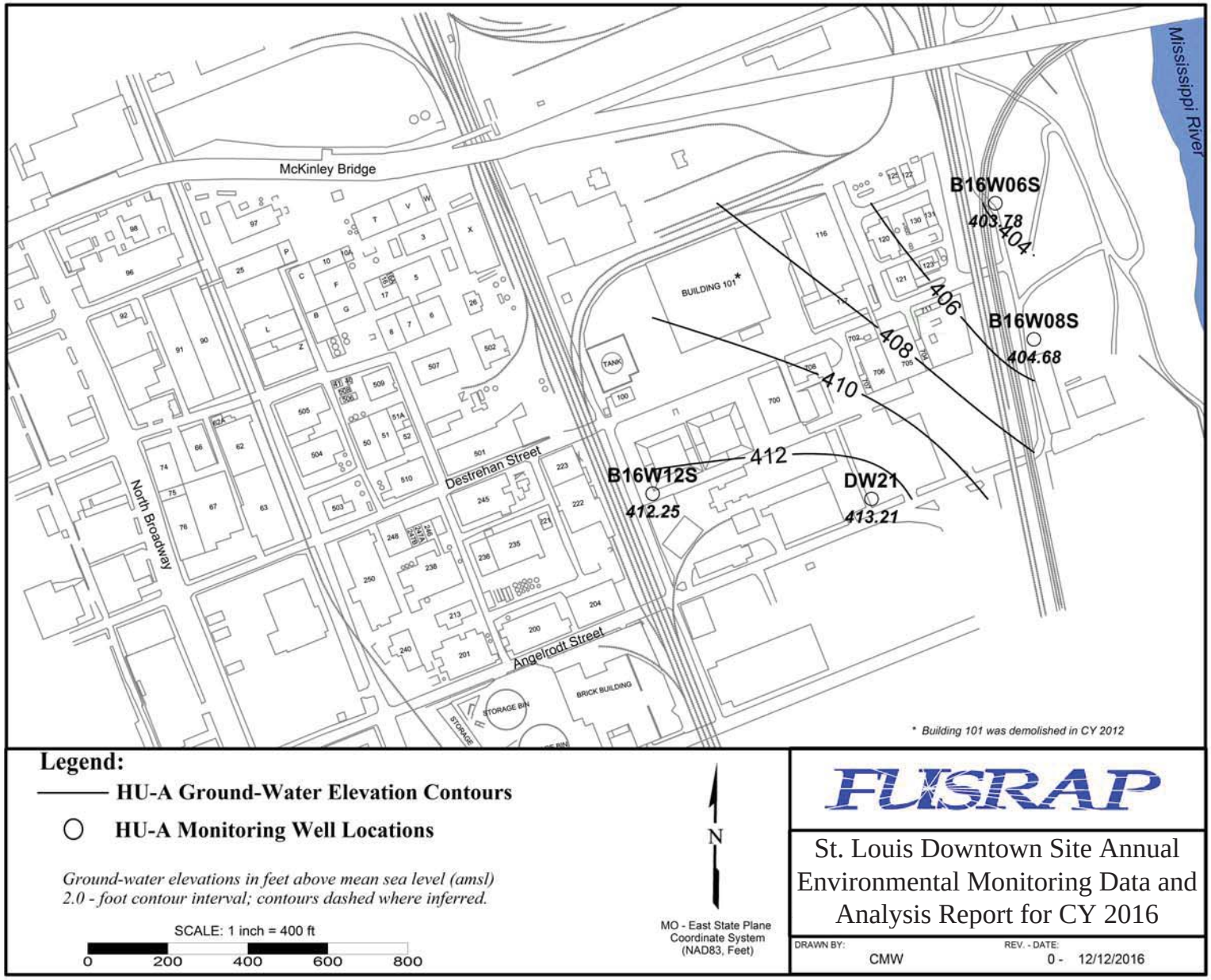


Figure 4-7. HU-A Potentiometric Surface at the SLDS (June 7, 2016)

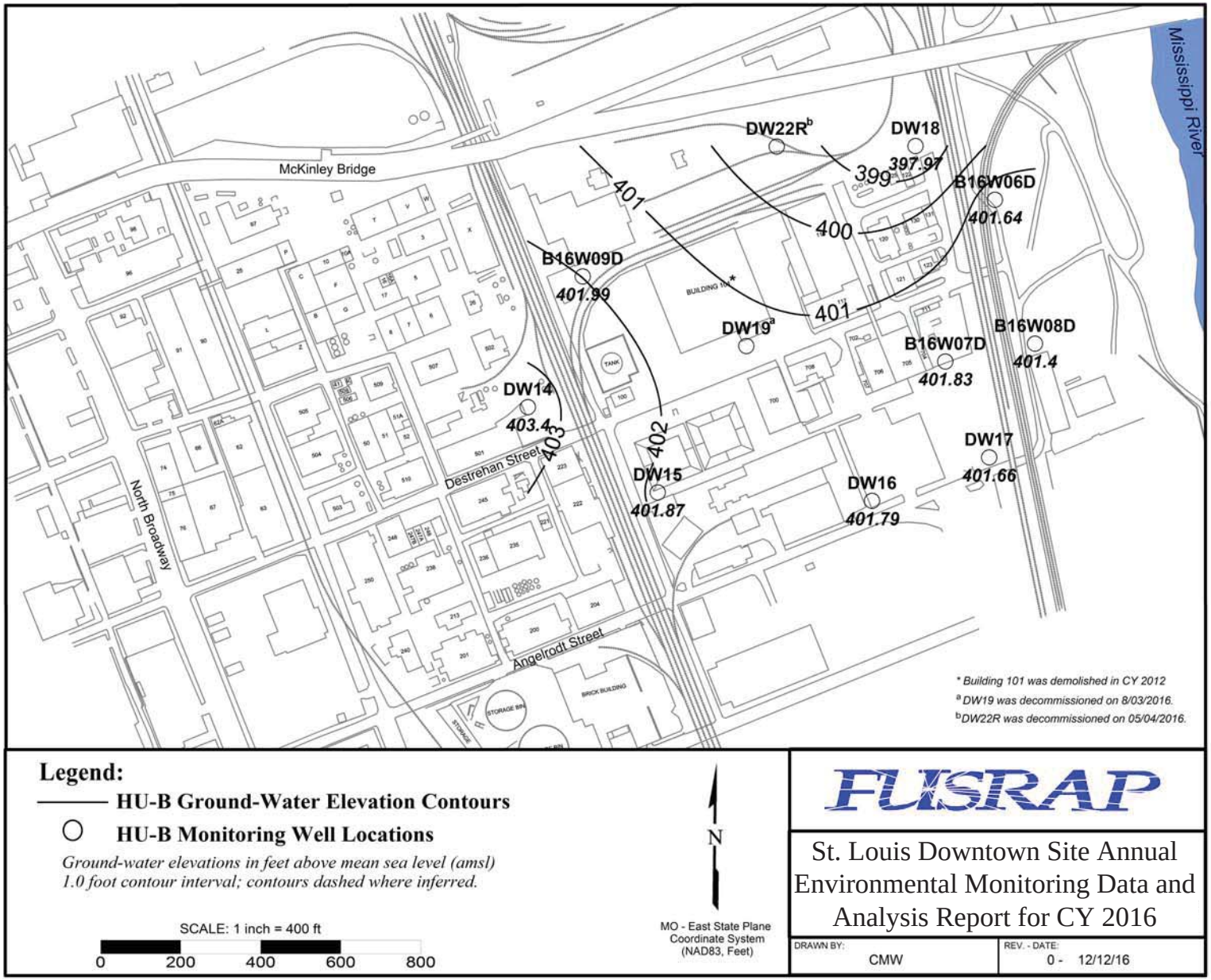


Figure 4-8. HU-B Potentiometric Surface at the SLDS (June 7, 2016)

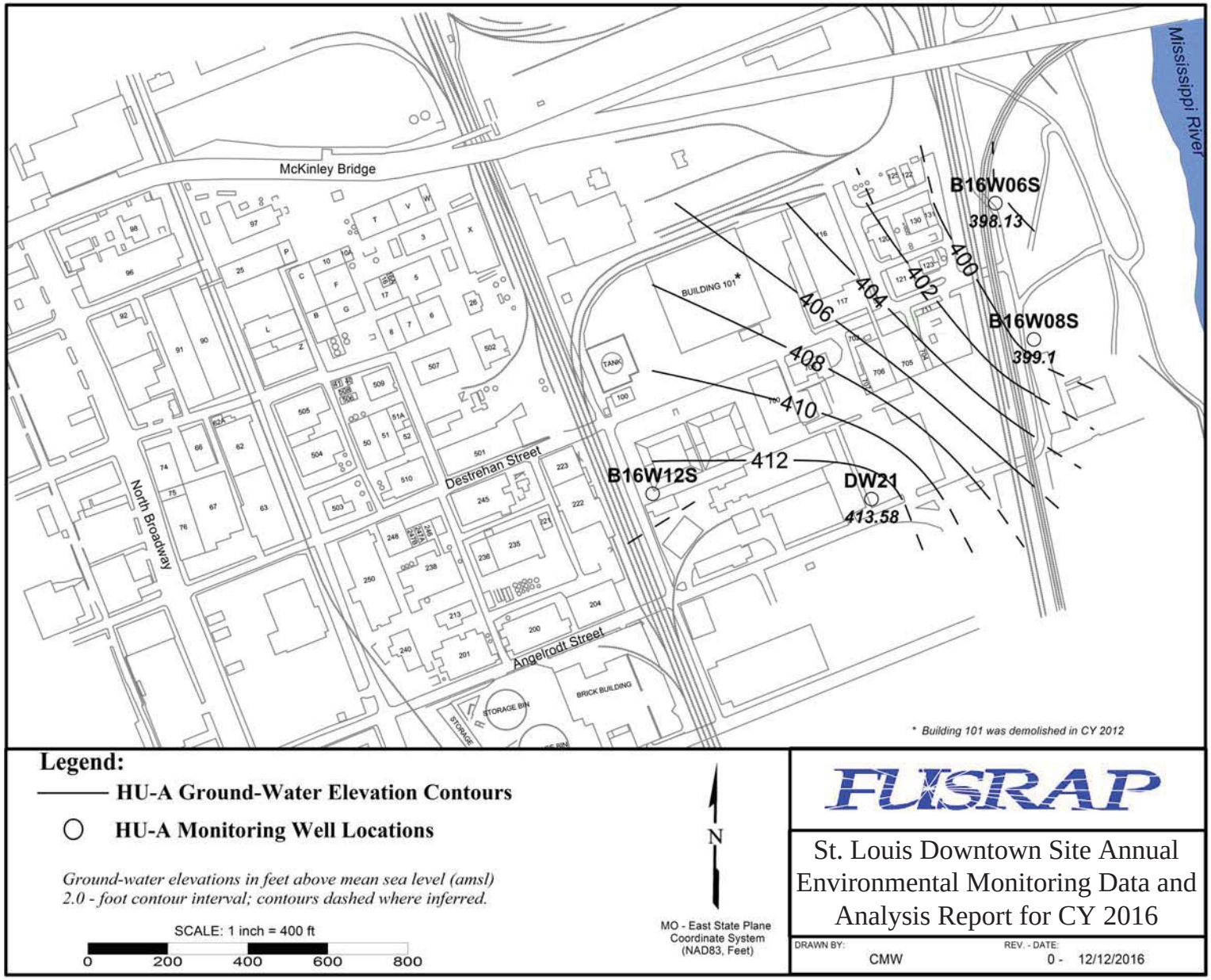


Figure 4-9. HU-A Potentiometric Surface at the SLDS (November 9, 2016)

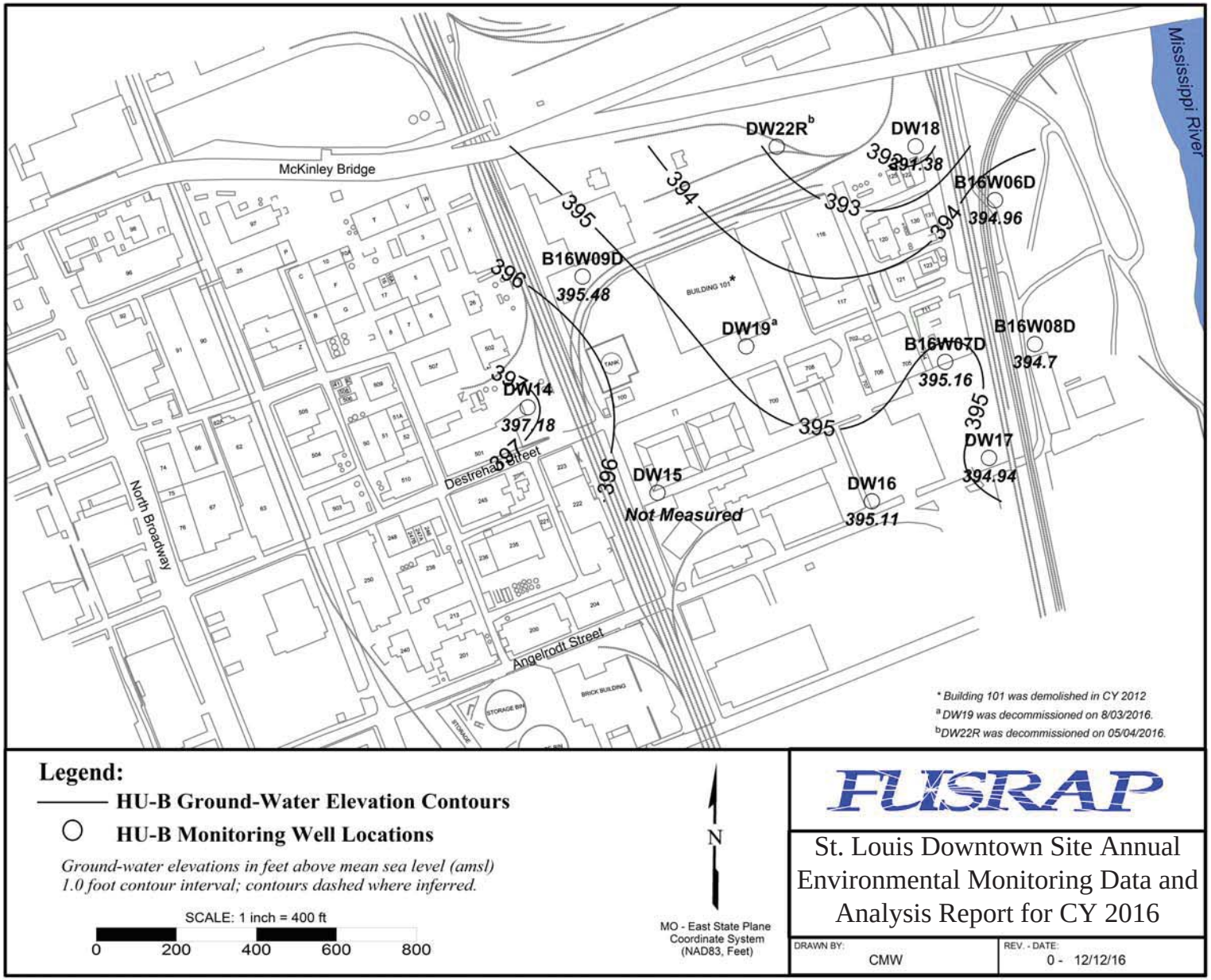


Figure 4-10. HU-B Potentiometric Surface at the SLDS (November 9, 2016)

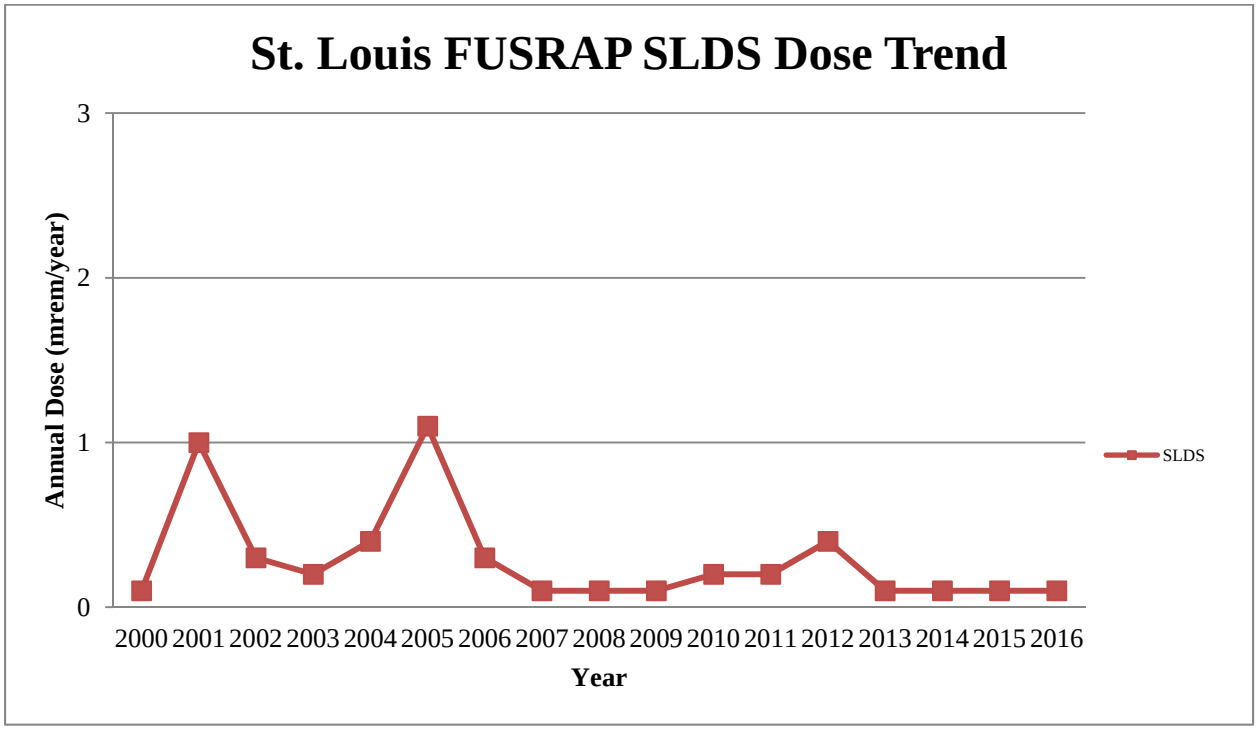


Figure 6-1. St. Louis FUSRAP SLDS Dose Trends

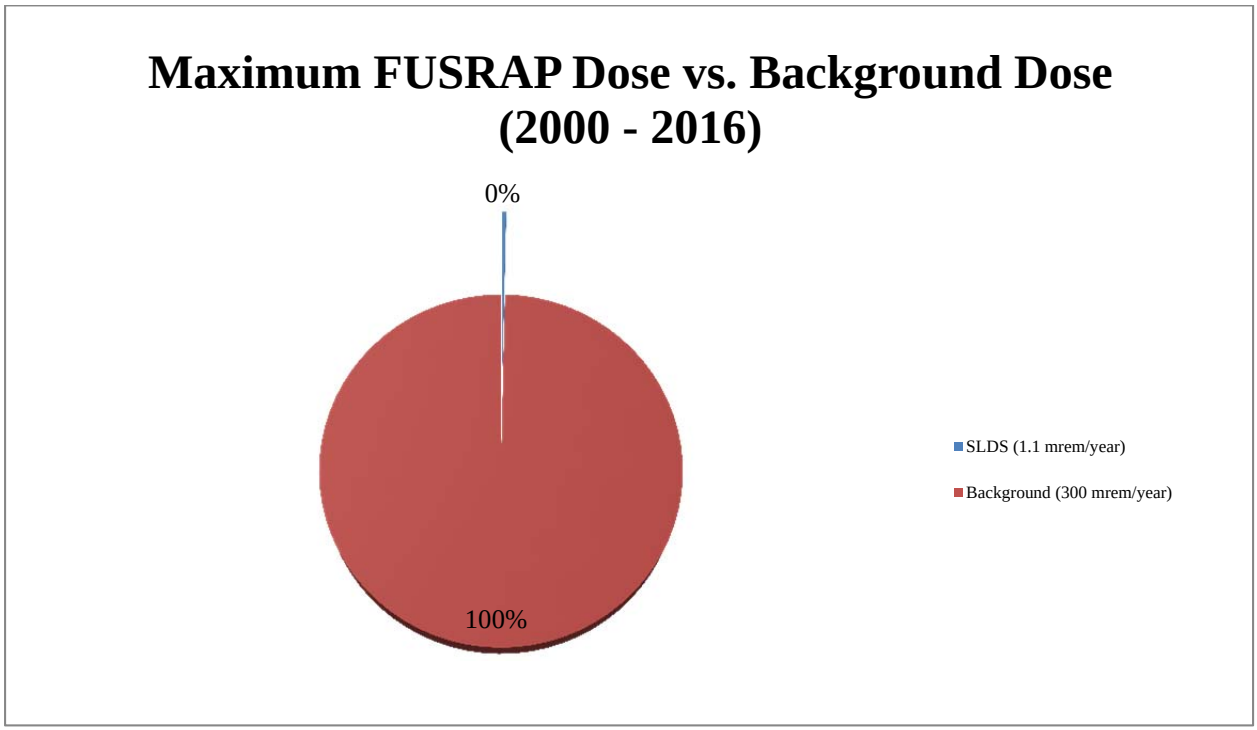


Figure 6-2. St. Louis FUSRAP SLDS Maximum Dose vs. Background Dose

APPENDIX A

ST. LOUIS DOWNTOWN SITE 2016 RADIONUCLIDE EMISSIONS NESHAP REPORT SUBMITTED IN ACCORDANCE WITH REQUIREMENTS OF 40 *CFR* 61, SUBPART I

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ACRONYMS AND ABBREVIATIONS

Ac	actinium
AEC	U.S. Atomic Energy Commission
CFR	*Code of Federal Regulations*
CY	calendar year
EDE	effective dose equivalent
FUSRAP	Formerly Utilized Sites Remedial Action Program
GIS	geographic information system
Mallinckrodt	Mallinckrodt LLC
MED	Manhattan Engineer District
NAD	normalized absolute difference
NESHAP	National Emission Standard for Hazardous Air Pollutants
Pa	protactinium
Ra	radium
RA	remedial action
ROD	*Record of Decision for the St. Louis Downtown Site*
SLDS	St. Louis Downtown Site
SU	survey unit
Th	thorium
U	uranium
USEPA	U.S. Environmental Protection Agency
VP	vicinity property

UNIT ABBREVIATIONS

Both English and metric units are used in this report. The units used in a specific situation are based on common unit usage or regulatory language (e.g., depths are given in feet, and areas are given in square meters). Units included in the following list are not defined at first use in this report.

°C	degree(s) Celsius (centigrade)
µCi/cm^3	microcurie(s) per cubic centimeter
µCi/mL	microcurie(s) per milliliter
Ci	curie(s)
cm	centimeter(s)
cm^3	cubic centimeter(s)
m	meter(s)
m^2	square meter(s)
m^3	cubic meter(s)
mL	milliliter
mrem	millirem
pCi/g	picocuries per gram

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) 2016. 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 NESHAP report evaluates SLDS properties where there was a reasonable potential for radionuclide emissions due to St. Louis FUSRAP activities. These sites include: Plant 6, Plant 7 (including Destrehan Street), and Plant 6 Loadout.

Emissions from the SLDS were evaluated for the entire CY 2016 to provide a conservative estimate of total emissions.

The NESHAP standard of EDE to a critical receptor from radionuclide emissions is 10 mrem per year. 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 less than 0.1 mrem per year.

The evaluation for the SLDS resulted in less than 10 percent of the dose standard prescribed 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 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

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1.0 PURPOSE

This NESHAP report contains the EDE calculations from radionuclide emissions (exclusive of radon) to critical receptors from the SLDS properties at which a reasonable potential existed for radionuclide emissions due to St. Louis FUSRAP activities. These sites include: Plant 6, Plant 7 (including Destrehan Street), and the 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 (i.e., *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities* [USEPA 1989]) referenced in 40 *CFR* 61, Appendix E, *Compliance Procedures Methods for Determining Compliance with Subpart I,* and were measured by collection of environmental air samples. Emission rates, along with appropriate meteorological data and distances to critical receptors[1], were input into the USEPA computer code CAP88-PC 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 models for assessing dose and risk from radioactive air emissions (USEPA 2014). The USEPA continues to maintain and update the CAP88-PC modeling program, and has updated it as recently as September, 2014. 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 NESHAP report to demonstrate compliance with the NESHAP standard.

2.1 EMISSION RATE

The method used to determine particulate radionuclide emission rates from the SLDS 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 4.0 (USEPA 2014). 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 1.0 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, farm, business, and school.

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3.0 METEOROLOGICAL DATA

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

- Average Annual Wind Velocity: 4.446 m per second
- Average Annual Precipitation Rate: 111 cm per year
- Average Annual Air Temperature: 14.18 ºC

Wind speed frequency data were obtained from Lambert – St. Louis International Airport (Table A-1).

Table A-1. St. Louis Wind Speed Frequency

Wind Speed Group (Knots)	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

Knot = 1.151 miles per hour

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

Table A-2. St. Louis Wind Rose Frequency

Wind Direction		Wind Frequency	Wind Direction		Wind Frequency
Wind Toward	Wind From		Wind Toward	Wind From	
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 ST. LOUIS DOWNTOWN SITE PROPERTIES UNDER ACTIVE REMEDIATION

4.1 SITE HISTORY

From 1942 until 1957, Mallinckrodt LLC (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, and radium, thorium, uranium, and their radioactive decay products, were inadvertently released from the Mallinckrodt property into the environment. 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.

4.2 MATERIAL HANDLING AND PROCESSING FOR CALENDAR YEAR 2016

Excavation activities were performed at the SLDS areas of Plant 6 and Plant 7 (including Destrehan Street). 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 and loadout perimeters during CY 2016, with the results used to determine the excavation emissions. In situ emissions from inactive areas of the SLDS were not calculated, because the ground surface soil at the 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 2000) or in property-specific pre-design investigation reports. Attachment A-1 contains summary tables of the radionuclide concentrations for each area or plant and vicinity properties (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 CALENDAR YEAR 2016

Wind erosion during periods of remedial action (RA) excavations and periods in which 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 listed in Table A-3. Distances and directions to critical receptors are determined by using tools in a geographic information system (GIS).

Table A-3. SLDS Critical Receptors for CY 2016

Sources	Nearest Residence		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction
Plant 6	495	SW	2,915	NE	160	SSE	750	W
Plant 7	495	SW	2,915	NE	90	SSE	750	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 excavations and loadout area to measure the radionuclide emissions from remedial activities. The sample locations were established at the start of each remedial activity and provide the basis for determining the radionuclide emission rates during CY 2016. The average gross alpha and beta concentrations (in μCi/mL) are determined for each area or plant location for CY 2016. The area or plant average concentrations are presented in Table A-4.

Table A-4. SLDS Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2016

Sampler Location	Average Concentration (μCi/mL)	
	Gross Alpha	Gross Beta
Plant 6	3.65E-15	2.32E-14
Plant 7	5.85E-15	3.95E-14
Plant 6 Loadout	4.04E-15	3.21E-14
Background Concentration[a]	3.61E-15	1.88E-14

[a] These concentrations are provided for informational purposes only. 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 of this NESHAP report. The product of the radionuclide activity fraction and the gross concentration for each property provides the radionuclide emission concentration (in $\mu Ci/cm^3$) for that area. The gross average concentration ($\mu Ci/cm^3$) is converted to a release (emission) rate, measured in Ci per year using Equations 1 and 2.

A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities (USEPA 1989) (page 3-21, [2]) provides Equation 1 for determination of the effective diameter of a non-circular stack or vent.

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

where:

D = effective diameter of the release in m
A = area of the stack, vent, or release point (in m^2)

Table A-5 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 the SLDS where excavation or loadout was conducted in CY 2016. Calculation of the effective surface area is contained in Attachment A-1.

Table A-5. SLDS Excavation Effective Areas and Effective Diameters for CY 2016

SLDS Location	Effective Area (m^2)	Effective Diameter (m)
Plant 6	2,568	58
Plant 7	150	14
Plant 6 Loadout	461	24

The average annual wind speed for the Lambert – St. Louis International Airport is provided in CAP88-PC as 4.446 m per 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.

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

where:

V = wind velocity (in m per minute) = 266.76 m per minute
F = flow rate (in m^3 per minute)
π = mathematical constant
D = effective diameter of the release (in m) determined using Equation 1

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-6. 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 listed in Table A-7. Flow rate and average radionuclide concentration data are contained in Attachment A-1.

Table A-6. SLDS Site Release Flow Rates for CY 2016

SLDS Location	Site Release Flow Rate (m^3/minute)
Plant 6	7.0E+05
Plant 7	4.1E+04
Plant 6 Loadout	1.3E+05

4.6.2 St. Louis Downtown Site Total Airborne Radioactive Particulate Emission Rates

The CY 2016 emission rates for each excavated SLDS area are presented in Table A-7 and are based on the air samples collected from the perimeter of the excavated areas.

Table A-7. SLDS Area Airborne Radioactive Particulate Emission Rates Based on Excavation Perimeter Air Samples for CY 2016

Radionuclide	Emission (Ci/year)[a]		
	Plant 6	Plant 7	Plant 6 Loadout
Uranium (U)-238	4.7E-04	3.1E-05	8.8E-05
U-235	2.3E-05	1.5E-06	4.4E-06
U-234	4.7E-04	3.1E-05	8.8E-05
Radium (Ra)-226	9.1E-05	1.9E-05	2.2E-05
Thorium (Th)-232	2.3E-05	7.3E-06	6.6E-06
Th-230	1.7E-04	2.0E-05	3.6E-05
Th-228	2.3E-05	7.3E-06	6.6E-06
Ra-224	2.3E-05	7.3E-06	6.6E-06
Th-234	4.0E-03	3.4E-04	9.7E-04
Protactinium (Pa)-234m	4.0E-03	3.4E-04	9.7E-04

Table A-7. SLDS Area Airborne Radioactive Particulate Emission Rates Based on Excavation Perimeter Air Samples for CY 2016 (Continued)

Radionuclide	Emission (Ci/year)[a]		
	Plant 6	Plant 7	Plant 6 Loadout
Th-231	2.0E-04	1.6E-05	4.8E-05
Ra-228	2.0E-04	8.0E-05	7.2E-05
Actinium (Ac)-228	2.0E-04	8.0E-05	7.2E-05
Pa-231	2.3E-05	1.5E-06	4.4E-06
Ac-227	2.3E-05	1.5E-06	4.4E-06

[a] Release rate based on 366-day period at a respective flow rate (as presented in Table A-6) as determined from the average annual wind speed (4.446 m per second) and the effective site area (as presented in Table A-5) for each location.

4.7 CAP88-PC RESULTS

The CAP88-PC report is contained in Attachment A-2. The effective area factor input was taken from Table A-5. This evaluation demonstrates that all SLDS critical receptors receive less than 10 percent of the dose standard prescribed in 40 *CFR* 61.102; therefore, the SLDS is exempt from the reporting requirements of 40 *CFR* 61.104(a). The results are summarized in Table A-8.

Table A-8. SLDS CAP88-PC Results for Critical Receptors for CY 2016

Source	Dose (mrem/year)			
	Nearest Residence[a]	Farm[a]	Business[b]	School[b]
Plant 6	<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	<0.1	<0.1

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

5.0 REFERENCES

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

USACE 2000. U.S. Army Corps of Engineers, St. Louis District Office. *St. Louis-FUSRAP Internal Dosimetry Technical Basis Manual*. September.

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

USEPA 2014. U.S. Environmental Protection Agency. CAP88-PC Version 4.0 Computer Code, U.S. Environmental Protection Agency. September.

18 *U.S. Code* 1001. *U.S. Code,* Title 18, Crimes and Criminal Procedure; Part I, Crimes; Chapter 47, Fraud and False Statements; Section 1001, Statements or entries generally.

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* 61, Appendix D. *Methods 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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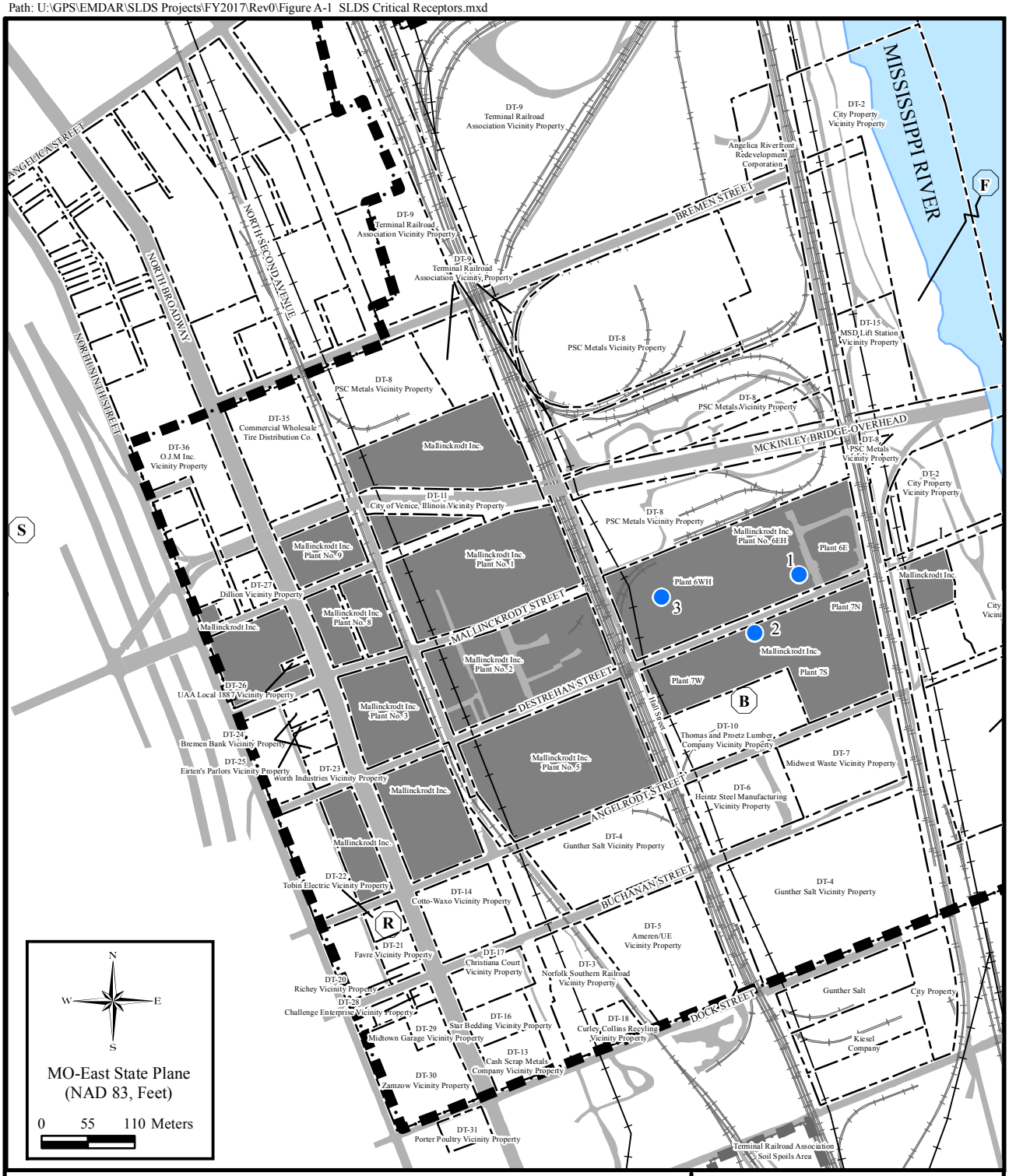
Path: U:\GPS\EMDAR\SLDS Projects\FY2017\Rev0\Figure A-1 SLDS Critical Receptors.mxd



Legend

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

Location	R Residential	F Farm	B Business	S School
1. Plant 6	495 SW	2,915 NE	160 SSE	750 W
2. Plant 7	495 SW	2,915 NE	90 SSE	750 W
3. Plant 6 Loadout	495 SW	2,915 NE	160 SSE	750 W

*Distances from property/source to critical receptors are in meters

St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for CY 2016

FUSRAP

DRAWN BY:	REV:	DATE:
Leidos	0	7/10/2017

Figure A-1. SLDS Critical Receptors

ATTACHMENT A-1

CALCULATED EMISSION RATES FROM ST. LOUIS DOWNTOWN SITE PROPERTIES

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Table A-1-1. SLDS Excavation/Loadout Area Soil Radionuclide Concentrations for CY 2016

Property	Plant 6[a]	Plant 7[a]	Plant 6 Loadout Average[b]
Radionuclide	**Average Concentration (pCi/g)**		
U-238	140	21	81
U-235	7	1	4
U-234	140	21	81
Ra-226	27	13	20
Ra-228	7	5	6
Th-232	7	5	6
Th-230	52	14	33
Th-228	7	5	6

[a] Radionuclides and concentrations from *St. Louis-FUSRAP Internal Dosimetry Technical Basis Manual* (USACE 1999) or in property-specific pre-design investigation reports.
[b] Average concentration from the SLDS CY 2016 excavated property and loadout area.

Table A-1-2. SLDS Average Gross Alpha and Beta Airborne Particulate Concentrations for CY 2016

Location	Average Concentration (μCi/mL) for Location[a]	
	Gross Alpha	**Gross Beta**
Plant 6	3.65E-15	2.32E-14
Plant 7	5.85E-15	3.95E-14
Plant 6 Loadout	4.04E-15	3.21E-14
Background Concentration[b]	3.61E-15	1.88E-14

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

Table A-1-3. SLDS Excavation Data for CY 2016

Excavation Location Name	Surface Area (m^2)	Start Date[a]	Backfill Date[a]
Plant 6WH, Building 101, Survey Unit (SU)-16A	595	01/01/16	04/25/16
Plant 6WH, Building 101, SU-16B	634	01/01/16	05/16/16
Plant 6WH, Building 101, SU-16C	333	01/01/16	05/16/16
Plant 6WH, Building 101, SU-16D	262	01/01/16	07/05/16
Plant 6WH, Building 101, SU-16E	145	01/01/16	07/05/16
Plant 6WH, Building 101, SU-16F	61	01/01/16	10/13/16
Plant 6WH, Building 101, SU-17A	1,156	01/01/16	07/05/16
Plant 6WH, Building 101, SU-17B	882	01/01/16	10/13/16
Plant 6WH, Building 101, SU-18	169	06/20/16	08/01/16
Plant 6WH, Building 101, SU-19A	438	07/18/16	12/31/16
Plant 6WH, Building 101, SU-19B	554	07/18/16	12/31/16
Plant 7W North, SU-5B	365	06/28/16	10/12/16
Plant 7W North, SU-1A	240	09/27/16	12/01/16
Plant 6 Loadout	2,000	01/01/16	12/31/16

[a] Open/close dates set to start or stop at the CY boundary.

Table A-1-4. SLDS Average Surface Area and Flow Rate Per Location at the SLDS for CY 2016

Location	Total Days	Surface Area × Total Days	Average Surface Area/year[a] (m^2)	Diameter of Stack $D = (1.3\ A)^{1/2}$ (m)	Flow Rate $F = V\ \pi\ (D)^2 / 4$ (m^3/minute)
Plant 6					
Plant 6WH, Building 101, SU-16A	116	69,020			
Plant 6WH, Building 101, SU-16B	137	86,858			
Plant 6WH, Building 101, SU-16C	137	45,621			
Plant 6WH, Building 101, SU-16D	187	48,994			
Plant 6WH, Building 101, SU-16E	187	27,115			
Plant 6WH, Building 101, SU-16F	287	17,507			
Plant 6WH, Building 101, SU-17A	187	216,172			
Plant 6WH, Building 101, SU-17B	287	253,134			
Plant 6WH, Building 101, SU-18	43	7,267			
Plant 6WH, Building 101, SU-19A	167	73,146			
Plant 6WH, Building 101, SU-19B	167	92,518			
	Total	937,352	2,568	58	**7.0E+05**
Plant 7					
Plant 7W North, SU-5B	107	39,055			
Plant 7W North, SU-1A	66	15,840			
	Total	54,895	150	14	**4.1E+04**
Plant 6 Loadout					
Plant 6 Loadout	366	167,900			
	Total	167,900	461	24	**1.3E+05[b]**

[a] Average surface area/year = [Σ(surface area x total days)]/366.

[b] This value has been multiplied by a factor of 0.23 to account for the loadout pile being uncovered for 2,000 hours per year.

Table A-1-5. SLDS Airborne Radioactive Particulate Emissions Based on Excavation Perimeter Air Samples for CY 2016

Property	Plant 6			Plant 7			Plant 6 Loadout		
Radionuclide	Activity Fraction[a]	Emission Conc. ($\mu Ci/cm^3$)[b]	Release Rate (Ci/year)[c]	Activity Fraction[a]	Emission Conc. ($\mu Ci/cm^3$)[b]	Release Rate (Ci/year)[c]	Activity Fraction[a]	Emission Conc. ($\mu Ci/cm^3$)[b]	Release Rate (Ci/year)[c]
U-238	0.35	1.3E-15	4.7E-04	0.24	1.4E-15	3.1E-05	0.33	1.3E-15	8.8E-05
U-235	0.02	6.4E-17	2.3E-05	0.01	6.7E-17	1.5E-06	0.02	6.6E-17	4.4E-06
U-234[d]	0.35	1.3E-15	4.7E-04	0.24	1.4E-15	3.1E-05	0.33	1.3E-15	8.8E-05
Ra-226	0.07	2.5E-16	9.1E-05	0.15	8.7E-16	1.9E-05	0.08	3.3E-16	2.2E-05
Th-232	0.02	6.4E-17	2.3E-05	0.06	3.4E-16	7.3E-06	0.02	9.9E-17	6.6E-06
Th-230	0.13	4.7E-16	1.7E-04	0.16	9.4E-16	2.0E-05	0.14	5.5E-16	3.6E-05
Th-228[d]	0.02	6.4E-17	2.3E-05	0.06	3.4E-16	7.3E-06	0.02	9.9E-17	6.6E-06
Ra-224[d]	0.02	6.4E-17	2.3E-05	0.06	3.4E-16	7.3E-06	0.02	9.9E-17	6.6E-06
Th-234[d]	0.47	1.1E-14	4.0E-03	0.40	1.6E-14	3.4E-04	0.45	1.5E-14	9.7E-04
Pa-234m[d]	0.47	1.1E-14	4.0E-03	0.40	1.6E-14	3.4E-04	0.45	1.5E-14	9.7E-04
Th-231[d]	0.02	5.4E-16	2.0E-04	0.02	7.4E-16	1.6E-05	0.02	7.2E-16	4.8E-05
Ra-228[d]	0.02	5.4E-16	2.0E-04	0.09	3.7E-15	8.0E-05	0.03	1.1E-15	7.2E-05
Ac-228[d]	0.02	5.4E-16	2.0E-04	0.09	3.7E-15	8.0E-05	0.03	1.1E-15	7.2E-05
Pa-231[d]	0.02	6.4E-17	2.3E-05	0.01	6.7E-17	1.5E-06	0.02	6.6E-17	4.4E-06
Ac-227[d]	0.02	6.4E-17	2.3E-05	0.01	6.7E-17	1.5E-06	0.02	6.6E-17	4.4E-06

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

[b] Emission concentration is equal to the activity fraction times the gross alpha or gross beta airborne particulate concentrations listed in Table A-1-2.

[c] Release rate based on 366-day period at measured flow rate (Table A-1-4) for each site, as determined from the average annual wind speed (4.446 m per second) and calculated site area (Table A-1-4). (Note: 1 mL = 1 cm^3).

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

Conc. – concentration

ATTACHMENT A-2

CAP88-PC OUTPUT REPORT FOR ST. LOUIS DOWNTOWN SITE PROPERTIES

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CAP88 OUTPUT RESULTS

Plant 6

C A P 8 8 - P C

Version 4.0

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Tue Mar 14 13:38:48 2017

Facility: Plant 6
Address: Destrehan
City: Saint Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2016
DOSE Age Group: Adult

Comments: Air
Air

Dataset Name: Plant6 2016.
Dataset Date: Mar 14, 2017 01:38 PM
Wind File: C:\Users\hansenra\Documents\CAP88\Wind Files\13994.WND

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Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenal	1.39E-01
UB_Wall	1.50E-01
Bone_Sur	1.24E+01
Brain	1.45E-01
Breasts	1.57E-01
St_Wall	1.46E-01
SI_Wall	1.46E-01
ULI_Wall	1.55E-01
LLI_Wall	1.76E-01
Kidneys	3.58E-01
Liver	8.24E-01
Muscle	1.60E-01
Ovaries	2.35E-01
Pancreas	1.40E-01
R_Marrow	6.80E-01
Skin	2.61E+00
Spleen	1.47E-01
Testes	2.54E-01
Thymus	1.45E-01
Thyroid	1.51E-01
GB_Wall	1.40E-01
Ht_Wall	1.45E-01
Uterus	1.44E-01
ET_Reg	8.38E-01
Lung_66	2.56E+00
Effectiv	7.06E-01

PATHWAY COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	2.74E-02
INHALATION	5.43E-01
AIR IMMERSION	4.75E-06
GROUND SURFACE	1.36E-01
INTERNAL	5.70E-01
EXTERNAL	1.36E-01
TOTAL	7.06E-01

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Page 2

NUCLIDE COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	5.62E-02
Th-234	3.36E-03
Pa-234m	2.12E-02
Pa-234	4.18E-04
U-234	6.78E-02
Th-230	1.19E-01
Ra-226	1.77E-02
Rn-222	1.36E-05
Po-218	2.43E-10
Pb-214	8.87E-03
At-218	9.13E-10
Bi-214	5.18E-02
Rn-218	5.29E-12
Po-214	2.87E-06
Tl-210	2.02E-05
Pb-210	4.36E-05
Bi-210	7.05E-04
Hg-206	5.69E-11
Po-210	1.83E-07
Tl-206	1.65E-09
U-235	4.31E-03
Th-231	1.41E-04
Pa-231	1.10E-01
Ac-227	8.32E-02
Th-227	1.03E-03
Fr-223	9.73E-06
Ra-223	1.15E-03
Rn-219	5.00E-04
At-219	0.00E+00
Bi-215	2.25E-09
Po-215	1.53E-06
Pb-211	9.82E-04
Bi-211	4.04E-04
Tl-207	5.08E-04
Po-211	1.95E-07
Th-232	2.96E-02
Ra-228	4.03E-02
Ac-228	1.74E-02
Th-228	3.99E-02
Ra-224	2.74E-03
Rn-220	1.21E-05
Po-216	2.91E-07
Pb-212	2.65E-03
Bi-212	3.09E-03
Po-212	0.00E+00
Tl-208	2.13E-02
TOTAL	7.06E-01

Tue Mar 14 13:38:48 2017 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	6.66E-09
INHALATION	1.15E-07
AIR IMMERSION	2.28E-12
GROUND SURFACE	6.38E-08
INTERNAL	1.22E-07
EXTERNAL	6.38E-08
TOTAL	1.86E-07

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Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.88E-08
Th-234	1.39E-09
Pa-234m	3.71E-09
Pa-234	2.27E-10
U-234	2.33E-08
Th-230	2.63E-08
Ra-226	9.30E-09
Rn-222	7.41E-12
Po-218	1.08E-16
Pb-214	4.74E-09
At-218	1.12E-16
Bi-214	2.74E-08
Rn-218	2.89E-18
Po-214	1.58E-12
Tl-210	1.08E-11
Pb-210	1.95E-11
Bi-210	7.81E-11
Hg-206	2.52E-17
Po-210	1.00E-13
Tl-206	1.85E-16
U-235	1.72E-09
Th-231	6.41E-11
Pa-231	4.75E-09
Ac-227	1.04E-08
Th-227	5.59E-10
Fr-223	3.62E-12
Ra-223	6.23E-10
Rn-219	2.74E-10
At-219	0.00E+00
Bi-215	1.00E-15
Po-215	8.37E-13
Pb-211	3.51E-10
Bi-211	2.21E-10
Tl-207	6.53E-11
Po-211	1.07E-13
Th-232	6.48E-09
Ra-228	5.84E-09
Ac-228	9.24E-09
Th-228	1.43E-08
Ra-224	1.03E-09
Rn-220	6.60E-12
Po-216	1.60E-13
Pb-212	1.44E-09
Bi-212	1.19E-09
Po-212	0.00E+00
Tl-208	1.16E-08
TOTAL	1.86E-07

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INDIVIDUAL COMMITTED EFFECTIVE DOSE EQUIVALENT (mrem)[a]
(All Radionuclides and Pathways)

	Distance (m)				
Direction	160	495	750	2915	
N	7.1E-01	1.0E-01	5.9E-02	2.3E-02	
NNW	3.7E-01	6.3E-02	4.0E-02	2.2E-02	
NW	4.4E-01	7.1E-02	4.3E-02	2.2E-02	
WNW	5.3E-01	8.2E-02	4.8E-02	2.2E-02	
W	4.0E-01	6.6E-02	4.1E-02	2.2E-02	School
WSW	2.0E-01	4.2E-02	3.0E-02	2.1E-02	
SW	2.8E-01	5.1E-02	3.4E-02	2.1E-02	Residence
SSW	3.4E-01	5.9E-02	3.7E-02	2.1E-02	
S	3.0E-01	5.4E-02	3.6E-02	2.1E-02	
SSE	2.2E-01	4.4E-02	3.1E-02	2.1E-02	Business
SSE	3.0E-01	5.5E-02	3.6E-02	2.1E-02	
ESE	5.1E-01	8.0E-02	4.7E-02	2.2E-02	
E	6.7E-01	9.8E-02	5.5E-02	2.3E-02	
ENE	5.6E-01	8.5E-02	4.9E-02	2.2E-02	
NE	3.5E-01	5.9E-02	3.8E-02	2.1E-02	Farm
NNE	2.9E-01	5.3E-02	3.5E-02	2.1E-02	

[a] Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2016 Radionuclide Emissions NESHAP Report (Appendix A) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

Tue Mar 14 13:38:48 2017 SUMMARY
Page 6

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

	Distance (m)			
Direction	160	495	750	2915
N	1.9E-07	2.7E-08	1.5E-08	5.8E-09
NNW	9.7E-08	1.6E-08	1.0E-08	5.3E-09
NW	1.1E-07	1.8E-08	1.1E-08	5.4E-09
WNW	1.4E-07	2.1E-08	1.2E-08	5.5E-09
W	1.1E-07	1.7E-08	1.0E-08	5.3E-09
WSW	5.3E-08	1.1E-08	7.5E-09	5.0E-09
SW	7.4E-08	1.3E-08	8.6E-09	5.1E-09
SSW	9.0E-08	1.5E-08	9.5E-09	5.2E-09
S	7.9E-08	1.4E-08	9.1E-09	5.2E-09
SSE	5.6E-08	1.1E-08	7.8E-09	5.1E-09
SSE	8.0E-08	1.4E-08	9.1E-09	5.2E-09
ESE	1.3E-07	2.1E-08	1.2E-08	5.5E-09
E	1.8E-07	2.6E-08	1.4E-08	5.7E-09
ENE	1.5E-07	2.2E-08	1.3E-08	5.5E-09
NE	9.0E-08	1.5E-08	9.6E-09	5.3E-09
NNE	7.7E-08	1.4E-08	8.9E-09	5.2E-09

CAP88 OUTPUT RESULTS

Plant 7

C A P 8 8 - P C

Version 4.0

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Tue Mar 14 11:47:43 2017

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

Source Category: Area
Source Type: Area
Emission Year: 2016
DOSE Age Group: Adult

Comments: Air
Air

Dataset Name: Plant7 2016.
Dataset Date: Mar 14, 2017 11:47 AM
Wind File: C:\Users\hansenra\Documents\CAP88\Wind Files\13994.WND

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Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenal	8.11E-02
UB_Wall	8.93E-02
Bone_Sur	3.97E+00
Brain	8.52E-02
Breasts	9.27E-02
St_Wall	8.61E-02
SI_Wall	8.56E-02
ULI_Wall	8.91E-02
LLI_Wall	9.68E-02
Kidneys	1.51E-01
Liver	2.54E-01
Muscle	9.54E-02
Ovaries	1.09E-01
Pancreas	8.18E-02
R_Marrow	2.96E-01
Skin	8.64E-01
Spleen	8.68E-02
Testes	1.21E-01
Thymus	8.56E-02
Thyroid	8.88E-02
GB_Wall	8.22E-02
Ht_Wall	8.52E-02
Uterus	8.46E-02
ET_Reg	3.86E-01
Lung_66	1.10E+00
Effectiv	2.97E-01

PATHWAY COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.88E-02
INHALATION	1.94E-01
AIR IMMERSION	3.27E-06
GROUND SURFACE	8.48E-02
INTERNAL	2.13E-01
EXTERNAL	8.48E-02
TOTAL	2.97E-01

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NUCLIDE COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.02E-02
Th-234	6.96E-04
Pa-234m	3.82E-03
Pa-234	7.54E-05
U-234	1.23E-02
Th-230	3.85E-02
Ra-226	9.95E-03
Rn-222	7.62E-06
Po-218	1.36E-10
Pb-214	4.98E-03
At-218	5.12E-10
Bi-214	2.91E-02
Rn-218	2.97E-12
Po-214	1.61E-06
Tl-210	1.14E-05
Pb-210	2.45E-05
Bi-210	3.96E-04
Hg-206	3.19E-11
Po-210	1.03E-07
Tl-206	9.24E-10
U-235	7.70E-04
Th-231	2.52E-05
Pa-231	1.97E-02
Ac-227	1.50E-02
Th-227	1.83E-04
Fr-223	1.72E-06
Ra-223	2.05E-04
Rn-219	8.86E-05
At-219	0.00E+00
Bi-215	3.99E-10
Po-215	2.71E-07
Pb-211	1.74E-04
Bi-211	7.17E-05
Tl-207	9.02E-05
Po-211	3.45E-08
Th-232	2.59E-02
Ra-228	4.30E-02
Ac-228	1.75E-02
Th-228	3.50E-02
Ra-224	2.43E-03
Rn-220	1.21E-05
Po-216	2.91E-07
Pb-212	2.65E-03
Bi-212	3.09E-03
Po-212	0.00E+00
Tl-208	2.14E-02
TOTAL	2.97E-01

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	3.59E-09
INHALATION	4.60E-08
AIR IMMERSION	1.71E-12
GROUND SURFACE	4.32E-08
INTERNAL	4.96E-08
EXTERNAL	4.32E-08
TOTAL	9.29E-08

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	3.42E-09
Th-234	2.80E-10
Pa-234m	6.69E-10
Pa-234	4.10E-11
U-234	4.23E-09
Th-230	8.53E-09
Ra-226	5.11E-09
Rn-222	4.16E-12
Po-218	6.08E-17
Pb-214	2.66E-09
At-218	6.31E-17
Bi-214	1.54E-08
Rn-218	1.62E-18
Po-214	8.85E-13
Tl-210	6.06E-12
Pb-210	1.10E-11
Bi-210	4.39E-11
Hg-206	1.42E-17
Po-210	5.63E-14
Tl-206	1.04E-16
U-235	3.08E-10
Th-231	1.14E-11
Pa-231	8.55E-10
Ac-227	1.87E-09
Th-227	9.91E-11
Fr-223	6.42E-13
Ra-223	1.11E-10
Rn-219	4.85E-11
At-219	0.00E+00
Bi-215	1.78E-16
Po-215	1.48E-13
Pb-211	6.22E-11
Bi-211	3.92E-11
Tl-207	1.16E-11
Po-211	1.89E-14
Th-232	5.68E-09
Ra-228	6.36E-09
Ac-228	9.29E-09
Th-228	1.26E-08
Ra-224	9.15E-10
Rn-220	6.61E-12
Po-216	1.60E-13
Pb-212	1.44E-09
Bi-212	1.19E-09
Po-212	0.00E+00
Tl-208	1.16E-08
TOTAL	9.29E-08

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INDIVIDUAL COMMITTED EFFECTIVE DOSE EQUIVALENT (mrem)[a]
(All Radionuclides and Pathways)

	Distance (m)				
Direction	90	495	750	2915	
N	3.0E-01	2.6E-02	1.9E-02	1.4E-02	
NNW	1.6E-01	2.0E-02	1.6E-02	1.4E-02	
NW	1.8E-01	2.1E-02	1.7E-02	1.4E-02	
WNW	2.2E-01	2.3E-02	1.8E-02	1.4E-02	
W	1.7E-01	2.0E-02	1.6E-02	1.4E-02	School
WSW	9.0E-02	1.7E-02	1.5E-02	1.3E-02	
SW	1.2E-01	1.8E-02	1.5E-02	1.3E-02	Residence
SSW	1.5E-01	1.9E-02	1.6E-02	1.3E-02	
S	1.3E-01	1.9E-02	1.6E-02	1.3E-02	
SSE	9.5E-02	1.7E-02	1.5E-02	1.3E-02	Business
SSE	1.3E-01	1.9E-02	1.6E-02	1.3E-02	
ESE	2.2E-01	2.2E-02	1.7E-02	1.4E-02	
E	2.8E-01	2.5E-02	1.9E-02	1.4E-02	
ENE	2.3E-01	2.3E-02	1.8E-02	1.4E-02	
NE	1.5E-01	1.9E-02	1.6E-02	1.4E-02	Farm
NNE	1.3E-01	1.8E-02	1.6E-02	1.3E-02	

[a] Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2016 Radionuclide Emissions NESHAP Report (Appendix A) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

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

	Distance (m)			
Direction	90	495	750	2915
N	9.3E-08	6.6E-09	4.4E-09	2.7E-09
NNW	4.9E-08	4.6E-09	3.5E-09	2.6E-09
NW	5.7E-08	5.0E-09	3.7E-09	2.6E-09
WNW	6.9E-08	5.5E-09	3.9E-09	2.6E-09
W	5.3E-08	4.8E-09	3.6E-09	2.6E-09
WSW	2.7E-08	3.6E-09	3.0E-09	2.6E-09
SW	3.7E-08	4.0E-09	3.2E-09	2.6E-09
SSW	4.5E-08	4.4E-09	3.4E-09	2.6E-09
S	4.0E-08	4.2E-09	3.3E-09	2.6E-09
SSE	2.8E-08	3.7E-09	3.1E-09	2.6E-09
SSE	4.0E-08	4.2E-09	3.3E-09	2.6E-09
ESE	6.7E-08	5.5E-09	3.9E-09	2.6E-09
E	8.7E-08	6.3E-09	4.3E-09	2.7E-09
ENE	7.2E-08	5.7E-09	4.0E-09	2.6E-09
NE	4.5E-08	4.4E-09	3.4E-09	2.6E-09
NNE	3.8E-08	4.1E-09	3.3E-09	2.6E-09

CAP88 OUTPUT RESULTS

Plant 6 Loadout

C A P 8 8 - P C

Version 4.0

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Tue Mar 14 11:51:02 2017

```
     Facility:  Plant 6 Loadout
      Address:  Destrehan
         City:  Saint Louis
        State:  MO          Zip:  63147


Source Category:  Area
    Source Type:  Area
  Emission Year:  2016
 DOSE Age Group:  Adult

       Comments:  Air
                  Air


   Dataset Name:  Plant6 Loadout 2
   Dataset Date:  Mar 14, 2017 11:50 AM
      Wind File:  C:\Users\hansenra\Documents\CAP88\Wind Files\13994.WND
```

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Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenal	3.54E-02
UB_Wall	3.86E-02
Bone_Sur	2.67E+00
Brain	3.70E-02
Breasts	4.02E-02
St_Wall	3.74E-02
SI_Wall	3.72E-02
ULI_Wall	3.95E-02
LLI_Wall	4.43E-02
Kidneys	8.22E-02
Liver	1.75E-01
Muscle	4.11E-02
Ovaries	5.56E-02
Pancreas	3.57E-02
R_Marrow	1.60E-01
Skin	5.54E-01
Spleen	3.77E-02
Testes	6.06E-02
Thymus	3.72E-02
Thyroid	3.85E-02
GB_Wall	3.58E-02
Ht_Wall	3.70E-02
Uterus	3.67E-02
ET_Reg	1.94E-01
Lung_66	5.80E-01
Effectiv	1.61E-01

PATHWAY COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	7.98E-03
INHALATION	1.18E-01
AIR IMMERSION	1.44E-06
GROUND SURFACE	3.54E-02
INTERNAL	1.26E-01
EXTERNAL	3.54E-02
TOTAL	1.61E-01

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NUCLIDE COMMITTED EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.05E-02
Th-234	7.30E-04
Pa-234m	3.99E-03
Pa-234	7.87E-05
U-234	1.27E-02
Th-230	2.52E-02
Ra-226	4.28E-03
Rn-222	3.27E-06
Po-218	5.85E-11
Pb-214	2.14E-03
At-218	2.20E-10
Bi-214	1.25E-02
Rn-218	1.27E-12
Po-214	6.92E-07
Tl-210	4.88E-06
Pb-210	1.05E-05
Bi-210	1.70E-04
Hg-206	1.37E-11
Po-210	4.40E-08
Tl-206	3.97E-10
U-235	8.24E-04
Th-231	2.71E-05
Pa-231	2.10E-02
Ac-227	1.59E-02
Th-227	1.97E-04
Fr-223	1.86E-06
Ra-223	2.21E-04
Rn-219	9.56E-05
At-219	0.00E+00
Bi-215	4.30E-10
Po-215	2.92E-07
Pb-211	1.88E-04
Bi-211	7.74E-05
Tl-207	9.73E-05
Po-211	3.72E-08
Th-232	8.49E-03
Ra-228	1.45E-02
Ac-228	5.81E-03
Th-228	1.15E-02
Ra-224	7.96E-04
Rn-220	4.00E-06
Po-216	9.65E-08
Pb-212	8.79E-04
Bi-212	1.03E-03
Po-212	0.00E+00
Tl-208	7.08E-03
TOTAL	1.61E-01

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Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	1.67E-09
INHALATION	2.55E-08
AIR IMMERSION	7.10E-13
GROUND SURFACE	1.71E-08
INTERNAL	2.72E-08
EXTERNAL	1.71E-08
TOTAL	4.43E-08

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	3.52E-09
Th-234	2.93E-10
Pa-234m	6.99E-10
Pa-234	4.28E-11
U-234	4.37E-09
Th-230	5.57E-09
Ra-226	2.25E-09
Rn-222	1.79E-12
Po-218	2.61E-17
Pb-214	1.14E-09
At-218	2.71E-17
Bi-214	6.60E-09
Rn-218	6.97E-19
Po-214	3.80E-13
Tl-210	2.60E-12
Pb-210	4.71E-12
Bi-210	1.88E-11
Hg-206	6.08E-18
Po-210	2.41E-14
Tl-206	4.46E-17
U-235	3.30E-10
Th-231	1.23E-11
Pa-231	9.09E-10
Ac-227	1.99E-09
Th-227	1.07E-10
Fr-223	6.93E-13
Ra-223	1.19E-10
Rn-219	5.23E-11
At-219	0.00E+00
Bi-215	1.92E-16
Po-215	1.60E-13
Pb-211	6.71E-11
Bi-211	4.22E-11
Tl-207	1.25E-11
Po-211	2.04E-14
Th-232	1.86E-09
Ra-228	2.10E-09
Ac-228	3.08E-09
Th-228	4.12E-09
Ra-224	3.00E-10
Rn-220	2.19E-12
Po-216	5.31E-14
Pb-212	4.78E-10
Bi-212	3.95E-10
Po-212	0.00E+00
Tl-208	3.85E-09
TOTAL	4.43E-08

Tue Mar 14 11:51:02 2017 SUMMARY
Page 5

INDIVIDUAL COMMITTED EFFECTIVE DOSE EQUIVALENT (mrem)[a]
(All Radionuclides and Pathways)

	Distance (m)				
Direction	160	495	750	2915	
N	1.6E-01	2.5E-02	1.5E-02	6.6E-03	
NNW	8.5E-02	1.6E-02	1.0E-02	6.2E-03	
NW	1.0E-01	1.7E-02	1.1E-02	6.3E-03	
WNW	1.2E-01	2.0E-02	1.2E-02	6.4E-03	
W	9.2E-02	1.6E-02	1.1E-02	6.2E-03	School
WSW	4.7E-02	1.1E-02	8.1E-03	6.0E-03	
SW	6.5E-02	1.3E-02	9.0E-03	6.1E-03	Residence
SSW	7.9E-02	1.5E-02	9.8E-03	6.1E-03	
S	6.9E-02	1.4E-02	9.4E-03	6.1E-03	
SSE	5.0E-02	1.1E-02	8.3E-03	6.0E-03	Business
SSE	7.0E-02	1.4E-02	9.4E-03	6.1E-03	
ESE	1.2E-01	1.9E-02	1.2E-02	6.4E-03	
E	1.5E-01	2.4E-02	1.4E-02	6.5E-03	
ENE	1.3E-01	2.1E-02	1.2E-02	6.4E-03	
NE	7.9E-02	1.5E-02	9.9E-03	6.1E-03	Farm
NNE	6.7E-02	1.3E-02	9.2E-03	6.1E-03	

[a] Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2016 Radionuclide Emissions NESHAP Report (Appendix A) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

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

	Distance (m)			
Direction	160	495	750	2915
N	4.4E-08	6.6E-09	3.7E-09	1.5E-09
NNW	2.3E-08	4.0E-09	2.5E-09	1.3E-09
NW	2.7E-08	4.4E-09	2.7E-09	1.3E-09
WNW	3.3E-08	5.1E-09	3.0E-09	1.4E-09
W	2.5E-08	4.2E-09	2.6E-09	1.3E-09
WSW	1.3E-08	2.6E-09	1.9E-09	1.3E-09
SW	1.8E-08	3.2E-09	2.1E-09	1.3E-09
SSW	2.2E-08	3.7E-09	2.3E-09	1.3E-09
S	1.9E-08	3.4E-09	2.2E-09	1.3E-09
SSE	1.4E-08	2.7E-09	1.9E-09	1.3E-09
SSE	1.9E-08	3.5E-09	2.2E-09	1.3E-09
ESE	3.2E-08	5.0E-09	3.0E-09	1.4E-09
E	4.2E-08	6.2E-09	3.5E-09	1.4E-09
ENE	3.5E-08	5.3E-09	3.1E-09	1.4E-09
NE	2.2E-08	3.7E-09	2.4E-09	1.3E-09
NNE	1.8E-08	3.3E-09	2.2E-09	1.3E-09

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APPENDIX B

ENVIRONMENTAL THERMOLUMINESCENT DOSIMETER, ALPHA TRACK DETECTOR, AND PERIMETER AIR DATA

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Table B-1. Background Air Particulate Data Results for CY 2016

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
HIS184809	BAP-001	01/04/16	Gross Alpha/Beta	Gross Alpha	8.09E-15	1.68E-15	7.25E-16	µCi/mL	=		HISS (General Air)-Perimeter Air
HIS184809	BAP-001	01/04/16	Gross Alpha/Beta	Gross Beta	2.51E-14	2.91E-15	1.17E-15	µCi/mL	=		HISS (General Air)-Perimeter Air
HIS184810	BAP-001	01/11/16	Gross Alpha/Beta	Gross Alpha	2.98E-15	9.60E-16	6.43E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184810	BAP-001	01/11/16	Gross Alpha/Beta	Gross Beta	1.24E-14	1.83E-15	1.03E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184811	BAP-001	01/19/16	Gross Alpha/Beta	Gross Alpha	6.80E-15	1.33E-15	5.37E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184811	BAP-001	01/19/16	Gross Alpha/Beta	Gross Beta	2.49E-14	2.62E-15	8.63E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184812	BAP-001	01/25/16	Gross Alpha/Beta	Gross Alpha	2.74E-15	1.01E-15	7.54E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184812	BAP-001	01/25/16	Gross Alpha/Beta	Gross Beta	1.80E-14	2.42E-15	1.21E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184813	BAP-001	02/01/16	Gross Alpha/Beta	Gross Alpha	3.72E-15	1.06E-15	6.34E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184813	BAP-001	02/01/16	Gross Alpha/Beta	Gross Beta	1.62E-14	2.11E-15	1.02E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184814	BAP-001	02/08/16	Gross Alpha/Beta	Gross Alpha	4.25E-15	1.16E-15	6.67E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184814	BAP-001	02/08/16	Gross Alpha/Beta	Gross Beta	1.74E-14	2.25E-15	1.07E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184815	BAP-001	02/15/16	Gross Alpha/Beta	Gross Alpha	1.67E-15	7.10E-16	5.95E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184815	BAP-001	02/15/16	Gross Alpha/Beta	Gross Beta	1.70E-14	2.12E-15	9.56E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184816	BAP-001	02/22/16	Gross Alpha/Beta	Gross Alpha	2.37E-15	8.86E-16	6.72E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184816	BAP-001	02/22/16	Gross Alpha/Beta	Gross Beta	2.01E-14	2.46E-15	1.08E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184817	BAP-001	02/29/16	Gross Alpha/Beta	Gross Alpha	2.70E-15	8.80E-16	5.95E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184817	BAP-001	02/29/16	Gross Alpha/Beta	Gross Beta	1.76E-14	2.16E-15	9.56E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184818	BAP-001	03/07/16	Gross Alpha/Beta	Gross Alpha	2.43E-15	8.54E-16	6.17E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184818	BAP-001	03/07/16	Gross Alpha/Beta	Gross Beta	1.58E-14	2.06E-15	9.92E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184819	BAP-001	03/14/16	Gross Alpha/Beta	Gross Alpha	1.62E-15	7.19E-16	6.22E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184819	BAP-001	03/14/16	Gross Alpha/Beta	Gross Beta	1.59E-14	2.07E-15	9.99E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184820	BAP-001	03/21/16	Gross Alpha/Beta	Gross Alpha	1.31E-15	6.43E-16	5.96E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184820	BAP-001	03/21/16	Gross Alpha/Beta	Gross Beta	1.13E-14	1.68E-15	9.58E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184821	BAP-001	03/28/16	Gross Alpha/Beta	Gross Alpha	1.15E-15	5.76E-16	5.45E-16	µCi/mL	J	T04	HISS Air (Particulate Air)-Environmental Monitoring
HIS184821	BAP-001	03/28/16	Gross Alpha/Beta	Gross Beta	1.36E-14	1.79E-15	8.76E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184822	BAP-001	04/04/16	Gross Alpha/Beta	Gross Alpha	4.80E-15	1.18E-15	6.08E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184822	BAP-001	04/04/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.88E-15	9.71E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184823	BAP-001	04/11/16	Gross Alpha/Beta	Gross Alpha	4.03E-15	1.12E-15	6.43E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184823	BAP-001	04/11/16	Gross Alpha/Beta	Gross Beta	1.10E-14	1.67E-15	1.03E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184824	BAP-001	04/16/16	Gross Alpha/Beta	Gross Alpha	4.46E-15	1.38E-15	8.84E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184824	BAP-001	04/16/16	Gross Alpha/Beta	Gross Beta	1.70E-14	2.45E-15	1.41E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184825	BAP-001	04/25/16	Gross Alpha/Beta	Gross Alpha	3.90E-15	1.04E-15	5.83E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184825	BAP-001	04/25/16	Gross Alpha/Beta	Gross Beta	1.54E-14	1.94E-15	9.32E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184826	BAP-001	05/02/16	Gross Alpha/Beta	Gross Alpha	3.71E-15	1.10E-15	6.80E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184826	BAP-001	05/02/16	Gross Alpha/Beta	Gross Beta	1.27E-14	1.85E-15	1.09E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184827	BAP-001	05/09/16	Gross Alpha/Beta	Gross Alpha	3.07E-15	9.32E-16	5.85E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184827	BAP-001	05/09/16	Gross Alpha/Beta	Gross Beta	1.26E-14	1.73E-15	9.34E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184828	BAP-001	05/16/16	Gross Alpha/Beta	Gross Alpha	2.69E-15	8.82E-16	5.92E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184828	BAP-001	05/16/16	Gross Alpha/Beta	Gross Beta	1.23E-14	1.71E-15	9.45E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184829	BAP-001	05/23/16	Gross Alpha/Beta	Gross Alpha	2.87E-15	9.40E-16	6.31E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184829	BAP-001	05/23/16	Gross Alpha/Beta	Gross Beta	1.78E-14	2.20E-15	1.01E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184830	BAP-001	05/31/16	Gross Alpha/Beta	Gross Alpha	-2.29E-16	1.61E-16	5.21E-16	µCi/mL	UJ	T06	HISS Air (Particulate Air)-Environmental Monitoring
HIS184830	BAP-001	05/31/16	Gross Alpha/Beta	Gross Beta	1.40E-17	4.85E-16	8.32E-16	µCi/mL	UJ	T06	HISS Air (Particulate Air)-Environmental Monitoring
HIS184831	BAP-001	06/06/16	Gross Alpha/Beta	Gross Alpha	2.57E-15	9.39E-16	6.89E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring

Table B-1. Background Air Particulate Data Results for CY 2016

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
HIS184831	BAP-001	06/06/16	Gross Alpha/Beta	Gross Beta	1.96E-14	2.41E-15	1.10E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184832	BAP-001	06/13/16	Gross Alpha/Beta	Gross Alpha	2.99E-15	9.57E-16	6.29E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184832	BAP-001	06/13/16	Gross Alpha/Beta	Gross Beta	2.11E-14	2.44E-15	1.01E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184833	BAP-001	06/20/16	Gross Alpha/Beta	Gross Alpha	1.57E-15	6.88E-16	5.79E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184833	BAP-001	06/20/16	Gross Alpha/Beta	Gross Beta	1.76E-14	2.11E-15	9.25E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184834	BAP-001	06/27/16	Gross Alpha/Beta	Gross Alpha	1.28E-15	7.22E-16	7.15E-16	µCi/mL	J	T04	HISS Air (Particulate Air)-Environmental Monitoring
HIS184834	BAP-001	06/27/16	Gross Alpha/Beta	Gross Beta	1.76E-14	2.29E-15	1.14E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184835	BAP-001	07/05/16	Gross Alpha/Beta	Gross Alpha	3.96E-15	9.49E-16	4.88E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184835	BAP-001	07/05/16	Gross Alpha/Beta	Gross Beta	1.29E-14	1.60E-15	7.47E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184836	BAP-001	07/11/16	Gross Alpha/Beta	Gross Alpha	8.16E-15	1.70E-15	7.49E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184836	BAP-001	07/11/16	Gross Alpha/Beta	Gross Beta	2.63E-14	2.95E-15	1.15E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184837	BAP-001	07/18/16	Gross Alpha/Beta	Gross Alpha	5.34E-15	1.25E-15	6.27E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184837	BAP-001	07/18/16	Gross Alpha/Beta	Gross Beta	1.69E-14	2.08E-15	9.60E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184838	BAP-001	07/25/16	Gross Alpha/Beta	Gross Alpha	4.00E-15	1.10E-15	6.53E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184838	BAP-001	07/25/16	Gross Alpha/Beta	Gross Beta	1.82E-14	2.21E-15	1.00E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184839	BAP-001	08/01/16	Gross Alpha/Beta	Gross Alpha	3.98E-15	1.03E-15	5.75E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184839	BAP-001	08/01/16	Gross Alpha/Beta	Gross Beta	1.74E-14	2.05E-15	8.80E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184840	BAP-001	08/09/16	Gross Alpha/Beta	Gross Alpha	4.02E-15	1.07E-15	6.08E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184840	BAP-001	08/09/16	Gross Alpha/Beta	Gross Beta	1.55E-14	1.94E-15	9.31E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184841	BAP-001	08/15/16	Gross Alpha/Beta	Gross Alpha	3.33E-15	1.08E-15	7.36E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184841	BAP-001	08/15/16	Gross Alpha/Beta	Gross Beta	1.67E-14	2.19E-15	1.13E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184842	BAP-001	08/22/16	Gross Alpha/Beta	Gross Alpha	2.76E-15	9.62E-16	7.03E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184842	BAP-001	08/22/16	Gross Alpha/Beta	Gross Beta	1.41E-14	1.95E-15	1.08E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184843	BAP-001	08/29/16	Gross Alpha/Beta	Gross Alpha	4.13E-15	1.11E-15	6.43E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184843	BAP-001	08/29/16	Gross Alpha/Beta	Gross Beta	2.03E-14	2.36E-15	9.84E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184844	BAP-001	09/06/16	Gross Alpha/Beta	Gross Alpha	2.84E-15	8.60E-16	5.55E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184844	BAP-001	09/06/16	Gross Alpha/Beta	Gross Beta	2.01E-14	2.23E-15	8.50E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184845	BAP-001	09/12/16	Gross Alpha/Beta	Gross Alpha	1.08E-15	6.76E-16	7.49E-16	µCi/mL	J	T04	HISS Air (Particulate Air)-Environmental Monitoring
HIS184845	BAP-001	09/12/16	Gross Alpha/Beta	Gross Beta	1.36E-14	1.96E-15	1.15E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184846	BAP-001	09/19/16	Gross Alpha/Beta	Gross Alpha	1.66E-15	7.75E-16	7.11E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184846	BAP-001	09/19/16	Gross Alpha/Beta	Gross Beta	2.79E-14	3.02E-15	1.09E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184847	BAP-001	09/26/16	Gross Alpha/Beta	Gross Alpha	2.09E-15	7.59E-16	5.75E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184847	BAP-001	09/26/16	Gross Alpha/Beta	Gross Beta	3.40E-14	3.28E-15	8.80E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184848	BAP-001	10/03/16	Gross Alpha/Beta	Gross Alpha	4.84E-15	1.22E-15	5.36E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184848	BAP-001	10/03/16	Gross Alpha/Beta	Gross Beta	1.37E-14	1.91E-15	1.09E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184849	BAP-001	10/11/16	Gross Alpha/Beta	Gross Alpha	6.13E-15	1.21E-15	4.05E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184849	BAP-001	10/11/16	Gross Alpha/Beta	Gross Beta	2.42E-14	2.49E-15	8.19E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184850	BAP-001	10/17/16	Gross Alpha/Beta	Gross Alpha	6.81E-15	1.56E-15	6.16E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184850	BAP-001	10/17/16	Gross Alpha/Beta	Gross Beta	2.14E-14	2.64E-15	1.25E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184851	BAP-001	10/24/16	Gross Alpha/Beta	Gross Alpha	6.30E-15	1.32E-15	4.72E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184851	BAP-001	10/24/16	Gross Alpha/Beta	Gross Beta	1.94E-14	2.25E-15	9.55E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184852	BAP-001	10/31/16	Gross Alpha/Beta	Gross Alpha	6.41E-15	1.37E-15	4.99E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184852	BAP-001	10/31/16	Gross Alpha/Beta	Gross Beta	2.41E-14	2.65E-15	1.01E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184853	BAP-001	11/07/16	Gross Alpha/Beta	Gross Alpha	5.30E-15	1.26E-15	5.21E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184853	BAP-001	11/07/16	Gross Alpha/Beta	Gross Beta	2.54E-14	2.78E-15	1.06E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring

Table B-1. Background Air Particulate Data Results for CY 2016

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
HIS184854	BAP-001	11/14/16	Gross Alpha/Beta	Gross Alpha	4.99E-15	1.20E-15	5.04E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184854	BAP-001	11/14/16	Gross Alpha/Beta	Gross Beta	2.41E-14	2.66E-15	1.02E-15	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184855	BAP-001	11/21/16	Gross Alpha/Beta	Gross Alpha	6.21E-15	1.30E-15	4.65E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184855	BAP-001	11/21/16	Gross Alpha/Beta	Gross Beta	3.63E-14	3.48E-15	9.42E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184856	BAP-001	11/28/16	Gross Alpha/Beta	Gross Alpha	4.52E-15	1.11E-15	4.74E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184856	BAP-001	11/28/16	Gross Alpha/Beta	Gross Beta	2.87E-14	2.94E-15	9.60E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184857	BAP-001	12/05/16	Gross Alpha/Beta	Gross Alpha	2.43E-15	8.23E-16	4.91E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184857	BAP-001	12/05/16	Gross Alpha/Beta	Gross Beta	2.03E-14	2.35E-15	9.95E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184858	BAP-001	12/12/16	Gross Alpha/Beta	Gross Alpha	2.81E-15	8.55E-16	4.61E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184858	BAP-001	12/12/16	Gross Alpha/Beta	Gross Beta	1.78E-14	2.11E-15	9.33E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184859	BAP-001	12/19/16	Gross Alpha/Beta	Gross Alpha	2.71E-15	8.45E-16	4.65E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184859	BAP-001	12/19/16	Gross Alpha/Beta	Gross Beta	2.84E-14	2.91E-15	9.42E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184860	BAP-001	12/27/16	Gross Alpha/Beta	Gross Alpha	1.47E-15	6.45E-16	4.87E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring
HIS184860	BAP-001	12/27/16	Gross Alpha/Beta	Gross Beta	2.33E-14	2.57E-15	9.85E-16	µCi/mL	=		HISS Air (Particulate Air)-Environmental Monitoring

VQs:

= Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

UJ Indicates that the parameter was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Validation Reason Code:

T04 Radionuclide Quantitation: Professional judgment was used to qualify the data.

T06 Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

Table B-2. SLDS TLD (External Gamma Radiation) Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS184884	BA-1	04/05/16	Radiological	External gamma radiation	19.4	0	0.1	mrem	J	Y01	HISS Air (TLDs)-Environmental Monitoring
HIS184885	BA-1	07/07/16	Radiological	External gamma radiation	20.1	0	0.1	mrem	J	Y01	HISS Air (TLDs)-Environmental Monitoring
HIS184886	BA-1	10/03/16	Radiological	External gamma radiation	20.3	0	0.1	mrem	J	Y01	HISS Air (TLDs)-Environmental Monitoring
HIS194367	BA-1	01/04/17	Radiological	External gamma radiation	19	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016
SLD184927	DA-1	04/05/16	Radiological	External gamma radiation	16.8	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184927-1	DA-1 dup	04/05/16	Radiological	External gamma radiation	17.4	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184928	DA-2	04/05/16	Radiological	External gamma radiation	19.1	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184929	DA-3	04/05/16	Radiological	External gamma radiation	18.2	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184930	DA-6	04/05/16	Radiological	External gamma radiation	20.9	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184931	DA-1	07/07/16	Radiological	External gamma radiation	16.1	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184931-1	DA-1 dup	07/07/16	Radiological	External gamma radiation	18	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184932	DA-2	07/07/16	Radiological	External gamma radiation	20.6	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184933	DA-3	07/07/16	Radiological	External gamma radiation	18.8	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184934	DA-6	07/07/16	Radiological	External gamma radiation	19.4	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184935	DA-1	10/03/16	Radiological	External gamma radiation	17.5	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184935-1	DA-1 dup	10/03/16	Radiological	External gamma radiation	17.7	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184936	DA-2	10/03/16	Radiological	External gamma radiation	19	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184937	DA-3	10/03/16	Radiological	External gamma radiation	18.9	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD184938	DA-6	10/03/16	Radiological	External gamma radiation	20.8	0	0.1	mrem	J	Y01	SLDS Air (TLDs)-Environmental Monitoring
SLD194387	DA-1	01/04/17	Radiological	External gamma radiation	17.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016
SLD194387-1	DA-1 dup	01/04/17	Radiological	External gamma radiation	17.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016
SLD194388	DA-2	01/04/17	Radiological	External gamma radiation	18.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016
SLD194389	DA-3	01/04/17	Radiological	External gamma radiation	19.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016
SLD194390	DA-6	01/04/17	Radiological	External gamma radiation	19.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2016

VQ:

J Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

Validation Reason Code:

Y01 FUSRAP Only: Not enough supporting documentation to perform validation.

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184620	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Alpha	1.25E-15	5.85E-15	8.58E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184620	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Beta	1.18E-14	1.76E-14	2.52E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184621	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Alpha	1.22E-15	5.69E-15	8.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184621	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Beta	1.65E-14	1.75E-14	2.45E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184622	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Alpha	-1.02E-15	4.68E-15	8.28E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184622	Plant 6WH Loadout	01/04/16	Gross Alpha/Beta	Gross Beta	1.85E-14	1.76E-14	2.43E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184652	Building 101	01/05/16	Gross Alpha/Beta	Gross Alpha	5.26E-16	5.25E-15	1.05E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184652	Building 101	01/05/16	Gross Alpha/Beta	Gross Alpha	3.68E-15	6.40E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184652	Building 101	01/05/16	Gross Alpha/Beta	Gross Beta	1.56E-14	1.23E-14	1.60E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184652	Building 101	01/05/16	Gross Alpha/Beta	Gross Beta	1.29E-14	1.20E-14	1.60E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184653	Building 101	01/06/16	Gross Alpha/Beta	Gross Alpha	5.20E-16	5.19E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184653	Building 101	01/06/16	Gross Alpha/Beta	Gross Beta	3.21E-14	1.40E-14	1.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184654	Building 101	01/07/16	Gross Alpha/Beta	Gross Alpha	4.64E-15	6.60E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184654	Building 101	01/07/16	Gross Alpha/Beta	Gross Beta	2.85E-14	1.35E-14	1.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184655	Building 101	01/11/16	Gross Alpha/Beta	Gross Alpha	5.11E-16	5.10E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184655	Building 101	01/11/16	Gross Alpha/Beta	Gross Beta	3.94E-14	1.46E-14	1.56E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184656	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Alpha	-5.47E-16	5.00E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184656	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Beta	7.82E-15	1.18E-14	1.67E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184657	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Alpha	1.69E-15	6.06E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184657	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Beta	1.02E-14	1.24E-14	1.72E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184658	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Alpha	2.87E-15	6.59E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184658	Plant 6WH Loadout	01/05/16	Gross Alpha/Beta	Gross Beta	1.34E-14	1.30E-14	1.75E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184659	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Alpha	5.74E-15	7.00E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184659	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Beta	2.15E-14	1.29E-14	1.59E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184660	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Alpha	5.42E-16	5.41E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184660	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Beta	4.98E-15	1.13E-14	1.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184661	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Alpha	5.91E-15	7.21E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184661	Plant 6WH Loadout	01/06/16	Gross Alpha/Beta	Gross Beta	2.56E-14	1.37E-14	1.64E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184662	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Alpha	2.76E-15	6.33E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184662	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.35E-14	1.68E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184663	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Alpha	5.69E-16	5.68E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184663	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Beta	2.93E-14	1.47E-14	1.73E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184664	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Alpha	-5.61E-16	5.13E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184664	Plant 6WH Loadout	01/07/16	Gross Alpha/Beta	Gross Beta	2.10E-14	1.36E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184665	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Alpha	1.68E-15	6.01E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184665	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Beta	3.59E-14	1.52E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184666	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Alpha	1.66E-15	5.96E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184666	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Beta	2.64E-14	1.41E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184667	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Alpha	5.52E-16	5.50E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184667	Plant 6WH Loadout	01/11/16	Gross Alpha/Beta	Gross Beta	3.33E-14	1.48E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184668	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Alpha	1.57E-14	9.86E-15	9.06E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184668	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.56E-15	9.06E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184668	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Beta	3.94E-14	2.34E-14	2.40E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184668	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Beta	4.99E-14	2.40E-14	2.40E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184669	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Alpha	1.50E-15	6.10E-15	9.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184669	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Beta	3.92E-14	2.40E-14	2.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184670	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Alpha	-7.38E-16	5.11E-15	9.18E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184670	P6WH Loadout	01/12/16	Gross Alpha/Beta	Gross Beta	5.84E-14	2.48E-14	2.43E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184671	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Alpha	9.06E-15	8.24E-15	9.02E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184671	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Beta	6.57E-14	2.49E-14	2.38E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184672	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Alpha	4.80E-15	7.12E-15	9.18E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184672	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Beta	5.27E-14	2.45E-14	2.43E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184673	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Alpha	3.72E-16	5.62E-15	9.26E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184673	P6WH Loadout	01/13/16	Gross Alpha/Beta	Gross Beta	5.82E-14	2.50E-14	2.45E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184674	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Alpha	1.23E-14	9.03E-15	8.99E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184674	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Beta	1.04E-13	2.69E-14	2.37E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184675	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Alpha	2.62E-15	6.48E-15	9.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184675	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Beta	6.71E-14	2.56E-14	2.46E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184676	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Alpha	5.93E-15	7.49E-15	9.22E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184676	P6WH Loadout	01/14/16	Gross Alpha/Beta	Gross Beta	8.29E-14	2.63E-14	2.44E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184677	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Alpha	-7.19E-16	4.98E-15	8.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184677	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Beta	2.65E-14	2.23E-14	2.36E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184678	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Alpha	5.09E-15	7.55E-15	9.74E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184678	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Beta	3.18E-14	2.45E-14	2.57E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184679	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Alpha	-7.86E-16	5.45E-15	9.78E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184679	P6WH Loadout	01/18/16	Gross Alpha/Beta	Gross Beta	4.71E-14	2.55E-14	2.59E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184680	Building 101	01/14/16	Gross Alpha/Beta	Gross Alpha	2.76E-15	6.84E-15	9.83E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184680	Building 101	01/14/16	Gross Alpha/Beta	Gross Beta	5.19E-14	2.59E-14	2.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184681	Building 101	01/15/16	Gross Alpha/Beta	Gross Alpha	5.41E-15	8.03E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184681	Building 101	01/15/16	Gross Alpha/Beta	Gross Beta	7.63E-14	2.86E-14	2.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184682	Building 101	01/18/16	Gross Alpha/Beta	Gross Alpha	-9.67E-16	6.70E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184682	Building 101	01/18/16	Gross Alpha/Beta	Gross Beta	6.91E-14	3.20E-14	3.18E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184683	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Alpha	5.30E-15	6.13E-15	9.43E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184683	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Alpha	1.14E-14	7.91E-15	9.43E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184683	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Beta	2.80E-14	1.43E-14	1.52E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184683	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Beta	2.61E-14	1.41E-14	1.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184684	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Alpha	5.90E-15	6.82E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184684	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Beta	1.39E-14	1.41E-14	1.69E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184685	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Alpha	1.39E-15	5.04E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184685	Plant 6WH Loadout	01/19/16	Gross Alpha/Beta	Gross Beta	1.65E-14	1.42E-14	1.67E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184686	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Alpha	1.31E-15	4.77E-15	9.79E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184686	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Beta	3.17E-14	1.51E-14	1.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184687	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.41E-15	1.08E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184687	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Beta	2.75E-14	1.58E-14	1.74E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184688	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Alpha	9.48E-15	8.04E-15	1.07E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184688	Plant 6WH Loadout	01/20/16	Gross Alpha/Beta	Gross Beta	3.55E-14	1.66E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184689	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Alpha	5.30E-15	6.13E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184689	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Beta	2.80E-14	1.43E-14	1.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184690	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Alpha	5.98E-15	6.91E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184690	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Beta	5.05E-14	1.79E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184691	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Alpha	1.39E-15	5.07E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184691	Plant 6WH Loadout	01/21/16	Gross Alpha/Beta	Gross Beta	4.44E-14	1.70E-14	1.67E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184692	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Alpha	2.56E-16	4.18E-15	9.55E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184692	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Beta	3.42E-14	1.50E-14	1.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184693	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.84E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184693	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Beta	2.39E-14	1.47E-14	1.64E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184694	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Alpha	6.99E-15	7.15E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184694	Plant 6WH Loadout	01/25/16	Gross Alpha/Beta	Gross Beta	3.53E-14	1.62E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184695	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Alpha	-1.87E-15	3.15E-15	9.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184695	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Beta	5.41E-14	1.74E-14	1.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184696	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Alpha	1.41E-15	5.13E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184696	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Beta	3.78E-14	1.66E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184697	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Alpha	3.52E-15	5.81E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184697	Plant 6WH Loadout	01/26/16	Gross Alpha/Beta	Gross Beta	4.32E-14	1.66E-14	1.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184698	Building 101	01/16/16	Gross Alpha/Beta	Gross Alpha	5.57E-15	6.24E-15	7.92E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184698	Building 101	01/16/16	Gross Alpha/Beta	Gross Alpha	1.26E-15	4.51E-15	7.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184698	Building 101	01/16/16	Gross Alpha/Beta	Gross Beta	1.98E-14	2.41E-14	2.50E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184698	Building 101	01/16/16	Gross Alpha/Beta	Gross Beta	2.80E-14	2.46E-14	2.50E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184699	Building 101	01/20/16	Gross Alpha/Beta	Gross Alpha	8.81E-15	7.28E-15	7.92E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184699	Building 101	01/20/16	Gross Alpha/Beta	Gross Beta	1.42E-14	2.38E-14	2.50E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184700	Building 101	01/21/16	Gross Alpha/Beta	Gross Alpha	5.62E-15	6.30E-15	7.99E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184700	Building 101	01/21/16	Gross Alpha/Beta	Gross Beta	2.76E-14	2.48E-14	2.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184701	Building 101	01/26/16	Gross Alpha/Beta	Gross Alpha	3.47E-15	5.54E-15	8.06E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184701	Building 101	01/26/16	Gross Alpha/Beta	Gross Beta	4.19E-14	2.58E-14	2.54E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184702	Building 101	01/25/16	Gross Alpha/Beta	Gross Alpha	1.82E-16	4.01E-15	8.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184702	Building 101	01/25/16	Gross Alpha/Beta	Gross Beta	1.09E-14	2.39E-14	2.53E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184703	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Alpha	8.32E-15	7.95E-15	8.30E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184703	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.59E-15	8.30E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184703	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.59E-15	8.30E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184703	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Beta	1.76E-14	1.58E-14	2.57E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184703	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Beta	4.84E-14	1.85E-14	2.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184704	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Alpha	1.40E-15	5.49E-15	8.11E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184704	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Beta	1.36E-14	1.51E-14	2.52E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184705	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Alpha	5.61E-15	6.76E-15	7.74E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184705	P6WH Loadout	01/27/16	Gross Alpha/Beta	Gross Beta	1.50E-14	1.46E-14	2.40E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184706	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Alpha	2.47E-15	5.80E-15	7.94E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184706	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Beta	1.19E-14	1.47E-14	2.46E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184707	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Alpha	5.86E-15	7.06E-15	8.08E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184707	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Beta	1.07E-14	1.48E-14	2.51E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184708	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Alpha	5.50E-15	6.62E-15	7.58E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184708	P6WH Loadout	01/28/16	Gross Alpha/Beta	Gross Beta	2.01E-14	1.48E-14	2.35E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184709	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Alpha	8.06E-15	7.70E-15	8.04E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184709	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Beta	2.77E-14	1.63E-14	2.50E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184710	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Alpha	2.78E-16	4.97E-15	8.04E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184710	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Beta	2.35E-14	1.59E-14	2.50E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184711	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Alpha	1.31E-15	5.15E-15	7.61E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184711	P6WH Loadout	02/01/16	Gross Alpha/Beta	Gross Beta	2.49E-14	1.53E-14	2.36E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184712	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Alpha	1.14E-14	8.62E-15	8.04E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184712	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Beta	5.62E-14	1.87E-14	2.50E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184713	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Alpha	1.95E-15	7.62E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184713	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Beta	3.78E-14	2.28E-14	3.50E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184714	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Alpha	9.81E-15	7.94E-15	7.67E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184714	P6WH Loadout	02/02/16	Gross Alpha/Beta	Gross Beta	6.99E-14	1.90E-14	2.38E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184715	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Alpha	2.50E-15	5.88E-15	8.04E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184715	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Beta	1.28E-14	1.49E-14	2.50E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184716	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Alpha	2.50E-15	5.88E-15	8.04E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184716	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Beta	9.20E-15	1.46E-14	2.50E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184717	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Alpha	1.07E-15	6.88E-15	1.02E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184717	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Alpha	4.26E-15	7.81E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184717	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Beta	6.32E-15	1.05E-14	1.66E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184717	P6WH Loadout	02/03/16	Gross Alpha/Beta	Gross Beta	1.72E-14	1.19E-14	1.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184718	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Alpha	2.25E-15	7.59E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184718	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Beta	1.53E-14	1.21E-14	1.75E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184719	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Alpha	5.45E-15	8.28E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184719	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Beta	1.69E-14	1.20E-14	1.70E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184720	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Alpha	2.12E-15	7.17E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184720	P6WH Loadout	02/04/16	Gross Alpha/Beta	Gross Beta	1.04E-14	1.10E-14	1.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184721	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Alpha	1.09E-15	7.03E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184721	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Beta	2.39E-14	1.29E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184722	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Alpha	6.51E-15	8.52E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184722	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Beta	3.07E-14	1.36E-14	1.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184723	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Alpha	7.22E-15	8.37E-15	9.85E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184723	P6WH Loadout	02/08/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.21E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184724	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Alpha	3.48E-15	8.17E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184724	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Beta	3.58E-14	1.49E-14	1.80E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184725	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Alpha	5.69E-15	8.65E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184725	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Beta	1.99E-14	1.28E-14	1.77E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184726	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Alpha	7.59E-15	8.80E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184726	P6WH Loadout	02/09/16	Gross Alpha/Beta	Gross Beta	2.45E-14	1.29E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184727	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Alpha	5.19E-15	9.50E-15	1.24E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184727	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Beta	2.35E-14	1.47E-14	2.02E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184728	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Alpha	3.85E-15	9.05E-15	1.23E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184728	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Beta	2.24E-14	1.45E-14	2.00E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184729	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Alpha	0	7.79E-15	1.21E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184729	P6WH Loadout	02/10/16	Gross Alpha/Beta	Gross Beta	3.93E-14	1.63E-14	1.98E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184730	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Alpha	1.05E-14	1.00E-14	1.11E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184730	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Beta	3.15E-14	1.44E-14	1.81E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184731	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Alpha	2.15E-15	4.86E-15	8.58E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184731	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Alpha	2.15E-15	4.86E-15	8.58E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184731	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Beta	2.53E-14	1.85E-14	2.47E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184731	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Beta	2.68E-14	1.86E-14	2.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184732	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Alpha	3.12E-15	7.05E-15	1.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184732	P6WH Loadout	02/11/16	Gross Alpha/Beta	Gross Beta	2.22E-14	2.56E-14	3.59E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184733	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Alpha	1.01E-15	4.25E-15	8.46E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184733	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Beta	3.28E-14	1.88E-14	2.44E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184734	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.75E-15	8.39E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184734	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Beta	3.46E-14	1.88E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184735	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Alpha	9.56E-16	4.01E-15	7.97E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184735	P6WH Loadout	02/15/16	Gross Alpha/Beta	Gross Beta	3.36E-14	1.79E-14	2.30E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184736	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Alpha	7.75E-15	1.27E-14	2.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184736	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Beta	3.45E-14	4.16E-14	5.86E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184737	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Alpha	-1.50E-16	5.92E-15	1.38E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184737	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Beta	2.92E-14	2.87E-14	3.98E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184738	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Alpha	2.34E-15	9.80E-15	1.95E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184738	P6WH Loadout	02/16/16	Gross Alpha/Beta	Gross Beta	3.96E-14	4.05E-14	5.62E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184739	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Alpha	2.02E-15	4.56E-15	8.04E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184739	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Beta	3.25E-14	1.80E-14	2.32E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184740	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Alpha	3.20E-15	5.24E-15	8.39E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184740	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Beta	3.39E-14	1.88E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184741	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Alpha	-1.07E-15	2.58E-15	7.57E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184741	P6WH Loadout	02/17/16	Gross Alpha/Beta	Gross Beta	3.00E-14	1.69E-14	2.18E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184742	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Alpha	4.21E-15	5.56E-15	8.21E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184742	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Beta	3.66E-14	1.86E-14	2.37E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184743	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Alpha	4.33E-15	5.73E-15	8.46E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184743	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Beta	2.50E-14	1.82E-14	2.44E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184744	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Alpha	-1.09E-15	2.62E-15	7.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184744	P6WH Loadout	02/18/16	Gross Alpha/Beta	Gross Beta	3.24E-14	1.73E-14	2.22E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184745	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Alpha	5.47E-16	4.63E-15	9.97E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184745	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.75E-15	9.97E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184745	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Beta	3.03E-14	1.35E-14	1.63E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184745	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Beta	2.53E-14	1.29E-14	1.63E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184746	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Alpha	-5.59E-16	4.17E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184746	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Beta	2.52E-14	1.31E-14	1.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184747	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Alpha	5.22E-16	4.42E-15	9.51E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184747	P6WH Loadout	02/22/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.11E-14	1.55E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184748	Building 101	01/27/16	Gross Alpha/Beta	Gross Alpha	3.85E-15	6.02E-15	1.00E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184748	Building 101	01/27/16	Gross Alpha/Beta	Gross Beta	2.33E-14	1.27E-14	1.63E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184749	Building 101	01/28/16	Gross Alpha/Beta	Gross Alpha	8.42E-15	7.63E-15	1.02E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184749	Building 101	01/28/16	Gross Alpha/Beta	Gross Beta	2.10E-14	1.26E-14	1.67E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184750	Building 101	02/01/16	Gross Alpha/Beta	Gross Alpha	5.38E-16	4.55E-15	9.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184750	Building 101	02/01/16	Gross Alpha/Beta	Gross Beta	3.80E-14	1.42E-14	1.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184751	Building 101	02/02/16	Gross Alpha/Beta	Gross Alpha	7.49E-16	6.34E-15	1.36E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184751	Building 101	02/02/16	Gross Alpha/Beta	Gross Beta	2.41E-14	1.64E-14	2.23E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184752	Building 101	02/03/16	Gross Alpha/Beta	Gross Alpha	1.66E-15	5.19E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184752	Building 101	02/03/16	Gross Alpha/Beta	Gross Beta	1.43E-14	1.17E-14	1.65E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184753	Building 101	02/04/16	Gross Alpha/Beta	Gross Alpha	1.58E-15	4.93E-15	9.59E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184753	Building 101	02/04/16	Gross Alpha/Beta	Gross Beta	2.44E-14	1.24E-14	1.57E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184754	Building 101	02/08/16	Gross Alpha/Beta	Gross Alpha	8.98E-15	7.49E-15	9.63E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184754	Building 101	02/08/16	Gross Alpha/Beta	Gross Beta	3.13E-14	1.32E-14	1.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184755	Building 101	02/09/16	Gross Alpha/Beta	Gross Alpha	4.00E-15	6.26E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184755	Building 101	02/09/16	Gross Alpha/Beta	Gross Beta	2.14E-14	1.29E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184756	Building 101	02/10/16	Gross Alpha/Beta	Gross Alpha	7.69E-15	8.62E-15	1.27E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184756	Building 101	02/10/16	Gross Alpha/Beta	Gross Beta	2.70E-14	1.58E-14	2.08E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184757	Building 101	02/11/16	Gross Alpha/Beta	Gross Alpha	1.63E-15	5.10E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184757	Building 101	02/11/16	Gross Alpha/Beta	Gross Beta	2.24E-14	1.25E-14	1.62E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184758	Building 101	02/15/16	Gross Alpha/Beta	Gross Alpha	-5.44E-16	4.06E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184758	Building 101	02/15/16	Gross Alpha/Beta	Gross Beta	2.94E-14	1.33E-14	1.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184759	Building 101	02/16/16	Gross Alpha/Beta	Gross Alpha	8.18E-15	1.34E-14	2.14E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184759	Building 101	02/16/16	Gross Alpha/Beta	Gross Alpha	5.37E-15	1.22E-14	2.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184759	Building 101	02/16/16	Gross Alpha/Beta	Gross Beta	4.18E-14	4.44E-14	6.18E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184759	Building 101	02/16/16	Gross Alpha/Beta	Gross Beta	4.90E-14	4.50E-14	6.18E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184760	Building 101	02/17/16	Gross Alpha/Beta	Gross Alpha	4.30E-15	5.68E-15	8.39E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184760	Building 101	02/17/16	Gross Alpha/Beta	Gross Beta	2.48E-14	1.81E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184761	Building 101	02/18/16	Gross Alpha/Beta	Gross Alpha	1.13E-15	4.76E-15	9.46E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184761	Building 101	02/18/16	Gross Alpha/Beta	Gross Beta	1.84E-14	1.96E-14	2.73E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184762	Building 101	02/22/16	Gross Alpha/Beta	Gross Alpha	-8.90E-17	3.51E-15	8.18E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184762	Building 101	02/22/16	Gross Alpha/Beta	Gross Beta	2.42E-14	1.76E-14	2.36E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184763	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Alpha	4.21E-15	7.34E-15	1.07E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184763	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Alpha	-2.38E-15	4.99E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184763	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Beta	2.42E-14	1.26E-14	1.69E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184763	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Beta	2.07E-14	1.21E-14	1.69E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184764	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Alpha	5.33E-15	7.70E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184764	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Beta	2.65E-14	1.29E-14	1.70E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184765	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Alpha	8.01E-15	7.98E-15	9.92E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184765	P6WH Loadout	02/23/16	Gross Alpha/Beta	Gross Beta	2.58E-14	1.21E-14	1.57E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184766	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Alpha	9.40E-16	6.44E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184766	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Beta	2.42E-14	1.28E-14	1.73E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184767	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Alpha	4.25E-15	7.41E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184767	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Beta	2.09E-14	1.23E-14	1.70E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184768	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Alpha	2.87E-15	6.47E-15	9.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184768	P6WH Loadout	02/25/16	Gross Alpha/Beta	Gross Beta	3.08E-14	1.26E-14	1.56E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184769	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Alpha	6.52E-15	8.12E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184769	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Beta	1.89E-14	1.21E-14	1.72E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184770	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Alpha	-1.28E-15	5.42E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184770	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Beta	2.97E-14	1.32E-14	1.68E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184771	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Alpha	4.88E-15	7.05E-15	9.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184771	P6WH Loadout	02/29/16	Gross Alpha/Beta	Gross Beta	2.42E-14	1.18E-14	1.55E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184772	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Alpha	3.15E-15	7.10E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184772	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Beta	6.00E-15	1.03E-14	1.71E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184773	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Alpha	3.15E-15	7.10E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184773	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Beta	2.24E-14	1.25E-14	1.71E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184774	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Alpha	8.04E-15	8.01E-15	9.96E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184774	P6WH Loadout	03/01/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.17E-14	1.58E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184775	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Alpha	-3.57E-15	4.60E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184775	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Beta	2.05E-14	1.24E-14	1.73E-14	µCi/mL	J	F01, T04	SLDS (General Area)-Perimeter Air
SLD184776	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Alpha	3.07E-15	6.91E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184776	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Beta	3.09E-14	1.32E-14	1.67E-14	µCi/mL	J	F01	SLDS (General Area)-Perimeter Air
SLD184777	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Alpha	6.29E-16	6.53E-15	9.01E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184777	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Alpha	6.29E-16	6.53E-15	9.01E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184777	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Beta	2.71E-14	5.75E-14	2.01E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184777	P6WH Loadout	03/02/16	Gross Alpha/Beta	Gross Beta	1.94E-14	5.74E-14	2.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184778	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Alpha	-2.72E-15	6.31E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184778	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Beta	3.17E-14	6.57E-14	2.29E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184779	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Alpha	-4.11E-16	6.78E-15	9.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184779	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Beta	2.54E-14	6.27E-14	2.19E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD184780	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Alpha	-1.39E-15	5.93E-15	9.09E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184780	P6WH Loadout	03/03/16	Gross Alpha/Beta	Gross Beta	2.93E-14	5.81E-14	2.03E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD184781	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Alpha	-1.56E-15	6.62E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184781	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Beta	8.79E-15	6.43E-14	2.26E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184782	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Alpha	5.10E-15	8.41E-15	9.88E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184782	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Beta	4.18E-14	6.33E-14	2.20E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD184783	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Alpha	-3.82E-16	6.32E-15	9.16E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184783	P6WH Loadout	03/07/16	Gross Alpha/Beta	Gross Beta	3.28E-14	5.86E-14	2.04E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD184784	Building 101	02/23/16	Gross Alpha/Beta	Gross Alpha	1.92E-15	6.34E-15	1.02E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184784	Building 101	02/23/16	Gross Alpha/Beta	Gross Alpha	1.92E-15	6.34E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184784	Building 101	02/23/16	Gross Alpha/Beta	Gross Beta	1.57E-14	1.11E-14	1.61E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184784	Building 101	02/23/16	Gross Alpha/Beta	Gross Beta	2.38E-14	1.21E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184785	Building 101	02/25/16	Gross Alpha/Beta	Gross Alpha	1.97E-15	6.50E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184785	Building 101	02/25/16	Gross Alpha/Beta	Gross Beta	2.37E-14	1.23E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184786	Building 101	02/29/16	Gross Alpha/Beta	Gross Alpha	-2.24E-15	4.70E-15	1.00E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184786	Building 101	02/29/16	Gross Alpha/Beta	Gross Beta	2.61E-14	1.23E-14	1.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184787	Building 101	03/01/16	Gross Alpha/Beta	Gross Alpha	2.98E-15	6.71E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184787	Building 101	03/01/16	Gross Alpha/Beta	Gross Beta	2.05E-14	1.17E-14	1.62E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184788	Building 101	03/02/16	Gross Alpha/Beta	Gross Alpha	-1.21E-15	5.13E-15	1.00E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184788	Building 101	03/02/16	Gross Alpha/Beta	Gross Beta	1.82E-14	1.13E-14	1.59E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184789	Building 101	03/03/16	Gross Alpha/Beta	Gross Alpha	-1.79E-16	5.75E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184789	Building 101	03/03/16	Gross Alpha/Beta	Gross Beta	8.55E-15	1.04E-14	1.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184790	Building 101	03/07/16	Gross Alpha/Beta	Gross Alpha	-2.71E-15	5.68E-15	1.21E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184790	Building 101	03/07/16	Gross Alpha/Beta	Gross Beta	1.48E-14	1.27E-14	1.92E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184791	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Alpha	-2.14E-15	4.48E-15	9.57E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184791	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Alpha	3.78E-15	6.59E-15	9.57E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184791	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Beta	2.43E-14	1.16E-14	1.52E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD184791	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Beta	2.05E-14	1.11E-14	1.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184792	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Alpha	-3.46E-15	4.46E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184792	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Beta	3.18E-14	1.34E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184793	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Alpha	8.81E-16	6.03E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184793	Plant 6WH Loadout	03/08/16	Gross Alpha/Beta	Gross Beta	2.40E-14	1.22E-14	1.62E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184794	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Alpha	5.87E-15	7.31E-15	9.76E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184794	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Beta	3.49E-15	9.06E-15	1.55E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184795	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Alpha	9.28E-16	6.36E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184795	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Beta	9.57E-15	1.08E-14	1.71E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184796	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Alpha	6.30E-15	7.84E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184796	Plant 6WH Loadout	03/09/16	Gross Alpha/Beta	Gross Beta	9.80E-16	9.32E-15	1.66E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184797	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Alpha	1.88E-15	6.19E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184797	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Beta	2.12E-14	1.16E-14	1.57E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184798	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Alpha	-1.29E-15	5.50E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184798	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Beta	3.08E-14	1.34E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184799	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Alpha	5.38E-15	7.77E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184799	Plant 6WH Loadout	03/10/16	Gross Alpha/Beta	Gross Beta	4.74E-14	1.53E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD184800	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Alpha	-1.21E-15	5.13E-15	1.00E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD184800	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Beta	1.16E-14	1.04E-14	1.59E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD184801	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Alpha	9.36E-16	6.41E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184801	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Beta	2.04E-14	1.23E-14	1.73E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD184802	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Alpha	2.08E-15	6.86E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD184802	Plant 6WH Loadout	03/14/16	Gross Alpha/Beta	Gross Beta	6.11E-15	1.05E-14	1.74E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187208	Building 101	03/08/16	Gross Alpha/Beta	Gross Alpha	4.10E-15	6.86E-15	1.04E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187208	Building 101	03/08/16	Gross Alpha/Beta	Gross Alpha	1.96E-15	6.15E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187208	Building 101	03/08/16	Gross Alpha/Beta	Gross Beta	1.61E-14	1.16E-14	1.64E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187208	Building 101	03/08/16	Gross Alpha/Beta	Gross Beta	2.44E-14	1.26E-14	1.64E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187209	Building 101	03/09/16	Gross Alpha/Beta	Gross Alpha	1.03E-15	6.65E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187209	Building 101	03/09/16	Gross Alpha/Beta	Gross Beta	1.78E-14	1.33E-14	1.89E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187210	Building 101	03/10/16	Gross Alpha/Beta	Gross Alpha	3.38E-15	7.26E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187210	Building 101	03/10/16	Gross Alpha/Beta	Gross Beta	3.09E-14	1.45E-14	1.83E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187211	Building 101	03/14/16	Gross Alpha/Beta	Gross Alpha	-2.07E-16	6.20E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187211	Building 101	03/14/16	Gross Alpha/Beta	Gross Beta	1.23E-14	1.27E-14	1.90E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187212	Building 101	03/15/16	Gross Alpha/Beta	Gross Alpha	4.00E-15	8.61E-15	1.37E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187212	Building 101	03/15/16	Gross Alpha/Beta	Gross Beta	3.31E-14	1.68E-14	2.17E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187213	Building 101	03/16/16	Gross Alpha/Beta	Gross Alpha	-1.25E-15	4.93E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187213	Building 101	03/16/16	Gross Alpha/Beta	Gross Beta	1.41E-14	1.14E-14	1.65E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187214	Building 101	03/17/16	Gross Alpha/Beta	Gross Alpha	-1.69E-16	5.08E-15	9.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187214	Building 101	03/17/16	Gross Alpha/Beta	Gross Beta	2.24E-14	1.19E-14	1.56E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187215	Building 101	03/21/16	Gross Alpha/Beta	Gross Alpha	4.42E-15	7.40E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187215	Building 101	03/21/16	Gross Alpha/Beta	Gross Beta	1.59E-14	1.24E-14	1.77E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187216	Building 101	03/22/16	Gross Alpha/Beta	Gross Alpha	5.87E-15	7.06E-15	9.76E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187216	Building 101	03/22/16	Gross Alpha/Beta	Gross Beta	2.55E-14	1.22E-14	1.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187217	Building 101	03/23/16	Gross Alpha/Beta	Gross Alpha	4.75E-15	7.95E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187217	Building 101	03/23/16	Gross Alpha/Beta	Gross Beta	3.30E-14	1.52E-14	1.90E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187218	Building 101	03/24/16	Gross Alpha/Beta	Gross Alpha	1.96E-15	6.15E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187218	Building 101	03/24/16	Gross Alpha/Beta	Gross Beta	1.82E-14	1.19E-14	1.64E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187219	Building 101	03/28/16	Gross Alpha/Beta	Gross Alpha	5.20E-15	7.22E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187219	Building 101	03/28/16	Gross Alpha/Beta	Gross Beta	3.41E-14	1.38E-14	1.65E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187220	Building 101	03/29/16	Gross Alpha/Beta	Gross Alpha	3.05E-15	6.55E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187220	Building 101	03/29/16	Gross Alpha/Beta	Gross Beta	2.38E-14	1.26E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187221	Building 101	03/29/16	Gross Alpha/Beta	Gross Alpha	9.19E-16	5.95E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187221	Building 101	03/29/16	Gross Alpha/Beta	Gross Beta	1.24E-14	1.15E-14	1.69E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187222	Building 101	03/30/16	Gross Alpha/Beta	Gross Alpha	5.02E-15	1.08E-14	1.72E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187222	Building 101	03/30/16	Gross Alpha/Beta	Gross Beta	3.58E-14	2.04E-14	2.72E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187223	Building 101	03/30/16	Gross Alpha/Beta	Gross Alpha	1.06E-14	1.47E-14	2.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187223	Building 101	03/30/16	Gross Alpha/Beta	Gross Beta	2.17E-14	2.23E-14	3.36E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187224	Building 101	03/31/16	Gross Alpha/Beta	Gross Alpha	-1.86E-16	5.57E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187224	Building 101	03/31/16	Gross Alpha/Beta	Gross Beta	2.10E-14	1.26E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187225	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Alpha	5.06E-15	6.19E-15	8.03E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187225	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Alpha	6.20E-15	6.61E-15	8.03E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187225	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Beta	2.66E-14	1.82E-14	2.64E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187225	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Beta	9.21E-15	1.67E-14	2.64E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187226	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Alpha	6.71E-15	7.15E-15	8.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187226	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.91E-14	2.85E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187227	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Alpha	1.55E-15	4.54E-15	7.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187227	Plant 6WH Loadout	03/15/16	Gross Alpha/Beta	Gross Beta	1.85E-14	1.68E-14	2.52E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187228	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.60E-15	7.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187228	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Beta	6.16E-15	1.60E-14	2.57E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187229	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Alpha	6.07E-15	6.46E-15	7.86E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187229	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Beta	2.65E-15	1.57E-14	2.58E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187230	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Alpha	1.48E-15	4.34E-15	7.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187230	Plant 6WH Loadout	03/16/16	Gross Alpha/Beta	Gross Beta	1.04E-14	1.54E-14	2.41E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187231	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Alpha	-1.82E-15	2.61E-15	8.07E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187231	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Beta	1.58E-14	1.73E-14	2.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187232	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Alpha	6.52E-16	5.67E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187232	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Beta	6.66E-15	2.22E-14	3.60E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187233	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Alpha	2.68E-15	5.11E-15	7.79E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187233	Plant 6WH Loadout	03/17/16	Gross Alpha/Beta	Gross Beta	1.17E-14	1.64E-14	2.56E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187234	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Alpha	2.73E-15	5.20E-15	7.93E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187234	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Beta	1.76E-14	1.72E-14	2.60E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187235	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Alpha	2.32E-15	7.15E-15	1.06E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187235	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Alpha	9.30E-17	6.42E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187235	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Beta	1.52E-14	1.17E-14	1.77E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187235	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Beta	2.80E-14	1.33E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187236	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Alpha	3.19E-15	6.97E-15	9.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187236	Plant 6WH Loadout	03/21/16	Gross Alpha/Beta	Gross Beta	2.40E-14	1.21E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187237	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Alpha	3.27E-15	7.15E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187237	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Beta	3.08E-14	1.32E-14	1.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187238	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Alpha	1.17E-15	6.57E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187238	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Beta	1.95E-14	1.19E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187239	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Alpha	8.30E-17	5.74E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187239	Plant 6WH Loadout	03/22/16	Gross Alpha/Beta	Gross Beta	1.67E-14	1.09E-14	1.58E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187240	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Alpha	3.36E-15	7.33E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187240	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Beta	2.95E-14	1.33E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187241	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Alpha	9.98E-15	9.17E-15	1.04E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187241	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Beta	1.14E-14	1.11E-14	1.75E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187242	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Alpha	4.14E-15	7.13E-15	9.62E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187242	Plant 6WH Loadout	03/23/16	Gross Alpha/Beta	Gross Beta	1.90E-14	1.14E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187243	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Alpha	9.10E-17	6.31E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187243	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.14E-14	1.74E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187244	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Alpha	1.17E-15	6.59E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187244	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Beta	1.06E-14	1.09E-14	1.72E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187245	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Alpha	3.01E-15	6.22E-15	1.15E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187245	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Alpha	-8.60E-17	5.09E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187245	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Beta	1.59E-14	1.23E-14	1.63E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187245	Plant 6WH Loadout	03/24/16	Gross Alpha/Beta	Gross Beta	1.78E-14	1.25E-14	1.63E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187246	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Alpha	-1.20E-15	5.01E-15	1.24E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187246	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Beta	3.20E-14	1.48E-14	1.75E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187247	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Alpha	-3.39E-15	3.88E-15	1.23E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187247	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Beta	1.83E-14	1.32E-14	1.73E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187248	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Alpha	2.05E-15	6.10E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187248	Plant 6WH Loadout	03/28/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.34E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187249	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Alpha	-2.27E-15	4.41E-15	1.21E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187249	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Beta	2.02E-14	1.34E-14	1.72E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187250	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Alpha	-2.18E-15	4.25E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187250	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Beta	1.88E-14	1.28E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187251	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Alpha	-2.21E-15	4.30E-15	1.18E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187251	Plant 6WH Loadout	03/29/16	Gross Alpha/Beta	Gross Beta	1.70E-14	1.27E-14	1.68E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187252	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Alpha	4.28E-15	6.96E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187252	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Beta	3.36E-14	1.49E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187253	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Alpha	-3.61E-15	7.03E-15	1.94E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187253	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Beta	3.22E-14	2.13E-14	2.74E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187254	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Alpha	5.03E-15	6.82E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187254	Plant 6WH Loadout	03/30/16	Gross Alpha/Beta	Gross Beta	1.31E-14	1.19E-14	1.61E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187255	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Alpha	-2.39E-15	4.66E-15	1.28E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187255	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Beta	1.91E-14	1.38E-14	1.81E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187256	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Alpha	3.06E-15	6.33E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187256	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Beta	2.28E-14	1.32E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187257	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Alpha	-8.50E-17	5.05E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187257	Plant 6WH Loadout	03/31/16	Gross Alpha/Beta	Gross Beta	1.97E-14	1.26E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187258	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Alpha	1.16E-15	7.25E-15	1.02E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187258	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Alpha	7.58E-15	8.96E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187258	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Beta	1.45E-14	1.17E-14	1.61E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187258	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Beta	2.82E-14	1.33E-14	1.61E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187259	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Alpha	2.15E-15	7.28E-15	9.78E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187259	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Beta	1.86E-14	1.18E-14	1.55E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187260	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Alpha	1.24E-14	1.04E-14	1.06E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187260	Plant 6WH Loadout	04/04/16	Gross Alpha/Beta	Gross Beta	5.10E-14	1.62E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187261	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Alpha	1.00E-16	7.75E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187261	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Beta	2.39E-14	1.40E-14	1.80E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187262	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Alpha	4.45E-15	8.29E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187262	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.27E-14	1.64E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187263	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Alpha	1.07E-14	1.05E-14	1.12E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187263	Plant 6WH Loadout	04/05/16	Gross Alpha/Beta	Gross Beta	2.06E-14	1.35E-14	1.78E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187264	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Alpha	3.84E-15	9.15E-15	1.18E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187264	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Beta	4.32E-14	1.66E-14	1.87E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187265	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Alpha	3.49E-15	8.32E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187265	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Beta	2.63E-14	1.37E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187266	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Alpha	-3.60E-15	6.75E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187266	Plant 6WH Loadout	04/06/16	Gross Alpha/Beta	Gross Beta	3.02E-14	1.51E-14	1.86E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187267	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Alpha	2.22E-15	7.53E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187267	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Beta	2.06E-14	1.24E-14	1.60E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187268	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Alpha	2.24E-15	7.59E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187268	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Beta	6.31E-15	1.07E-14	1.62E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187269	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Alpha	-1.01E-15	6.79E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187269	Plant 6WH Loadout	04/07/16	Gross Alpha/Beta	Gross Beta	1.78E-14	1.24E-14	1.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187270	Plant 6WH Loadout	04/11/16	Gross Alpha/Beta	Gross Alpha	-1.07E-15	7.17E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187270	Plant 6WH Loadout	04/11/16	Gross Alpha/Beta	Gross Beta	2.40E-14	1.37E-14	1.75E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187271	Building 101	04/04/16	Gross Alpha/Beta	Gross Alpha	1.61E-15	4.41E-15	7.96E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187271	Building 101	04/04/16	Gross Alpha/Beta	Gross Alpha	9.55E-15	7.48E-15	7.96E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187271	Building 101	04/04/16	Gross Alpha/Beta	Gross Beta	2.27E-15	1.92E-14	2.82E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187271	Building 101	04/04/16	Gross Alpha/Beta	Gross Beta	4.42E-15	1.93E-14	2.82E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187272	Building 101	04/05/16	Gross Alpha/Beta	Gross Alpha	4.30E-15	6.05E-15	8.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187272	Building 101	04/05/16	Gross Alpha/Beta	Gross Beta	1.05E-14	2.18E-14	3.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187273	Building 101	04/06/16	Gross Alpha/Beta	Gross Alpha	-2.99E-15	1.37E-14	3.60E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187273	Building 101	04/06/16	Gross Alpha/Beta	Gross Beta	-6.42E-14	8.09E-14	1.28E-13	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187274	Building 101	04/07/16	Gross Alpha/Beta	Gross Alpha	2.95E-15	5.34E-15	8.57E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187274	Building 101	04/07/16	Gross Alpha/Beta	Gross Beta	-2.15E-14	1.88E-14	3.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187275	Building 101	04/12/16	Gross Alpha/Beta	Gross Alpha	3.90E-15	5.48E-15	8.00E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187275	Building 101	04/12/16	Gross Alpha/Beta	Gross Alpha	5.04E-15	5.94E-15	8.00E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187275	Building 101	04/12/16	Gross Alpha/Beta	Gross Beta	-3.48E-15	1.88E-14	2.83E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187275	Building 101	04/12/16	Gross Alpha/Beta	Gross Beta	-2.76E-15	1.89E-14	2.83E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187276	Building 101	04/13/16	Gross Alpha/Beta	Gross Alpha	4.99E-15	5.89E-15	7.93E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187276	Building 101	04/13/16	Gross Alpha/Beta	Gross Beta	3.68E-15	1.92E-14	2.81E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187277	Building 101	04/14/16	Gross Alpha/Beta	Gross Alpha	2.62E-15	4.73E-15	7.59E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187277	Building 101	04/14/16	Gross Alpha/Beta	Gross Beta	-5.69E-16	1.81E-14	2.69E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187278	Building 101	04/18/16	Gross Alpha/Beta	Gross Alpha	2.76E-15	4.98E-15	8.00E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187278	Building 101	04/18/16	Gross Alpha/Beta	Gross Beta	1.38E-14	2.01E-14	2.83E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187279	Building 101	04/19/16	Gross Alpha/Beta	Gross Alpha	5.47E-15	6.46E-15	8.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187279	Building 101	04/19/16	Gross Alpha/Beta	Gross Beta	-4.56E-15	2.04E-14	3.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187281	Building 101	04/20/16	Gross Alpha/Beta	Gross Alpha	3.32E-15	6.00E-15	9.62E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187281	Building 101	04/20/16	Gross Alpha/Beta	Gross Beta	-5.05E-15	2.26E-14	3.41E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187282	Building 101	04/21/16	Gross Alpha/Beta	Gross Alpha	5.64E-15	6.65E-15	8.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187282	Building 101	04/21/16	Gross Alpha/Beta	Gross Beta	8.19E-15	2.20E-14	3.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187283	Building 101	04/25/16	Gross Alpha/Beta	Gross Alpha	4.10E-15	5.77E-15	8.41E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187283	Building 101	04/25/16	Gross Alpha/Beta	Gross Beta	1.60E-14	2.13E-14	2.98E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187284	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Alpha	1.20E-14	8.26E-15	8.07E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187284	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Beta	6.65E-15	1.97E-14	2.86E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187285	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Alpha	2.70E-15	4.88E-15	7.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187285	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Beta	1.14E-14	1.95E-14	2.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187286	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Alpha	5.70E-15	5.87E-15	7.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187286	P6WH Loadout	04/12/16	Gross Alpha/Beta	Gross Beta	6.08E-15	1.80E-14	2.61E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187287	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Alpha	8.31E-15	7.03E-15	7.86E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187287	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Beta	2.20E-14	2.04E-14	2.78E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187288	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Alpha	4.47E-16	2.42E-15	3.06E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187288	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Beta	-5.82E-14	1.23E-14	1.36E-14	µCi/mL	UJ	T06, T07	SLDS (General Area)-Perimeter Air
SLD187289	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Alpha	1.48E-15	4.07E-15	7.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187289	P6WH Loadout	04/13/16	Gross Alpha/Beta	Gross Beta	5.36E-14	2.15E-14	2.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187290	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Alpha	4.93E-15	5.81E-15	7.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187290	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Beta	-4.81E-15	1.83E-14	2.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187291	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Alpha	2.74E-15	4.96E-15	7.96E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187291	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Beta	2.98E-15	1.92E-14	2.82E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187292	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Alpha	1.12E-15	7.01E-15	9.82E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187292	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Alpha	-3.02E-15	5.66E-15	9.82E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187292	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Beta	2.07E-14	1.21E-14	1.56E-14	µCi/mL			SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187292	P6WH Loadout	04/14/16	Gross Alpha/Beta	Gross Beta	1.67E-14	1.16E-14	1.56E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187293	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Alpha	9.20E-17	7.11E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187293	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Beta	2.41E-14	1.31E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187294	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Alpha	4.55E-15	8.47E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187294	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Beta	2.22E-14	1.30E-14	1.68E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187295	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Alpha	-9.37E-16	6.30E-15	9.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187295	P6WH Loadout	04/18/16	Gross Alpha/Beta	Gross Beta	2.83E-14	1.29E-14	1.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187296	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Alpha	2.23E-15	7.56E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187296	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Beta	3.30E-14	1.39E-14	1.61E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187297	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Alpha	7.99E-15	9.45E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187297	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Beta	2.11E-14	1.30E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187298	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Alpha	2.13E-15	7.22E-15	9.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187298	P6WH Loadout	04/19/16	Gross Alpha/Beta	Gross Beta	2.44E-14	1.24E-14	1.54E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187299	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Alpha	2.40E-15	8.15E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187299	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Beta	3.34E-14	1.47E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187300	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Alpha	9.20E-17	7.14E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187300	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Beta	3.41E-14	1.43E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187301	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Alpha	2.23E-15	7.56E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187301	P6WH Loadout	04/20/16	Gross Alpha/Beta	Gross Beta	3.37E-14	1.39E-14	1.61E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187302	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Alpha	9.40E-17	7.27E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187302	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Beta	1.81E-14	1.26E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187303	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Alpha	3.30E-15	7.86E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187303	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Beta	2.48E-14	1.29E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187304	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Alpha	3.25E-15	7.73E-15	9.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187304	P6WH Loadout	04/21/16	Gross Alpha/Beta	Gross Beta	2.91E-14	1.32E-14	1.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187305	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Alpha	1.09E-15	6.79E-15	9.50E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187305	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Beta	4.06E-14	1.40E-14	1.51E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187306	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Alpha	9.64E-15	9.39E-15	1.01E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187306	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Beta	2.66E-14	1.30E-14	1.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187307	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Alpha	5.16E-15	7.99E-15	9.62E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187307	P6WH Loadout	04/25/16	Gross Alpha/Beta	Gross Beta	4.30E-14	1.44E-14	1.53E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187308	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Alpha	1.29E-16	5.07E-15	1.15E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187308	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Alpha	1.29E-16	5.07E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187308	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Beta	3.58E-14	2.36E-14	3.38E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187308	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Beta	5.52E-15	2.08E-14	3.38E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187309	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Alpha	5.92E-15	7.51E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187309	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Beta	3.26E-14	2.21E-14	3.17E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187310	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Alpha	3.13E-15	6.51E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187310	Plant 6WH Loadout	04/26/16	Gross Alpha/Beta	Gross Beta	3.38E-14	2.28E-14	3.29E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187311	Plant 6WH Loadout	04/27/16	Gross Alpha/Beta	Gross Alpha	1.10E-15	3.91E-15	7.58E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187311	Plant 6WH Loadout	04/27/16	Gross Alpha/Beta	Gross Beta	2.93E-14	1.61E-14	2.23E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187312	Plant 6WH Loadout	04/28/16	Gross Alpha/Beta	Gross Alpha	5.72E-15	6.26E-15	8.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187312	Plant 6WH Loadout	04/28/16	Gross Alpha/Beta	Gross Beta	1.47E-14	1.62E-14	2.46E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187313	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Alpha	1.23E-15	4.36E-15	8.45E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187313	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Beta	4.27E-14	1.88E-14	2.49E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187314	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Alpha	1.13E-15	4.03E-15	7.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187314	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Beta	3.08E-14	1.66E-14	2.29E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187315	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Alpha	5.62E-15	6.15E-15	8.23E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187315	Plant 6WH Loadout	05/02/16	Gross Alpha/Beta	Gross Beta	3.47E-14	1.77E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187316	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Alpha	5.70E-15	6.23E-15	8.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187316	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Beta	4.78E-14	1.90E-14	2.45E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187317	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Alpha	-9.44E-16	2.68E-15	7.67E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187317	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Beta	3.29E-14	1.66E-14	2.26E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187318	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Alpha	1.61E-15	4.36E-15	8.73E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187318	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Alpha	5.91E-15	6.14E-15	8.73E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187318	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Beta	9.30E-15	1.16E-14	1.69E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187318	Plant 6WH Loadout	05/03/16	Gross Alpha/Beta	Gross Beta	1.45E-13	2.47E-14	1.69E-14	µCi/mL	J	J01	SLDS (General Area)-Perimeter Air
SLD187319	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Alpha	5.42E-16	3.83E-15	8.81E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187319	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Beta	1.49E-14	1.24E-14	1.70E-14	µCi/mL	UJ	J01, T04, T05	SLDS (General Area)-Perimeter Air
SLD187320	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Alpha	4.58E-15	5.44E-15	8.27E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187320	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Beta	2.06E-14	1.24E-14	1.60E-14	µCi/mL	J	J01, T04	SLDS (General Area)-Perimeter Air
SLD187321	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Alpha	5.74E-15	5.96E-15	8.48E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187321	Plant 6WH Loadout	05/04/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.28E-14	1.64E-14	µCi/mL	J	J01, T04	SLDS (General Area)-Perimeter Air
SLD187322	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.08E-15	9.24E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187322	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Beta	1.50E-14	1.29E-14	1.79E-14	µCi/mL	J	J01, T04, T05	SLDS (General Area)-Perimeter Air
SLD187323	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Alpha	5.65E-15	5.86E-15	8.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187323	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Beta	1.28E-14	1.16E-14	1.61E-14	µCi/mL	J	J01, T04, T05	SLDS (General Area)-Perimeter Air
SLD187324	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Alpha	4.74E-15	5.62E-15	8.55E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187324	Plant 6WH Loadout	05/05/16	Gross Alpha/Beta	Gross Beta	1.38E-14	1.20E-14	1.65E-14	µCi/mL	J	J01, T04, T05	SLDS (General Area)-Perimeter Air
SLD187325	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.29E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187325	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Beta	1.88E-14	1.50E-14	2.05E-14	µCi/mL	UJ	J01, T04, T05	SLDS (General Area)-Perimeter Air
SLD187326	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Alpha	6.53E-15	6.77E-15	9.64E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187326	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.42E-14	1.86E-14	µCi/mL	J	J01, T04	SLDS (General Area)-Perimeter Air
SLD187327	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Alpha	-6.11E-16	3.55E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187327	Plant 6WH Loadout	05/09/16	Gross Alpha/Beta	Gross Beta	2.15E-14	1.45E-14	1.92E-14	µCi/mL	J	J01, T04	SLDS (General Area)-Perimeter Air
SLD187328	Building 101	04/26/16	Gross Alpha/Beta	Gross Alpha	6.31E-15	8.01E-15	1.15E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187328	Building 101	04/26/16	Gross Alpha/Beta	Gross Alpha	7.86E-15	8.59E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187328	Building 101	04/26/16	Gross Alpha/Beta	Gross Beta	2.31E-14	2.25E-14	3.38E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187328	Building 101	04/26/16	Gross Alpha/Beta	Gross Beta	6.40E-14	2.61E-14	3.38E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187329	Building 101	04/27/16	Gross Alpha/Beta	Gross Alpha	2.62E-15	9.31E-15	1.80E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187329	Building 101	04/27/16	Gross Alpha/Beta	Gross Beta	-6.62E-15	3.11E-14	5.30E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187330	Building 101	04/28/16	Gross Alpha/Beta	Gross Alpha	2.33E-15	4.86E-15	8.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187330	Building 101	04/28/16	Gross Alpha/Beta	Gross Beta	1.11E-14	1.58E-14	2.45E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187331	Building 101	05/02/16	Gross Alpha/Beta	Gross Alpha	6.64E-15	6.45E-15	8.13E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187331	Building 101	05/02/16	Gross Alpha/Beta	Gross Beta	3.01E-14	1.71E-14	2.39E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187332	Building 101	05/03/16	Gross Alpha/Beta	Gross Alpha	7.94E-15	7.00E-15	8.34E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187332	Building 101	05/03/16	Gross Alpha/Beta	Gross Beta	1.25E-14	1.59E-14	2.45E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187333	Building 101	05/04/16	Gross Alpha/Beta	Gross Alpha	5.87E-15	6.42E-15	8.61E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187333	Building 101	05/04/16	Gross Alpha/Beta	Gross Beta	2.02E-14	1.71E-14	2.53E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187334	Building 101	05/05/16	Gross Alpha/Beta	Gross Alpha	3.04E-15	4.71E-15	7.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187334	Building 101	05/05/16	Gross Alpha/Beta	Gross Beta	2.97E-14	1.57E-14	2.16E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187335	Building 101	05/09/16	Gross Alpha/Beta	Gross Alpha	2.89E-15	6.01E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187335	Building 101	05/09/16	Gross Alpha/Beta	Gross Beta	6.18E-14	2.38E-14	3.04E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187336	Building 101	05/10/16	Gross Alpha/Beta	Gross Alpha	-1.65E-15	1.41E-15	7.60E-15	µCi/mL			SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187336	Building 101	05/10/16	Gross Alpha/Beta	Gross Alpha	4.96E-15	5.58E-15	7.60E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187336	Building 101	05/10/16	Gross Alpha/Beta	Gross Beta	1.51E-15	1.52E-14	2.46E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187336	Building 101	05/10/16	Gross Alpha/Beta	Gross Beta	7.06E-15	1.57E-14	2.46E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187337	Building 101	05/11/16	Gross Alpha/Beta	Gross Alpha	5.87E-15	7.81E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187337	Building 101	05/11/16	Gross Alpha/Beta	Gross Beta	6.52E-15	2.35E-14	3.74E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187338	Building 101	05/16/16	Gross Alpha/Beta	Gross Alpha	3.90E-15	5.19E-15	7.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187338	Building 101	05/16/16	Gross Alpha/Beta	Gross Beta	1.98E-14	1.70E-14	2.49E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187339	Building 101	05/17/16	Gross Alpha/Beta	Gross Alpha	-1.54E-15	1.67E-15	3.61E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187339	Building 101	05/17/16	Gross Alpha/Beta	Gross Beta	-4.95E-14	9.48E-15	1.43E-14	µCi/mL	UJ	T06, T07	SLDS (General Area)-Perimeter Air
SLD187340	Building 101	05/18/16	Gross Alpha/Beta	Gross Alpha	5.45E-15	6.14E-15	8.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187340	Building 101	05/18/16	Gross Alpha/Beta	Gross Beta	2.07E-14	1.84E-14	2.70E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187341	Building 101	05/19/16	Gross Alpha/Beta	Gross Alpha	5.13E-15	5.78E-15	7.87E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187341	Building 101	05/19/16	Gross Alpha/Beta	Gross Beta	2.53E-14	1.79E-14	2.54E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187342	Building 101	05/23/16	Gross Alpha/Beta	Gross Alpha	9.21E-15	7.56E-15	8.47E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187342	Building 101	05/23/16	Gross Alpha/Beta	Gross Beta	3.58E-14	2.00E-14	2.74E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187343	Building 101	05/24/16	Gross Alpha/Beta	Gross Alpha	3.84E-15	5.11E-15	7.57E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187343	Building 101	05/24/16	Gross Alpha/Beta	Gross Beta	2.99E-14	1.76E-14	2.44E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187344	Building 101	05/25/16	Gross Alpha/Beta	Gross Alpha	-5.32E-16	2.53E-15	7.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187344	Building 101	05/25/16	Gross Alpha/Beta	Gross Beta	1.76E-14	1.61E-14	2.37E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187345	Building 101	05/31/16	Gross Alpha/Beta	Gross Alpha	1.58E-15	3.90E-15	7.28E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187345	Building 101	05/31/16	Gross Alpha/Beta	Gross Beta	3.47E-14	1.75E-14	2.35E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187346	Plant 7W	05/10/16	Gross Alpha/Beta	Gross Alpha	7.40E-15	1.82E-14	3.40E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187346	Plant 7W	05/10/16	Gross Alpha/Beta	Gross Beta	5.03E-14	7.20E-14	1.10E-13	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187347	Plant 7W	05/11/16	Gross Alpha/Beta	Gross Alpha	6.38E-16	3.96E-15	8.81E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187347	Plant 7W	05/11/16	Gross Alpha/Beta	Gross Beta	3.40E-14	2.05E-14	2.85E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187348	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Alpha	1.66E-15	4.08E-15	7.63E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187348	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Alpha	3.87E-15	5.15E-15	7.63E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187348	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Beta	9.88E-15	1.60E-14	2.47E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187348	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Beta	1.55E-14	1.65E-14	2.47E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187349	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Alpha	2.68E-15	4.51E-15	7.41E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187349	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Beta	1.30E-14	1.58E-14	2.39E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187350	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Alpha	1.55E-15	3.82E-15	7.14E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187350	Plant 6WH Loadout	05/10/16	Gross Alpha/Beta	Gross Beta	8.59E-15	1.49E-14	2.31E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187351	Plant 6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Alpha	1.54E-14	1.10E-14	1.12E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187351	Plant 6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Beta	4.11E-14	2.59E-14	3.62E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187352	Plant 6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Alpha	-7.82E-16	3.71E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187352	Plant 6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Beta	3.67E-14	2.47E-14	3.49E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187353	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Alpha	2.72E-15	4.57E-15	7.50E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187353	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Beta	2.69E-14	1.73E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187354	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Alpha	7.04E-15	6.30E-15	7.47E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187354	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Beta	3.84E-14	1.82E-14	2.41E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187355	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Alpha	2.64E-15	4.44E-15	7.28E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187355	Plant 6WH Loadout	05/16/16	Gross Alpha/Beta	Gross Beta	2.81E-14	1.69E-14	2.35E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187356	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Alpha	2.67E-15	4.49E-15	7.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187356	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Beta	1.36E-14	1.58E-14	2.38E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187357	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Alpha	2.62E-15	4.40E-15	7.23E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187357	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Beta	3.25E-14	1.72E-14	2.33E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187358	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Alpha	1.65E-15	5.19E-15	8.87E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187358	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Alpha	1.65E-15	5.19E-15	8.87E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187358	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Beta	2.37E-14	1.22E-14	1.47E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187358	Plant 6WH Loadout	05/17/16	Gross Alpha/Beta	Gross Beta	2.44E-14	1.23E-14	1.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187359	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Alpha	-1.42E-15	4.19E-15	9.55E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187359	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Beta	2.28E-14	1.28E-14	1.58E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187360	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Alpha	1.75E-15	5.51E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187360	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Beta	1.78E-14	1.21E-14	1.56E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187361	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Alpha	1.72E-15	5.40E-15	9.24E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187361	Plant 6WH Loadout	05/18/16	Gross Alpha/Beta	Gross Beta	1.35E-14	1.14E-14	1.53E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187362	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Alpha	3.75E-15	6.09E-15	9.16E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187362	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Beta	1.99E-14	1.21E-14	1.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187363	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Alpha	-1.35E-15	3.98E-15	9.09E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187363	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Beta	2.37E-14	1.24E-14	1.50E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187364	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Alpha	2.65E-15	5.58E-15	8.91E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187364	Plant 6WH Loadout	05/19/16	Gross Alpha/Beta	Gross Beta	1.56E-14	1.13E-14	1.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187365	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Alpha	6.82E-15	7.06E-15	9.16E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187365	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Beta	4.16E-14	1.45E-14	1.52E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187366	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Alpha	4.73E-15	6.38E-15	9.09E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187366	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Beta	4.51E-14	1.48E-14	1.50E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187367	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Alpha	9.61E-15	7.69E-15	8.91E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187367	Plant 6WH Loadout	05/23/16	Gross Alpha/Beta	Gross Beta	4.29E-14	1.43E-14	1.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187368	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Alpha	4.08E-15	6.63E-15	9.97E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187368	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Alpha	7.42E-16	5.39E-15	9.97E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187368	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Beta	3.10E-14	1.42E-14	1.65E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187368	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Beta	2.95E-14	1.40E-14	1.65E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187369	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Alpha	6.02E-15	7.01E-15	9.51E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187369	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Beta	3.70E-14	1.44E-14	1.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187370	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Alpha	4.85E-15	6.53E-15	9.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187370	Plant 6WH Loadout	05/24/16	Gross Alpha/Beta	Gross Beta	4.69E-14	1.52E-14	1.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187371	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Alpha	1.77E-15	5.56E-15	9.51E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187371	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.27E-14	1.57E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187372	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Alpha	6.79E-16	4.93E-15	9.12E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187372	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Beta	2.12E-14	1.22E-14	1.51E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187373	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Alpha	2.61E-15	5.49E-15	8.77E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187373	Plant 6WH Loadout	05/25/16	Gross Alpha/Beta	Gross Beta	2.28E-14	1.20E-14	1.45E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187374	P6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Alpha	4.48E-15	5.82E-15	8.14E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187374	P6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Alpha	3.26E-15	5.28E-15	8.14E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187374	P6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Beta	2.50E-14	1.74E-14	2.66E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187374	P6WH Loadout	05/11/16	Gross Alpha/Beta	Gross Beta	2.96E-14	1.78E-14	2.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187375	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Alpha	5.72E-15	5.61E-15	6.73E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187375	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Beta	9.82E-15	1.33E-14	2.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187376	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Alpha	5.03E-15	5.58E-15	7.18E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187376	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Beta	3.16E-14	1.63E-14	2.35E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187377	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Alpha	5.86E-15	5.74E-15	6.89E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187377	P6WH Loadout	05/31/16	Gross Alpha/Beta	Gross Beta	3.36E-14	1.59E-14	2.26E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187378	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Alpha	6.90E-15	6.11E-15	6.89E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187378	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Beta	2.90E-14	1.55E-14	2.26E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187379	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Alpha	6.21E-15	6.09E-15	7.30E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187379	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Beta	2.03E-14	1.54E-14	2.39E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187380	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Alpha	1.77E-15	4.06E-15	7.06E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187380	P6WH Loadout	06/01/16	Gross Alpha/Beta	Gross Beta	2.30E-14	1.52E-14	2.31E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187381	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Alpha	6.81E-16	3.34E-15	6.81E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187381	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Beta	2.61E-14	1.51E-14	2.23E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187382	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Alpha	2.86E-15	4.64E-15	7.15E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187382	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Beta	2.80E-14	1.59E-14	2.34E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187383	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Alpha	1.76E-15	4.05E-15	7.03E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187383	P6WH Loadout	06/02/16	Gross Alpha/Beta	Gross Beta	1.76E-14	1.47E-14	2.30E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187384	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Alpha	1.62E-15	3.72E-15	6.47E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187384	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Beta	4.62E-14	1.63E-14	2.12E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187385	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Alpha	7.22E-15	6.39E-15	7.21E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187385	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Beta	3.78E-14	1.69E-14	2.36E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187386	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Alpha	6.53E-15	5.78E-15	6.52E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187386	P6WH Loadout	06/06/16	Gross Alpha/Beta	Gross Beta	3.79E-14	1.56E-14	2.14E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187387	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Alpha	-3.26E-16	2.53E-15	6.52E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187387	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Beta	1.14E-14	1.31E-14	2.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187388	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Alpha	2.61E-16	5.39E-15	1.06E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187388	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Alpha	2.35E-15	6.14E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187388	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Beta	7.75E-15	1.28E-14	1.66E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187388	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Beta	-5.63E-15	1.13E-14	1.66E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187389	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Alpha	2.50E-16	5.15E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187389	P6WH Loadout	06/07/16	Gross Alpha/Beta	Gross Beta	8.05E-15	1.23E-14	1.58E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187390	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Alpha	-7.31E-16	4.64E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187390	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Beta	1.91E-14	1.32E-14	1.55E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187391	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Alpha	-7.99E-16	5.07E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187391	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Beta	2.09E-14	1.44E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187392	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Alpha	2.55E-16	5.26E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187392	P6WH Loadout	06/08/16	Gross Alpha/Beta	Gross Beta	1.02E-14	1.28E-14	1.61E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187393	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Alpha	1.20E-15	5.29E-15	9.73E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187393	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Beta	2.43E-14	1.35E-14	1.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187394	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Alpha	4.53E-15	6.97E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187394	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Beta	2.16E-14	1.45E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187395	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Alpha	8.24E-15	7.66E-15	1.02E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187395	P6WH Loadout	06/09/16	Gross Alpha/Beta	Gross Beta	3.62E-14	1.52E-14	1.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187396	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Alpha	7.10E-15	7.25E-15	9.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187396	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Beta	3.30E-14	1.46E-14	1.55E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187397	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Alpha	-7.96E-16	5.05E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187397	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Beta	4.60E-14	1.68E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187398	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Alpha	6.29E-15	7.17E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187398	P6WH Loadout	06/13/16	Gross Alpha/Beta	Gross Beta	4.68E-14	1.63E-14	1.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD187399	Building 101	06/01/16	Gross Alpha/Beta	Gross Alpha	5.62E-15	6.23E-15	8.02E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187399	Building 101	06/01/16	Gross Alpha/Beta	Gross Alpha	2.01E-15	4.62E-15	8.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187399	Building 101	06/01/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.67E-14	2.63E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187399	Building 101	06/01/16	Gross Alpha/Beta	Gross Beta	3.76E-14	1.84E-14	2.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD187400	Building 101	06/02/16	Gross Alpha/Beta	Gross Alpha	5.42E-15	6.01E-15	7.73E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187400	Building 101	06/02/16	Gross Alpha/Beta	Gross Beta	1.13E-14	1.53E-14	2.53E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187401	Building 101	06/06/16	Gross Alpha/Beta	Gross Alpha	7.74E-15	6.86E-15	7.73E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187401	Building 101	06/06/16	Gross Alpha/Beta	Gross Beta	1.06E-14	1.53E-14	2.53E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187402	Building 101	06/07/16	Gross Alpha/Beta	Gross Alpha	6.32E-15	6.19E-15	7.43E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187402	Building 101	06/07/16	Gross Alpha/Beta	Gross Beta	1.51E-14	1.51E-14	2.43E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187403	Building 101	06/08/16	Gross Alpha/Beta	Gross Alpha	4.34E-15	5.64E-15	7.87E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187403	Building 101	06/08/16	Gross Alpha/Beta	Gross Beta	2.94E-14	1.73E-14	2.58E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187404	Building 101	06/09/16	Gross Alpha/Beta	Gross Alpha	5.76E-15	6.38E-15	8.21E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187404	Building 101	06/09/16	Gross Alpha/Beta	Gross Beta	2.76E-14	1.78E-14	2.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187405	Building 101	06/13/16	Gross Alpha/Beta	Gross Alpha	7.46E-15	7.30E-15	8.76E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD187405	Building 101	06/13/16	Gross Alpha/Beta	Gross Beta	2.94E-14	1.90E-14	2.87E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187406	Building 101	06/14/16	Gross Alpha/Beta	Gross Alpha	-2.96E-16	4.34E-15	9.27E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187406	Building 101	06/14/16	Gross Alpha/Beta	Gross Alpha	1.15E-14	8.68E-15	9.27E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD187406	Building 101	06/14/16	Gross Alpha/Beta	Gross Beta	2.31E-14	2.13E-14	2.63E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD187406	Building 101	06/14/16	Gross Alpha/Beta	Gross Beta	2.09E-14	2.11E-14	2.63E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187407	Building 101	06/15/16	Gross Alpha/Beta	Gross Alpha	-1.54E-15	3.79E-15	9.67E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD187407	Building 101	06/15/16	Gross Alpha/Beta	Gross Beta	2.57E-14	2.23E-14	2.74E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191745	Building 101	06/16/16	Gross Alpha/Beta	Gross Alpha	3.21E-15	5.89E-15	9.15E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191745	Building 101	06/16/16	Gross Alpha/Beta	Gross Beta	3.53E-14	2.20E-14	2.59E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191746	Building 101	06/20/16	Gross Alpha/Beta	Gross Alpha	2.09E-15	5.53E-15	9.36E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191746	Building 101	06/20/16	Gross Alpha/Beta	Gross Beta	3.31E-14	2.22E-14	2.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191747	Building 101	06/21/16	Gross Alpha/Beta	Gross Alpha	3.03E-15	5.56E-15	8.64E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191747	Building 101	06/21/16	Gross Alpha/Beta	Gross Beta	2.01E-14	1.97E-14	2.44E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191748	Building 101	06/22/16	Gross Alpha/Beta	Gross Alpha	8.92E-15	7.78E-15	9.02E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191748	Building 101	06/22/16	Gross Alpha/Beta	Gross Beta	1.45E-14	2.01E-14	2.55E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191749	Building 101	06/23/16	Gross Alpha/Beta	Gross Alpha	5.72E-15	6.98E-15	9.45E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191749	Building 101	06/23/16	Gross Alpha/Beta	Gross Beta	4.33E-14	2.32E-14	2.67E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191750	Building 101	06/27/16	Gross Alpha/Beta	Gross Alpha	8.26E-16	4.60E-15	8.64E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191750	Building 101	06/27/16	Gross Alpha/Beta	Gross Beta	2.22E-14	1.99E-14	2.44E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191751	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Alpha	2.73E-15	6.24E-15	1.01E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191751	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Alpha	6.82E-16	5.52E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191751	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Beta	2.26E-14	1.22E-14	1.61E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191751	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Beta	2.32E-14	1.23E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191752	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Alpha	6.40E-16	5.19E-15	9.44E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191752	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Beta	1.69E-14	1.09E-14	1.51E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191753	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.81E-15	9.37E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191753	P6WH Loadout	06/14/16	Gross Alpha/Beta	Gross Beta	1.92E-14	1.12E-14	1.50E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191754	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Alpha	3.83E-15	6.70E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191754	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Beta	3.37E-14	1.37E-14	1.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191755	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Alpha	-3.42E-16	5.15E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191755	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Beta	2.26E-14	1.22E-14	1.61E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191756	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Alpha	5.53E-15	6.85E-15	9.59E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191756	P6WH Loadout	06/15/16	Gross Alpha/Beta	Gross Beta	2.71E-14	1.23E-14	1.53E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191757	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Alpha	3.94E-15	6.90E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191757	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Beta	2.58E-14	1.31E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191758	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Alpha	2.82E-15	6.45E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191758	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Beta	4.09E-14	1.46E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191759	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Alpha	7.20E-16	5.83E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191759	P6WH Loadout	06/16/16	Gross Alpha/Beta	Gross Beta	4.11E-14	1.48E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191760	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Alpha	-3.61E-16	5.44E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191760	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Beta	2.32E-14	1.29E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191761	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Alpha	7.36E-16	5.96E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191761	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Beta	3.92E-14	1.48E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191762	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Alpha	8.94E-15	8.09E-15	1.01E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191762	P6WH Loadout	06/20/16	Gross Alpha/Beta	Gross Beta	2.87E-14	1.30E-14	1.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191763	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Alpha	1.80E-15	6.22E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191763	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Beta	2.38E-14	1.29E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191764	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Alpha	3.83E-15	6.70E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191764	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Beta	2.90E-14	1.31E-14	1.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191765	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Alpha	-2.55E-15	2.65E-15	8.90E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191765	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Alpha	1.99E-15	5.26E-15	8.90E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191765	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Beta	1.86E-14	2.02E-14	2.52E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191765	P6WH Loadout	06/21/16	Gross Alpha/Beta	Gross Beta	3.01E-14	2.10E-14	2.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191766	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Alpha	-2.73E-16	4.00E-15	8.56E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191766	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Beta	2.07E-14	1.96E-14	2.42E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191767	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Alpha	3.03E-15	5.56E-15	8.64E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191767	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Beta	3.40E-14	2.08E-14	2.44E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191768	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Alpha	7.79E-16	4.34E-15	8.15E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191768	P6WH Loadout	06/22/16	Gross Alpha/Beta	Gross Beta	3.21E-14	1.96E-14	2.31E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191769	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Alpha	5.04E-15	6.14E-15	8.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191769	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Beta	1.54E-14	1.87E-14	2.35E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191770	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Alpha	4.01E-15	5.81E-15	8.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191770	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Beta	3.64E-14	2.04E-14	2.37E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191771	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Alpha	4.71E-15	5.74E-15	7.77E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191771	P6WH Loadout	06/23/16	Gross Alpha/Beta	Gross Beta	4.31E-14	1.96E-14	2.20E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191772	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Alpha	2.94E-15	5.40E-15	8.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191772	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Beta	3.37E-14	2.02E-14	2.37E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191773	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Alpha	2.94E-15	5.40E-15	8.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191773	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Beta	2.83E-14	1.98E-14	2.37E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191774	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Alpha	2.80E-15	5.14E-15	7.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191774	P6WH Loadout	06/27/16	Gross Alpha/Beta	Gross Beta	1.86E-14	1.82E-14	2.26E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191775	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Alpha	5.77E-15	5.86E-15	7.71E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191775	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Alpha	4.69E-15	5.44E-15	7.71E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191775	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Beta	2.48E-14	1.62E-14	2.34E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191775	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Beta	1.46E-14	1.53E-14	2.34E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191776	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Alpha	4.81E-15	5.58E-15	7.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191776	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Beta	2.76E-14	1.68E-14	2.40E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191777	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Alpha	5.50E-15	5.58E-15	7.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191777	Plant 6WH Loadout	06/28/16	Gross Alpha/Beta	Gross Beta	3.14E-14	1.62E-14	2.22E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191778	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Alpha	1.41E-15	3.85E-15	7.56E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191778	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Beta	1.69E-14	1.52E-14	2.29E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191779	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Alpha	1.48E-15	4.03E-15	7.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191779	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Beta	2.83E-14	1.69E-14	2.40E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191780	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Alpha	5.50E-15	5.58E-15	7.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191780	Plant 6WH Loadout	06/29/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.53E-14	2.22E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191781	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Alpha	3.17E-14	1.74E-14	1.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191781	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Beta	3.48E-13	5.57E-14	4.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191782	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Alpha	2.83E-14	1.61E-14	1.41E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191782	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Beta	3.10E-13	5.15E-14	4.26E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191783	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Alpha	1.10E-14	1.12E-14	1.47E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191783	Plant 6WH Loadout	06/30/16	Gross Alpha/Beta	Gross Beta	2.39E-14	2.88E-14	4.47E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191784	Building 101	06/28/16	Gross Alpha/Beta	Gross Alpha	4.02E-15	7.14E-15	1.23E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191784	Building 101	06/28/16	Gross Alpha/Beta	Gross Beta	7.97E-14	2.94E-14	3.72E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191785	Plant 7W	06/28/16	Gross Alpha/Beta	Gross Alpha	1.30E-14	1.79E-14	2.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191785	Plant 7W	06/28/16	Gross Alpha/Beta	Gross Beta	4.01E-14	5.37E-14	8.39E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191786	Building 101	06/29/16	Gross Alpha/Beta	Gross Alpha	-1.09E-15	1.51E-15	2.90E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191786	Building 101	06/29/16	Gross Alpha/Beta	Gross Beta	-4.79E-14	7.69E-15	1.12E-14	µCi/mL	UJ	T06, T07	SLDS (General Area)-Perimeter Air
SLD191787	Plant 7W	06/30/16	Gross Alpha/Beta	Gross Alpha	2.95E-15	2.68E-14	6.31E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191787	Plant 7W	06/30/16	Gross Alpha/Beta	Gross Beta	2.75E-13	1.39E-13	1.91E-13	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191788	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Alpha	1.28E-15	4.35E-15	8.05E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191788	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Alpha	5.66E-15	6.19E-15	8.05E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191788	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Beta	2.73E-14	1.91E-14	2.52E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191788	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Beta	2.10E-14	1.86E-14	2.52E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191789	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Alpha	5.26E-15	5.74E-15	7.48E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191789	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Beta	2.60E-14	1.78E-14	2.34E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191790	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Alpha	3.36E-15	5.17E-15	7.78E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191790	P6WH Loadout	07/05/16	Gross Alpha/Beta	Gross Beta	1.50E-14	1.76E-14	2.43E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191791	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Alpha	5.84E-15	9.00E-15	1.36E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191791	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Beta	2.03E-14	3.01E-14	4.23E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191792	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Alpha	9.02E-15	9.85E-15	1.28E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191792	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Beta	2.36E-14	2.88E-14	4.00E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191793	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Alpha	2.14E-15	7.26E-15	1.35E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191793	P6WH Loadout	07/06/16	Gross Alpha/Beta	Gross Beta	-4.14E-15	2.79E-14	4.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191794	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Alpha	6.22E-15	7.86E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191794	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Beta	1.92E-14	2.46E-14	3.42E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191795	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Alpha	8.94E-15	8.68E-15	1.06E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191795	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Beta	2.05E-14	2.40E-14	3.32E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191796	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Alpha	3.81E-15	7.80E-15	1.29E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191796	P6WH Loadout	07/07/16	Gross Alpha/Beta	Gross Beta	1.71E-14	2.85E-14	4.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191797	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Alpha	1.81E-16	3.72E-15	7.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191797	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Beta	2.34E-15	1.70E-14	2.49E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191798	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Alpha	5.39E-15	5.88E-15	7.66E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191798	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Beta	2.33E-14	1.80E-14	2.39E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191799	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Alpha	3.36E-15	5.17E-15	7.78E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191799	P6WH Loadout	07/11/16	Gross Alpha/Beta	Gross Beta	3.24E-14	1.90E-14	2.43E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191800	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Alpha	1.21E-15	4.12E-15	7.63E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191800	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.76E-14	2.38E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191801	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Alpha	4.36E-15	5.52E-15	7.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191801	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Beta	3.86E-14	1.92E-14	2.40E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191802	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Alpha	3.29E-16	5.22E-15	9.97E-15	µCi/mL			SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191802	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Alpha	1.32E-15	5.58E-15	9.97E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191802	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Beta	1.08E-14	1.14E-14	1.56E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191802	P6WH Loadout	07/12/16	Gross Alpha/Beta	Gross Beta	2.47E-14	1.30E-14	1.56E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191803	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Alpha	5.34E-15	8.19E-15	1.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191803	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Beta	3.17E-14	1.63E-14	1.94E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191804	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Alpha	-1.56E-15	4.18E-15	9.45E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191804	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Beta	4.02E-14	1.40E-14	1.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191805	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Alpha	3.44E-15	6.52E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191805	P6WH Loadout	07/13/16	Gross Alpha/Beta	Gross Beta	5.82E-14	1.68E-14	1.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191806	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Alpha	-7.32E-16	5.38E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191806	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Beta	1.70E-14	1.33E-14	1.73E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191807	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Alpha	3.44E-15	6.52E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191807	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Beta	3.04E-14	1.40E-14	1.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191808	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Alpha	3.63E-16	5.76E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191808	P6WH Loadout	07/14/16	Gross Alpha/Beta	Gross Beta	1.61E-14	1.31E-14	1.72E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191809	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Alpha	6.75E-15	7.70E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191809	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Beta	3.56E-14	1.49E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191810	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Alpha	4.41E-15	6.76E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191810	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Beta	3.79E-14	1.47E-14	1.61E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191811	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Alpha	3.51E-16	5.57E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191811	P6WH Loadout	07/18/16	Gross Alpha/Beta	Gross Beta	3.45E-14	1.47E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191812	Building 101	07/05/16	Gross Alpha/Beta	Gross Alpha	2.54E-15	6.54E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191812	Building 101	07/05/16	Gross Alpha/Beta	Gross Beta	3.22E-14	1.48E-14	1.72E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191813	Building 101	07/12/16	Gross Alpha/Beta	Gross Alpha	3.17E-15	8.16E-15	1.37E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191813	Building 101	07/12/16	Gross Alpha/Beta	Gross Beta	1.31E-14	1.56E-14	2.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191814	Plant 7W	07/06/16	Gross Alpha/Beta	Gross Alpha	2.97E-15	1.26E-14	2.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191814	Plant 7W	07/06/16	Gross Alpha/Beta	Gross Beta	1.58E-14	2.48E-14	3.51E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191815	Plant 7W	07/11/16	Gross Alpha/Beta	Gross Alpha	6.67E-15	7.60E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191815	Plant 7W	07/11/16	Gross Alpha/Beta	Gross Beta	3.38E-14	1.46E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191816	Plant 7W	07/13/16	Gross Alpha/Beta	Gross Alpha	1.79E-15	7.61E-15	1.36E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191816	Plant 7W	07/13/16	Gross Alpha/Beta	Gross Beta	1.65E-14	1.58E-14	2.12E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191817	Plant 7W	07/14/16	Gross Alpha/Beta	Gross Alpha	-2.96E-15	4.44E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191817	Plant 7W	07/14/16	Gross Alpha/Beta	Gross Beta	1.85E-14	1.36E-14	1.75E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191818	Plant 7W	07/18/16	Gross Alpha/Beta	Gross Alpha	3.68E-15	6.98E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191818	Plant 7W	07/18/16	Gross Alpha/Beta	Gross Beta	4.53E-14	1.63E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191819	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Alpha	6.14E-15	6.54E-15	8.76E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191819	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Alpha	7.46E-15	7.05E-15	8.76E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191819	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Beta	2.84E-14	2.07E-14	3.03E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191819	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Beta	3.34E-14	2.11E-14	3.03E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191820	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Alpha	6.08E-15	6.47E-15	8.67E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191820	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Beta	2.73E-14	2.04E-14	3.00E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191821	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Alpha	2.04E-15	4.34E-15	8.14E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191821	P6WH Loadout	07/19/16	Gross Alpha/Beta	Gross Beta	3.80E-14	2.02E-14	2.82E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191822	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Alpha	3.01E-15	4.61E-15	7.53E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191822	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Beta	1.44E-14	1.69E-14	2.61E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191823	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Alpha	7.40E-15	6.36E-15	7.40E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191823	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Beta	1.21E-14	1.64E-14	2.56E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191824	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Alpha	1.79E-15	3.81E-15	7.15E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191824	P6WH Loadout	07/20/16	Gross Alpha/Beta	Gross Beta	1.30E-14	1.60E-14	2.48E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191825	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.09E-15	7.46E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191825	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.72E-14	2.58E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191826	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Alpha	1.85E-15	3.94E-15	7.40E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191826	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Beta	2.68E-14	1.77E-14	2.56E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191827	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Alpha	1.78E-15	3.80E-15	7.12E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191827	P6WH Loadout	07/21/16	Gross Alpha/Beta	Gross Beta	3.19E-14	1.76E-14	2.47E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191828	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Alpha	6.27E-15	5.93E-15	7.37E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191828	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Beta	2.53E-14	1.75E-14	2.55E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191829	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Alpha	2.91E-15	4.45E-15	7.27E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191829	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Beta	3.62E-15	1.54E-14	2.52E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191830	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Alpha	3.78E-15	4.68E-15	6.86E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191830	P6WH Loadout	07/25/16	Gross Alpha/Beta	Gross Beta	2.68E-14	1.66E-14	2.38E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191831	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Alpha	5.12E-15	5.45E-15	7.30E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191831	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Beta	3.68E-14	1.84E-14	2.53E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191832	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Alpha	5.07E-15	5.40E-15	7.24E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191832	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Beta	3.79E-14	1.83E-14	2.51E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191833	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Alpha	-2.40E-15	4.21E-15	9.85E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191833	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Alpha	5.80E-16	5.44E-15	9.85E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191833	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Beta	1.40E-14	1.17E-14	1.59E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191833	P6WH Loadout	07/26/16	Gross Alpha/Beta	Gross Beta	2.54E-14	1.30E-14	1.59E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191834	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Alpha	-1.50E-15	4.97E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191834	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Beta	1.83E-14	1.29E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191835	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Alpha	2.77E-15	6.59E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191835	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Beta	2.74E-14	1.40E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191836	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Alpha	4.51E-15	8.15E-15	1.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191836	P6WH Loadout	07/27/16	Gross Alpha/Beta	Gross Beta	2.41E-14	1.56E-14	2.01E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191837	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Alpha	7.05E-15	7.87E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191837	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Beta	3.63E-14	1.49E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191838	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Alpha	7.39E-15	9.37E-15	1.31E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191838	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Beta	4.66E-14	1.87E-14	2.11E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191839	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Alpha	-4.31E-16	5.27E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191839	P6WH Loadout	07/28/16	Gross Alpha/Beta	Gross Beta	2.78E-14	1.37E-14	1.65E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191840	Building 101	07/19/16	Gross Alpha/Beta	Gross Alpha	-2.72E-15	8.99E-15	1.90E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191840	Building 101	07/19/16	Gross Alpha/Beta	Gross Beta	3.93E-14	2.40E-14	3.07E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191841	Building 101	07/21/16	Gross Alpha/Beta	Gross Alpha	6.67E-16	6.25E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191841	Building 101	07/21/16	Gross Alpha/Beta	Gross Beta	2.27E-14	1.42E-14	1.83E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191842	Building 101	07/25/16	Gross Alpha/Beta	Gross Alpha	7.65E-15	1.82E-14	2.93E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191842	Building 101	07/25/16	Gross Alpha/Beta	Gross Beta	9.32E-15	3.11E-14	4.73E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191843	Building 101	07/26/16	Gross Alpha/Beta	Gross Alpha	7.17E-15	8.01E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191843	Building 101	07/26/16	Gross Alpha/Beta	Gross Beta	6.55E-14	1.80E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191844	Building 101	07/27/16	Gross Alpha/Beta	Gross Alpha	1.77E-15	6.51E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191844	Building 101	07/27/16	Gross Alpha/Beta	Gross Beta	2.43E-14	1.42E-14	1.79E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191845	Building 101	07/28/16	Gross Alpha/Beta	Gross Alpha	-6.28E-16	7.66E-15	1.49E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191845	Building 101	07/28/16	Gross Alpha/Beta	Gross Beta	2.31E-14	1.80E-14	2.41E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191846	Plant 7W	07/19/16	Gross Alpha/Beta	Gross Alpha	9.44E-15	9.50E-15	1.23E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191846	Plant 7W	07/19/16	Gross Alpha/Beta	Gross Beta	2.23E-14	1.52E-14	1.99E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191847	Plant 7W	07/20/16	Gross Alpha/Beta	Gross Alpha	3.69E-15	8.80E-15	1.42E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191847	Plant 7W	07/20/16	Gross Alpha/Beta	Gross Beta	1.18E-14	1.59E-14	2.28E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191848	Plant 7W	07/21/16	Gross Alpha/Beta	Gross Alpha	8.19E-15	1.48E-14	2.27E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191848	Plant 7W	07/21/16	Gross Alpha/Beta	Gross Beta	1.45E-14	2.49E-14	3.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191849	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Alpha	1.71E-15	4.92E-15	8.66E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191849	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Alpha	6.29E-16	4.43E-15	8.66E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191849	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Beta	2.78E-14	1.96E-14	2.43E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191849	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Beta	1.97E-14	1.90E-14	2.43E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191850	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Alpha	1.58E-15	4.56E-15	8.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191850	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Beta	2.77E-14	1.83E-14	2.25E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191851	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Alpha	6.01E-16	4.23E-15	8.27E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191851	P6WH Loadout	08/01/16	Gross Alpha/Beta	Gross Beta	3.37E-14	1.93E-14	2.32E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191852	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Alpha	8.46E-15	7.49E-15	8.96E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191852	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Beta	2.60E-14	2.00E-14	2.52E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191853	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Alpha	4.84E-15	6.06E-15	8.48E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191853	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Beta	2.59E-14	1.91E-14	2.38E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191854	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Alpha	1.71E-15	4.92E-15	8.66E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191854	P6WH Loadout	08/02/16	Gross Alpha/Beta	Gross Beta	2.44E-14	1.93E-14	2.43E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191855	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Alpha	6.40E-16	4.50E-15	8.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191855	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Beta	2.00E-14	1.93E-14	2.47E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191856	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Alpha	2.64E-15	5.10E-15	8.21E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191856	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.80E-14	2.31E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191857	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Alpha	1.72E-15	4.97E-15	8.73E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191857	P6WH Loadout	08/03/16	Gross Alpha/Beta	Gross Beta	2.12E-14	1.92E-14	2.45E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191858	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Alpha	2.32E-14	1.12E-14	9.03E-15	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191858	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Beta	4.54E-14	2.17E-14	2.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191859	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Alpha	8.11E-15	7.18E-15	8.58E-15	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191859	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Beta	3.57E-14	2.00E-14	2.41E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191860	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Alpha	1.36E-14	8.73E-15	8.66E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191860	P6WH Loadout	08/04/16	Gross Alpha/Beta	Gross Beta	3.73E-14	2.03E-14	2.43E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191861	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Alpha	1.81E-15	5.23E-15	9.20E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191861	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Beta	4.28E-15	1.89E-14	2.58E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191862	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Alpha	9.83E-15	7.49E-15	8.24E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191862	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Beta	4.46E-14	2.00E-14	2.31E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191863	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Alpha	5.99E-15	6.53E-15	8.62E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191863	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Alpha	1.70E-15	4.90E-15	8.62E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191863	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Beta	3.45E-14	2.00E-14	2.42E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191863	P6WH Loadout	08/08/16	Gross Alpha/Beta	Gross Beta	3.18E-14	1.98E-14	2.42E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191864	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Alpha	5.07E-15	6.35E-15	8.88E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191864	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Beta	2.72E-14	2.00E-14	2.49E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191865	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Alpha	5.89E-15	6.42E-15	8.48E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191865	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Beta	4.86E-14	2.08E-14	2.38E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191866	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Alpha	4.03E-15	6.05E-15	9.03E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191866	P6WH Loadout	08/09/16	Gross Alpha/Beta	Gross Beta	4.61E-14	2.17E-14	2.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191867	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Alpha	6.45E-16	4.54E-15	8.88E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191867	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Beta	4.88E-14	2.16E-14	2.49E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191868	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Alpha	4.82E-15	6.04E-15	8.44E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191868	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Beta	2.85E-14	1.92E-14	2.37E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191869	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Alpha	7.25E-15	6.40E-15	7.70E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191869	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Alpha	3.90E-15	5.09E-15	7.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191869	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Beta	4.33E-14	1.94E-14	2.62E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191869	P6WH Loadout	08/10/16	Gross Alpha/Beta	Gross Beta	5.39E-14	2.03E-14	2.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191870	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Alpha	-5.41E-16	2.36E-15	7.47E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191870	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Beta	2.57E-14	1.74E-14	2.54E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191871	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Alpha	7.79E-15	6.32E-15	7.17E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191871	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Beta	3.31E-14	1.75E-14	2.44E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191872	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Alpha	8.90E-15	6.71E-15	7.23E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191872	P6WH Loadout	08/11/16	Gross Alpha/Beta	Gross Beta	3.14E-14	1.74E-14	2.46E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191873	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Alpha	8.02E-15	6.50E-15	7.38E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191873	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Beta	3.82E-14	1.83E-14	2.51E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191874	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Alpha	3.59E-15	4.68E-15	7.08E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191874	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Beta	4.44E-14	1.82E-14	2.41E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191875	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Alpha	1.03E-14	7.31E-15	7.50E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191875	P6WH Loadout	08/16/16	Gross Alpha/Beta	Gross Beta	3.54E-14	1.83E-14	2.55E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191876	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Alpha	8.29E-15	6.73E-15	7.63E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191876	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Beta	1.79E-14	1.71E-14	2.59E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191877	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Alpha	8.90E-15	6.71E-15	7.23E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191877	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Beta	2.28E-14	1.67E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191878	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.37E-15	7.57E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191878	P6WH Loadout	08/17/16	Gross Alpha/Beta	Gross Beta	4.05E-14	1.89E-14	2.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191879	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Alpha	1.14E-14	7.63E-15	7.50E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191879	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Beta	2.10E-14	1.71E-14	2.55E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191880	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Alpha	2.60E-15	4.25E-15	7.17E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191880	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Beta	2.14E-14	1.65E-14	2.44E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191881	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Alpha	9.44E-15	7.12E-15	7.66E-15	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191881	P6WH Loadout	08/18/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.73E-14	2.61E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191882	Building 101	08/01/16	Gross Alpha/Beta	Gross Alpha	-3.38E-15	2.79E-15	1.08E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191882	Building 101	08/01/16	Gross Alpha/Beta	Gross Alpha	6.77E-15	7.33E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191882	Building 101	08/01/16	Gross Alpha/Beta	Gross Beta	9.34E-15	1.15E-14	1.74E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191882	Building 101	08/01/16	Gross Alpha/Beta	Gross Beta	1.44E-14	1.22E-14	1.74E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191883	Building 101	08/02/16	Gross Alpha/Beta	Gross Alpha	9.87E-15	8.75E-15	1.18E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191883	Building 101	08/02/16	Gross Alpha/Beta	Gross Beta	2.36E-14	1.43E-14	1.91E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191884	Building 101	08/03/16	Gross Alpha/Beta	Gross Alpha	0	4.71E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191884	Building 101	08/03/16	Gross Alpha/Beta	Gross Beta	1.84E-14	1.25E-14	1.71E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191885	Building 101	08/04/16	Gross Alpha/Beta	Gross Alpha	0	4.86E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191885	Building 101	08/04/16	Gross Alpha/Beta	Gross Beta	2.56E-14	1.36E-14	1.77E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191886	Building 101	08/08/16	Gross Alpha/Beta	Gross Alpha	7.49E-15	7.28E-15	1.02E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191886	Building 101	08/08/16	Gross Alpha/Beta	Gross Beta	2.60E-14	1.30E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191887	Building 101	08/09/16	Gross Alpha/Beta	Gross Alpha	2.18E-15	5.56E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191887	Building 101	08/09/16	Gross Alpha/Beta	Gross Beta	3.76E-14	1.45E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191888	Building 101	08/10/16	Gross Alpha/Beta	Gross Alpha	7.22E-15	7.82E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191888	Building 101	08/10/16	Gross Alpha/Beta	Gross Beta	4.62E-14	1.65E-14	1.86E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191889	Building 101	08/11/16	Gross Alpha/Beta	Gross Alpha	5.52E-15	6.82E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191889	Building 101	08/11/16	Gross Alpha/Beta	Gross Beta	2.33E-14	1.30E-14	1.70E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191890	Plant 7W	08/10/16	Gross Alpha/Beta	Gross Alpha	1.76E-14	1.90E-14	2.80E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191890	Plant 7W	08/10/16	Gross Alpha/Beta	Gross Beta	3.73E-14	3.15E-14	4.52E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191891	Plant 7W	08/17/16	Gross Alpha/Beta	Gross Alpha	4.52E-15	8.27E-15	1.44E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191891	Plant 7W	08/17/16	Gross Alpha/Beta	Gross Beta	3.76E-14	1.84E-14	2.33E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191892	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Alpha	4.75E-15	7.03E-15	1.13E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191892	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Alpha	1.58E-15	6.00E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191892	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Beta	1.49E-14	1.16E-14	1.62E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191892	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Beta	2.56E-14	1.29E-14	1.62E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191893	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Alpha	2.77E-15	6.67E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191893	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Beta	2.19E-14	1.29E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191894	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Alpha	-1.67E-15	5.01E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191894	Plant 6WH Loadout	08/22/16	Gross Alpha/Beta	Gross Beta	1.57E-14	1.23E-14	1.70E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191895	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Alpha	3.59E-15	6.52E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191895	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Beta	3.72E-14	1.39E-14	1.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191896	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Alpha	5.44E-16	5.78E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191896	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Beta	2.02E-14	1.26E-14	1.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191897	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Alpha	-5.51E-16	5.43E-15	1.18E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191897	Plant 6WH Loadout	08/23/16	Gross Alpha/Beta	Gross Beta	1.84E-14	1.25E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191898	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Alpha	3.60E-15	6.54E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191898	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Beta	6.12E-15	1.03E-14	1.58E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191899	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Alpha	-1.62E-15	4.86E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191899	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Beta	2.61E-14	1.32E-14	1.65E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191900	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Alpha	1.05E-14	8.86E-15	1.18E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD191900	Plant 6WH Loadout	08/24/16	Gross Alpha/Beta	Gross Beta	2.25E-14	1.30E-14	1.69E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191901	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Alpha	1.57E-15	5.95E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191901	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Beta	2.21E-14	1.24E-14	1.60E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191902	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Alpha	6.14E-15	7.77E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191902	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Beta	3.69E-14	1.47E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191903	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Alpha	-1.69E-15	5.07E-15	1.21E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191903	Plant 6WH Loadout	08/25/16	Gross Alpha/Beta	Gross Beta	2.59E-14	1.36E-14	1.72E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191904	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Alpha	2.61E-15	6.28E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191904	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Beta	4.50E-14	1.49E-14	1.60E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191905	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Alpha	5.58E-16	5.94E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191905	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Beta	5.17E-14	1.63E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191906	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Alpha	7.92E-15	7.94E-15	1.13E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191906	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Alpha	5.81E-15	7.35E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191906	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Beta	3.29E-14	1.37E-14	1.62E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191906	Plant 6WH Loadout	08/29/16	Gross Alpha/Beta	Gross Beta	3.76E-14	1.42E-14	1.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191907	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Alpha	-1.51E-15	4.53E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191907	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Beta	2.50E-14	1.23E-14	1.54E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191908	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Alpha	-3.76E-15	3.77E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191908	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Beta	2.81E-14	1.33E-14	1.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191909	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Alpha	5.44E-16	5.78E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191909	Plant 6WH Loadout	08/30/16	Gross Alpha/Beta	Gross Beta	2.16E-14	1.27E-14	1.66E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191910	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Alpha	1.50E-15	5.69E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191910	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Beta	2.49E-14	1.23E-14	1.53E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191911	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Alpha	-2.67E-15	4.32E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191911	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Beta	3.74E-14	1.43E-14	1.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191912	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Alpha	7.92E-15	7.94E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191912	Plant 6WH Loadout	08/31/16	Gross Alpha/Beta	Gross Beta	4.29E-14	1.48E-14	1.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191913	Building 101	08/23/16	Gross Alpha/Beta	Gross Alpha	-4.99E-16	4.92E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191913	Building 101	08/23/16	Gross Alpha/Beta	Gross Beta	2.29E-14	1.20E-14	1.53E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191914	Building 101	08/24/16	Gross Alpha/Beta	Gross Alpha	-5.60E-16	5.52E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191914	Building 101	08/24/16	Gross Alpha/Beta	Gross Beta	1.37E-14	1.21E-14	1.72E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191915	Building 101	08/25/16	Gross Alpha/Beta	Gross Alpha	4.18E-15	7.59E-15	1.28E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191915	Building 101	08/25/16	Gross Alpha/Beta	Gross Beta	2.59E-14	1.42E-14	1.83E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191916	Building 101	08/29/16	Gross Alpha/Beta	Gross Alpha	3.97E-15	7.21E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191916	Building 101	08/29/16	Gross Alpha/Beta	Gross Beta	3.97E-14	1.52E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191917	Building 101	08/30/16	Gross Alpha/Beta	Gross Alpha	2.39E-15	9.04E-15	1.71E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191917	Building 101	08/30/16	Gross Alpha/Beta	Gross Beta	5.76E-14	2.15E-14	2.43E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191918	Building 101	08/31/16	Gross Alpha/Beta	Gross Alpha	-5.81E-16	5.73E-15	1.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191918	Building 101	08/31/16	Gross Alpha/Beta	Gross Beta	2.16E-14	1.34E-14	1.78E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191919	Building 101	09/01/16	Gross Alpha/Beta	Gross Alpha	7.12E-15	1.29E-14	2.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191919	Building 101	09/01/16	Gross Alpha/Beta	Gross Beta	1.72E-14	2.10E-14	3.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191920	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Alpha	-4.77E-16	4.43E-15	9.20E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191920	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Alpha	1.81E-15	5.49E-15	9.20E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191920	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Beta	9.63E-15	1.56E-14	2.64E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191920	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Beta	2.41E-15	1.49E-14	2.64E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191921	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Alpha	6.15E-15	6.88E-15	8.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191921	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Beta	1.90E-14	1.60E-14	2.54E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191922	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Alpha	-1.57E-15	3.66E-15	8.88E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191922	Plant 6WH Loadout	09/01/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.56E-14	2.55E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191923	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Alpha	3.58E-15	5.56E-15	8.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191923	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Beta	2.04E-14	1.48E-14	2.30E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191924	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Alpha	1.59E-15	4.82E-15	8.08E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191924	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Beta	7.19E-15	1.36E-14	2.32E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191925	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Alpha	2.69E-15	5.42E-15	8.37E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191925	Plant 6WH Loadout	09/06/16	Gross Alpha/Beta	Gross Beta	1.34E-14	1.47E-14	2.40E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191926	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Alpha	5.30E-15	6.84E-15	9.28E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191926	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Beta	2.07E-14	1.68E-14	2.66E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191927	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Alpha	7.41E-15	7.39E-15	9.03E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191927	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Beta	1.66E-15	1.46E-14	2.59E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191928	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Alpha	3.95E-15	6.13E-15	8.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191928	Plant 6WH Loadout	09/07/16	Gross Alpha/Beta	Gross Beta	2.66E-14	1.67E-14	2.54E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191929	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Alpha	6.74E-16	5.03E-15	9.28E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191929	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Beta	1.56E-14	1.63E-14	2.66E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191930	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Alpha	1.81E-15	5.49E-15	9.20E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191930	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Beta	5.30E-15	1.52E-14	2.64E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191931	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Alpha	2.87E-15	5.77E-15	8.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191931	Plant 6WH Loadout	09/08/16	Gross Alpha/Beta	Gross Beta	1.00E-14	1.52E-14	2.56E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191932	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Alpha	4.20E-15	6.52E-15	9.41E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191932	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Beta	5.72E-14	2.03E-14	2.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191933	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Alpha	6.31E-15	7.06E-15	9.07E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD191933	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Beta	2.09E-14	1.65E-14	2.61E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD191934	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Alpha	2.73E-15	6.51E-15	1.14E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191934	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Alpha	-2.92E-15	4.10E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191934	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Beta	4.36E-14	1.49E-14	1.74E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD191934	Plant 6WH Loadout	09/13/16	Gross Alpha/Beta	Gross Beta	2.72E-14	1.30E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191935	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Alpha	3.93E-15	7.02E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191935	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Beta	3.57E-14	1.42E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191936	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Alpha	4.69E-16	5.64E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191936	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Beta	3.70E-14	1.41E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191937	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Alpha	-2.82E-15	3.96E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191937	Plant 6WH Loadout	09/12/16	Gross Alpha/Beta	Gross Beta	1.94E-14	1.17E-14	1.68E-14	µCi/mL	J	T04	SLDS (General Area)-Perimeter Air
SLD191938	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Alpha	4.04E-15	7.22E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191938	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Beta	4.71E-14	1.57E-14	1.82E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191939	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Alpha	-6.74E-16	5.32E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191939	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Beta	3.80E-14	1.45E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191940	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Alpha	2.67E-15	6.37E-15	1.11E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191940	Plant 6WH Loadout	09/14/16	Gross Alpha/Beta	Gross Beta	2.80E-14	1.29E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191941	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Alpha	3.93E-15	7.02E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191941	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Beta	4.08E-14	1.47E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191942	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Alpha	5.15E-15	7.49E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191942	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Beta	4.06E-14	1.49E-14	1.79E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191943	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Alpha	1.58E-15	6.02E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191943	Plant 6WH Loadout	09/15/16	Gross Alpha/Beta	Gross Beta	2.89E-14	1.31E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD191944	Plant 6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Alpha	5.00E-16	6.02E-15	1.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD191944	Plant 6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Beta	2.81E-14	1.37E-14	1.84E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193133	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Alpha	3.87E-15	6.13E-15	9.63E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193133	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Alpha	7.35E-15	7.35E-15	9.63E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193133	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Beta	2.84E-14	1.68E-14	2.50E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193133	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Beta	4.97E-14	1.88E-14	2.50E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193134	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Alpha	1.59E-15	5.32E-15	9.90E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193134	P6WH Loadout	09/19/16	Gross Alpha/Beta	Gross Beta	3.83E-14	1.82E-14	2.57E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193135	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Alpha	4.83E-15	6.30E-15	9.26E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193135	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Beta	1.40E-14	1.49E-14	2.40E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193136	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Alpha	1.55E-15	5.17E-15	9.63E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193136	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Beta	2.77E-14	1.68E-14	2.50E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193137	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.68E-15	9.81E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193137	P6WH Loadout	09/20/16	Gross Alpha/Beta	Gross Beta	2.90E-14	1.71E-14	2.55E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193138	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Alpha	-7.50E-16	3.87E-15	9.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193138	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Beta	3.40E-14	1.69E-14	2.42E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193139	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Alpha	5.20E-15	6.78E-15	9.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193139	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Beta	5.36E-14	1.96E-14	2.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193140	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Alpha	1.48E-14	9.63E-15	9.95E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193140	P6WH Loadout	09/21/16	Gross Alpha/Beta	Gross Beta	5.13E-14	1.94E-14	2.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193141	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Alpha	1.11E-14	8.09E-15	8.94E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193141	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Beta	6.38E-14	1.90E-14	2.32E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193142	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Alpha	3.80E-15	6.02E-15	9.46E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193142	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Beta	7.83E-14	2.11E-14	2.45E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193143	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Alpha	9.65E-15	8.93E-15	8.94E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193143	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Alpha	1.30E-14	9.77E-15	8.94E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193143	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Beta	6.25E-14	3.10E-14	1.48E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193143	P6WH Loadout	09/22/16	Gross Alpha/Beta	Gross Beta	6.96E-14	3.14E-14	1.48E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193144	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Alpha	5.10E-15	7.65E-15	8.90E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193144	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Beta	2.81E-14	2.90E-14	1.47E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD193145	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Alpha	7.69E-15	8.68E-15	9.32E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193145	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Beta	2.57E-14	3.01E-14	1.54E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD193146	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Alpha	4.10E-15	7.54E-15	9.19E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193146	P6WH Loadout	09/26/16	Gross Alpha/Beta	Gross Beta	3.19E-14	3.00E-14	1.52E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193147	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Alpha	3.86E-15	7.09E-15	8.64E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193147	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Beta	2.59E-14	2.80E-14	1.43E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD193148	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Alpha	7.52E-15	8.48E-15	9.11E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193148	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Beta	3.45E-14	2.99E-14	1.50E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193149	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Alpha	-5.32E-16	5.80E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193149	P6WH Loadout	09/27/16	Gross Alpha/Beta	Gross Beta	3.19E-14	2.94E-14	1.48E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193150	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Alpha	6.14E-15	7.87E-15	8.79E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193150	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Beta	1.72E-14	2.80E-14	1.45E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD193151	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Alpha	6.28E-15	8.05E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193151	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Beta	3.34E-14	2.95E-14	1.48E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193152	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Alpha	3.07E-15	7.48E-15	9.58E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193152	P6WH Loadout	09/28/16	Gross Alpha/Beta	Gross Beta	1.95E-14	3.06E-14	1.58E-14	µCi/mL	UJ	T02	SLDS (General Area)-Perimeter Air
SLD193153	Destrehan Street	09/22/16	Gross Alpha/Beta	Gross Alpha	7.31E-16	8.73E-15	1.82E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193153	Destrehan Street	09/22/16	Gross Alpha/Beta	Gross Alpha	1.39E-14	1.39E-14	1.82E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193153	Destrehan Street	09/22/16	Gross Alpha/Beta	Gross Beta	8.41E-14	3.46E-14	4.72E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193153	Destrehan Street	09/22/16	Gross Alpha/Beta	Gross Beta	6.48E-14	3.28E-14	4.72E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193154	Destrehan Street	09/26/16	Gross Alpha/Beta	Gross Alpha	1.50E-15	5.01E-15	9.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193154	Destrehan Street	09/26/16	Gross Alpha/Beta	Gross Beta	3.25E-14	1.68E-14	2.42E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193155	Destrehan Street	09/27/16	Gross Alpha/Beta	Gross Alpha	4.19E-16	5.01E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193155	Destrehan Street	09/27/16	Gross Alpha/Beta	Gross Beta	4.27E-14	1.94E-14	2.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193156	Destrehan Street	09/28/16	Gross Alpha/Beta	Gross Alpha	1.60E-15	5.34E-15	9.95E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193156	Destrehan Street	09/28/16	Gross Alpha/Beta	Gross Beta	2.03E-14	1.65E-14	2.58E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193157	Destrehan Street	09/29/16	Gross Alpha/Beta	Gross Alpha	3.70E-15	5.87E-15	9.22E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193157	Destrehan Street	09/29/16	Gross Alpha/Beta	Gross Beta	1.74E-14	1.52E-14	2.39E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193158	Plant 7W	09/01/16	Gross Alpha/Beta	Gross Alpha	1.78E-14	2.00E-14	2.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193158	Plant 7W	09/01/16	Gross Alpha/Beta	Gross Beta	1.65E-14	4.19E-14	7.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193159	Plant 7W	09/06/16	Gross Alpha/Beta	Gross Alpha	5.01E-15	6.53E-15	9.59E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193159	Plant 7W	09/06/16	Gross Alpha/Beta	Gross Beta	2.18E-14	1.61E-14	2.49E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193160	Plant 7W	09/07/16	Gross Alpha/Beta	Gross Alpha	8.35E-15	6.96E-15	8.32E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193160	Plant 7W	09/07/16	Gross Alpha/Beta	Gross Beta	2.39E-14	1.45E-14	2.16E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193161	Plant 7W	09/08/16	Gross Alpha/Beta	Gross Alpha	1.76E-14	3.69E-14	6.26E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193161	Plant 7W	09/08/16	Gross Alpha/Beta	Gross Beta	7.54E-14	9.87E-14	1.62E-13	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193162	Plant 7W	09/12/16	Gross Alpha/Beta	Gross Alpha	1.45E-15	4.84E-15	9.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193162	Plant 7W	09/12/16	Gross Alpha/Beta	Gross Beta	3.35E-14	1.64E-14	2.34E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193163	Plant 7W	09/13/16	Gross Alpha/Beta	Gross Alpha	-7.85E-16	4.05E-15	9.77E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193163	Plant 7W	09/13/16	Gross Alpha/Beta	Gross Beta	4.07E-14	1.82E-14	2.53E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193164	Destrehan Street	10/03/16	Gross Alpha/Beta	Gross Alpha	5.78E-16	3.53E-15	7.97E-15	µCi/mL			SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193164	Destrehan Street	10/03/16	Gross Alpha/Beta	Gross Alpha	6.36E-15	6.27E-15	7.97E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193164	Destrehan Street	10/03/16	Gross Alpha/Beta	Gross Beta	2.18E-14	1.89E-14	2.49E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193164	Destrehan Street	10/03/16	Gross Alpha/Beta	Gross Beta	3.56E-14	2.01E-14	2.49E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193165	Destrehan Street	10/04/16	Gross Alpha/Beta	Gross Alpha	6.24E-15	6.16E-15	7.83E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193165	Destrehan Street	10/04/16	Gross Alpha/Beta	Gross Beta	4.50E-14	2.05E-14	2.44E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193166	Destrehan Street	10/05/16	Gross Alpha/Beta	Gross Alpha	4.22E-15	5.57E-15	8.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193166	Destrehan Street	10/05/16	Gross Alpha/Beta	Gross Beta	2.72E-14	2.01E-14	2.59E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193167	Destrehan Street	10/06/16	Gross Alpha/Beta	Gross Alpha	8.83E-15	7.22E-15	8.12E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193167	Destrehan Street	10/06/16	Gross Alpha/Beta	Gross Beta	1.84E-14	1.90E-14	2.53E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193168	Destrehan Street	10/11/16	Gross Alpha/Beta	Gross Alpha	5.42E-15	6.07E-15	8.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193168	Destrehan Street	10/11/16	Gross Alpha/Beta	Gross Beta	5.99E-14	2.28E-14	2.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193169	Destrehan Street	10/12/16	Gross Alpha/Beta	Gross Alpha	6.79E-16	4.15E-15	9.37E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193169	Destrehan Street	10/12/16	Gross Alpha/Beta	Gross Beta	5.55E-14	2.47E-14	2.92E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193170	Destrehan Street	10/13/16	Gross Alpha/Beta	Gross Alpha	1.75E-15	4.26E-15	8.05E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193170	Destrehan Street	10/13/16	Gross Alpha/Beta	Gross Beta	1.02E-14	1.81E-14	2.51E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193171	Destrehan Street	10/17/16	Gross Alpha/Beta	Gross Alpha	5.00E-15	5.60E-15	7.66E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193171	Destrehan Street	10/17/16	Gross Alpha/Beta	Gross Beta	8.99E-15	1.72E-14	2.39E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193172	Destrehan Street	10/18/16	Gross Alpha/Beta	Gross Alpha	6.02E-16	3.68E-15	8.31E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193172	Destrehan Street	10/18/16	Gross Alpha/Beta	Gross Beta	5.19E-15	1.83E-14	2.59E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193173	Destrehan Street	10/19/16	Gross Alpha/Beta	Gross Alpha	7.75E-15	7.65E-15	9.73E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193173	Destrehan Street	10/19/16	Gross Alpha/Beta	Gross Beta	2.21E-14	2.27E-14	3.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193174	Building 101	10/12/16	Gross Alpha/Beta	Gross Alpha	1.06E-14	1.40E-14	2.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193174	Building 101	10/12/16	Gross Alpha/Beta	Gross Beta	4.35E-14	4.83E-14	6.50E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193175	Building 101	10/13/16	Gross Alpha/Beta	Gross Alpha	8.69E-15	7.74E-15	9.22E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193175	Building 101	10/13/16	Gross Alpha/Beta	Gross Beta	2.43E-14	2.18E-14	2.88E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193176	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Alpha	2.92E-15	4.86E-15	8.05E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193176	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Alpha	5.25E-15	5.88E-15	8.05E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193176	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Beta	2.71E-14	1.95E-14	2.51E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193176	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Beta	1.39E-14	1.84E-14	2.51E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193177	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Alpha	4.98E-15	5.58E-15	7.63E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193177	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Beta	2.57E-14	1.85E-14	2.38E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193178	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Alpha	1.73E-15	4.20E-15	7.94E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193178	P6WH Loadout	09/29/16	Gross Alpha/Beta	Gross Beta	2.96E-14	1.95E-14	2.48E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193179	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Alpha	7.58E-15	6.75E-15	8.05E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193179	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Beta	4.70E-14	2.11E-14	2.51E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193180	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Alpha	3.90E-15	5.16E-15	7.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193180	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Beta	3.44E-14	1.94E-14	2.40E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193181	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Alpha	1.78E-15	4.34E-15	8.20E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193181	P6WH Loadout	10/03/16	Gross Alpha/Beta	Gross Beta	1.94E-14	1.92E-14	2.56E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193182	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Alpha	1.70E-15	4.13E-15	7.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193182	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Beta	5.19E-14	2.10E-14	2.43E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193183	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Alpha	8.22E-15	6.72E-15	7.57E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193183	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Beta	5.94E-14	2.11E-14	2.36E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193184	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Alpha	8.63E-15	7.05E-15	7.94E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193184	P6WH Loadout	10/04/16	Gross Alpha/Beta	Gross Beta	5.00E-14	2.12E-14	2.48E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193185	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Alpha	9.78E-15	7.43E-15	7.94E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193185	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Beta	3.62E-14	2.00E-14	2.48E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193186	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Alpha	4.89E-15	6.56E-15	1.02E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193186	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Alpha	3.78E-15	6.17E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193186	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Beta	2.62E-14	1.34E-14	1.71E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193186	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Beta	2.55E-14	1.33E-14	1.71E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193187	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Alpha	8.58E-15	7.96E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193187	P6WH Loadout	10/05/16	Gross Alpha/Beta	Gross Beta	3.54E-14	1.49E-14	1.79E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193188	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Alpha	1.19E-14	8.81E-15	1.05E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193188	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Beta	4.43E-14	1.57E-14	1.76E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193189	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Alpha	6.89E-15	7.06E-15	9.86E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193189	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Beta	4.44E-14	1.51E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193190	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Alpha	2.77E-15	5.97E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193190	P6WH Loadout	10/06/16	Gross Alpha/Beta	Gross Beta	5.24E-14	1.66E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193191	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Alpha	5.13E-15	6.89E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193191	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Beta	5.17E-14	1.67E-14	1.80E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193192	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Alpha	8.13E-15	7.54E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193192	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Beta	4.88E-14	1.57E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193193	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Alpha	1.65E-15	5.61E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193193	P6WH Loadout	10/11/16	Gross Alpha/Beta	Gross Beta	4.24E-14	1.57E-14	1.80E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193194	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Alpha	5.55E-16	5.82E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193194	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Beta	4.08E-14	1.72E-14	2.06E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193195	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Alpha	5.72E-15	6.61E-15	9.70E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193195	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Beta	3.43E-14	1.38E-14	1.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193196	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Alpha	1.60E-14	1.03E-14	1.07E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193196	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Alpha	1.05E-14	8.75E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193196	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Beta	5.94E-14	2.16E-14	2.85E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193196	P6WH Loadout	10/12/16	Gross Alpha/Beta	Gross Beta	5.42E-14	2.12E-14	2.85E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193197	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Alpha	5.51E-15	6.29E-15	9.10E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193197	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.50E-14	2.44E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193198	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Alpha	-1.38E-15	2.55E-15	8.67E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193198	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Beta	2.40E-14	1.53E-14	2.32E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193199	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Alpha	3.24E-15	5.44E-15	9.23E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193199	P6WH Loadout	10/13/16	Gross Alpha/Beta	Gross Beta	3.96E-14	1.77E-14	2.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193200	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Alpha	2.01E-15	4.79E-15	9.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193200	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Beta	2.78E-14	1.62E-14	2.41E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193201	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.52E-15	8.60E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193201	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Beta	3.20E-14	1.60E-14	2.30E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193202	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Alpha	3.18E-15	5.34E-15	9.06E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193202	P6WH Loadout	10/17/16	Gross Alpha/Beta	Gross Beta	1.56E-14	1.50E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193203	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Alpha	5.46E-15	6.24E-15	9.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193203	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Beta	3.87E-14	1.73E-14	2.41E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193204	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Alpha	8.39E-15	6.98E-15	8.49E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193204	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Beta	3.37E-14	1.60E-14	2.27E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193205	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Alpha	3.15E-15	5.29E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193205	P6WH Loadout	10/18/16	Gross Alpha/Beta	Gross Beta	4.36E-14	1.77E-14	2.40E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193206	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Alpha	9.89E-15	7.64E-15	8.86E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193206	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Beta	5.01E-14	1.81E-14	2.37E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193207	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Alpha	5.15E-15	6.91E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193207	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Beta	4.53E-14	2.05E-14	2.88E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193208	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Alpha	7.63E-15	6.92E-15	8.86E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193208	P6WH Loadout	10/19/16	Gross Alpha/Beta	Gross Beta	4.44E-14	1.76E-14	2.37E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193209	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Alpha	5.18E-15	6.90E-15	9.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193209	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Beta	2.32E-14	1.66E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193210	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Alpha	-1.71E-15	3.93E-15	9.26E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193210	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Beta	2.66E-14	1.68E-14	2.55E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193211	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Alpha	3.87E-15	6.25E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193211	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Beta	5.85E-14	1.92E-14	2.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193212	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.56E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193212	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Beta	6.15E-14	2.02E-14	2.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193213	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Alpha	-5.78E-16	4.60E-15	9.38E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193213	P6WH Loadout	10/24/16	Gross Alpha/Beta	Gross Beta	4.08E-14	1.83E-14	2.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193214	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Alpha	4.18E-15	6.74E-15	9.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193214	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Beta	2.18E-14	1.70E-14	2.66E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193215	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Alpha	5.50E-15	7.32E-15	9.92E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193215	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Beta	2.69E-14	1.78E-14	2.73E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193216	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Alpha	-2.98E-15	3.35E-15	9.69E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193216	P6WH Loadout	10/25/16	Gross Alpha/Beta	Gross Beta	3.98E-14	1.87E-14	2.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193217	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Alpha	2.90E-15	6.13E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193217	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Beta	6.07E-14	2.01E-14	2.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193218	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.56E-15	9.43E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193218	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Beta	4.17E-14	1.84E-14	2.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193219	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Alpha	6.50E-15	7.48E-15	9.60E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193219	P6WH Loadout	10/26/16	Gross Alpha/Beta	Gross Beta	4.47E-14	1.90E-14	2.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193220	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Alpha	1.03E-14	8.16E-15	8.83E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193220	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Beta	2.19E-14	1.57E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193221	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Alpha	7.35E-15	7.50E-15	9.18E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193221	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Beta	5.06E-14	1.88E-14	2.52E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193222	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Alpha	1.72E-15	5.60E-15	9.30E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193222	P6WH Loadout	10/27/16	Gross Alpha/Beta	Gross Beta	3.03E-14	1.72E-14	2.56E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193223	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Alpha	1.39E-14	9.24E-15	9.06E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193223	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Beta	5.06E-14	1.87E-14	2.49E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193224	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Alpha	1.77E-15	5.75E-15	9.56E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193224	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Beta	5.19E-14	1.95E-14	2.63E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193225	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.67E-15	9.38E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193225	P6WH Loadout	10/31/16	Gross Alpha/Beta	Gross Beta	3.49E-14	1.77E-14	2.58E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193226	Destrehan Street	10/20/16	Gross Alpha/Beta	Gross Alpha	1.14E-15	5.57E-15	1.09E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193226	Destrehan Street	10/20/16	Gross Alpha/Beta	Gross Alpha	-1.14E-15	4.54E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193226	Destrehan Street	10/20/16	Gross Alpha/Beta	Gross Beta	1.62E-14	1.25E-14	1.80E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193226	Destrehan Street	10/20/16	Gross Alpha/Beta	Gross Beta	4.21E-14	1.55E-14	1.80E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193227	Destrehan Street	10/24/16	Gross Alpha/Beta	Gross Alpha	3.41E-15	6.41E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193227	Destrehan Street	10/24/16	Gross Alpha/Beta	Gross Beta	5.56E-14	1.68E-14	1.79E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193228	Destrehan Street	10/25/16	Gross Alpha/Beta	Gross Alpha	6.72E-15	7.44E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193228	Destrehan Street	10/25/16	Gross Alpha/Beta	Gross Beta	1.95E-14	1.27E-14	1.77E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193229	Destrehan Street	10/26/16	Gross Alpha/Beta	Gross Alpha	1.66E-14	1.21E-14	1.44E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193229	Destrehan Street	10/26/16	Gross Alpha/Beta	Gross Beta	5.46E-14	2.03E-14	2.38E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193230	Destrehan Street	10/27/16	Gross Alpha/Beta	Gross Alpha	4.58E-15	6.87E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193230	Destrehan Street	10/27/16	Gross Alpha/Beta	Gross Beta	3.51E-14	1.47E-14	1.81E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193231	Destrehan Street	10/31/16	Gross Alpha/Beta	Gross Alpha	9.83E-15	8.87E-15	1.17E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193231	Destrehan Street	10/31/16	Gross Alpha/Beta	Gross Beta	3.61E-14	1.56E-14	1.94E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193232	Building 101	10/27/16	Gross Alpha/Beta	Gross Alpha	-2.62E-15	1.04E-14	2.51E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193232	Building 101	10/27/16	Gross Alpha/Beta	Gross Beta	2.07E-14	2.67E-14	4.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193236	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Alpha	-5.53E-16	4.40E-15	8.98E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193236	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Alpha	3.87E-15	6.25E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193236	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Beta	2.92E-14	1.66E-14	2.47E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193236	P6WH Loadout	10/20/16	Gross Alpha/Beta	Gross Beta	4.32E-14	1.79E-14	2.47E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193237	Destrehan Street	11/01/16	Gross Alpha/Beta	Gross Alpha	1.13E-14	9.11E-15	1.17E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193237	Destrehan Street	11/01/16	Gross Alpha/Beta	Gross Alpha	6.58E-15	7.77E-15	1.17E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193237	Destrehan Street	11/01/16	Gross Alpha/Beta	Gross Beta	5.83E-14	1.78E-14	1.82E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193237	Destrehan Street	11/01/16	Gross Alpha/Beta	Gross Beta	5.09E-14	1.71E-14	1.82E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193238	Destrehan Street	11/02/16	Gross Alpha/Beta	Gross Alpha	6.37E-15	7.53E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193238	Destrehan Street	11/02/16	Gross Alpha/Beta	Gross Beta	4.71E-14	1.63E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193239	Destrehan Street	11/07/16	Gross Alpha/Beta	Gross Alpha	1.24E-14	1.17E-14	1.62E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193239	Destrehan Street	11/07/16	Gross Alpha/Beta	Gross Beta	7.66E-14	2.42E-14	2.52E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193240	Destrehan Street	11/08/16	Gross Alpha/Beta	Gross Alpha	8.54E-15	8.95E-15	1.29E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193240	Destrehan Street	11/08/16	Gross Alpha/Beta	Gross Beta	4.79E-14	1.79E-14	2.01E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193241	Destrehan Street	11/09/16	Gross Alpha/Beta	Gross Alpha	1.82E-15	6.02E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193241	Destrehan Street	11/09/16	Gross Alpha/Beta	Gross Beta	1.99E-14	1.35E-14	1.78E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193242	Destrehan Street	11/10/16	Gross Alpha/Beta	Gross Alpha	7.58E-15	7.94E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193242	Destrehan Street	11/10/16	Gross Alpha/Beta	Gross Beta	2.57E-14	1.41E-14	1.78E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193243	Destrehan Street	11/14/16	Gross Alpha/Beta	Gross Alpha	2.99E-15	6.48E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193243	Destrehan Street	11/14/16	Gross Alpha/Beta	Gross Beta	3.53E-14	1.52E-14	1.79E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193244	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Alpha	5.99E-15	9.27E-15	1.19E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193244	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Alpha	3.78E-15	8.73E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193244	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Beta	4.07E-14	1.47E-14	1.70E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193244	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Beta	7.07E-14	1.78E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193245	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Alpha	1.52E-14	1.15E-14	1.22E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193245	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Beta	4.23E-14	1.51E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193246	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Alpha	9.64E-15	1.04E-14	1.24E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193246	P6WH Loadout	11/01/16	Gross Alpha/Beta	Gross Beta	3.92E-14	1.50E-14	1.76E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193247	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Alpha	-1.73E-15	7.09E-15	1.18E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193247	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Beta	2.77E-14	1.32E-14	1.67E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193248	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Alpha	6.10E-15	9.44E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193248	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Beta	5.20E-14	1.61E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193249	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Alpha	1.42E-14	1.13E-14	1.23E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193249	P6WH Loadout	11/03/16	Gross Alpha/Beta	Gross Beta	5.49E-14	1.66E-14	1.75E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193250	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Alpha	5.81E-15	9.00E-15	1.16E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193250	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Beta	4.15E-14	1.45E-14	1.65E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193251	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Alpha	6.10E-15	9.44E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193251	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Beta	5.84E-14	1.68E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193252	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Alpha	4.71E-16	8.01E-15	1.22E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193252	P6WH Loadout	11/07/16	Gross Alpha/Beta	Gross Beta	4.09E-14	1.50E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193253	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Alpha	9.00E-15	9.71E-15	1.15E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193253	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Beta	4.94E-14	1.53E-14	1.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193254	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Alpha	3.76E-15	8.69E-15	1.19E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193254	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Beta	4.33E-14	1.50E-14	1.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193255	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Alpha	7.53E-16	4.71E-15	8.97E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193255	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Alpha	3.01E-15	5.69E-15	8.97E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193255	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Beta	3.52E-14	3.29E-14	2.96E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193255	P6WH Loadout	11/08/16	Gross Alpha/Beta	Gross Beta	1.88E-14	3.21E-14	2.96E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193256	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Alpha	1.88E-15	5.20E-15	8.93E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193256	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Beta	1.44E-14	3.17E-14	2.95E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193257	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Alpha	3.11E-15	5.87E-15	9.26E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193257	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Beta	2.38E-14	3.33E-14	3.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193258	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Alpha	3.14E-15	5.93E-15	9.34E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193258	P6WH Loadout	11/09/16	Gross Alpha/Beta	Gross Beta	3.81E-14	3.43E-14	3.08E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193259	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.41E-15	8.78E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193259	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Beta	5.67E-14	3.33E-14	2.90E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193260	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Alpha	1.95E-15	5.41E-15	9.30E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193260	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Beta	3.57E-14	3.40E-14	3.07E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193261	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Alpha	1.94E-15	5.36E-15	9.21E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193261	P6WH Loadout	11/10/16	Gross Alpha/Beta	Gross Beta	3.54E-14	3.37E-14	3.04E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193262	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Alpha	6.16E-15	6.66E-15	8.63E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193262	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Beta	6.95E-14	3.34E-14	2.85E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193263	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Alpha	6.46E-15	6.98E-15	9.05E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193263	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Beta	6.14E-14	3.45E-14	2.99E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193264	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Alpha	4.13E-15	6.10E-15	8.93E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193264	P6WH Loadout	11/14/16	Gross Alpha/Beta	Gross Beta	5.49E-14	3.37E-14	2.95E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193265	Building 101	10/31/16	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.30E-15	9.34E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193265	Building 101	10/31/16	Gross Alpha/Beta	Gross Alpha	1.37E-14	9.26E-15	9.34E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193265	Building 101	10/31/16	Gross Alpha/Beta	Gross Beta	3.22E-15	3.27E-14	3.08E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193265	Building 101	10/31/16	Gross Alpha/Beta	Gross Beta	1.96E-14	3.34E-14	3.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193266	Building 101	11/01/16	Gross Alpha/Beta	Gross Alpha	5.32E-15	6.59E-15	9.05E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193266	Building 101	11/01/16	Gross Alpha/Beta	Gross Beta	2.33E-14	3.26E-14	2.99E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193267	Building 101	11/02/16	Gross Alpha/Beta	Gross Alpha	5.78E-15	7.17E-15	9.84E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193267	Building 101	11/02/16	Gross Alpha/Beta	Gross Beta	3.70E-14	3.60E-14	3.25E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193268	Building 101	11/14/16	Gross Alpha/Beta	Gross Alpha	5.86E-15	1.62E-14	2.79E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193268	Building 101	11/14/16	Gross Alpha/Beta	Gross Beta	5.17E-15	9.73E-14	9.21E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193276	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Alpha	3.49E-15	6.89E-15	1.04E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193276	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Alpha	1.89E-14	1.08E-14	1.04E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193276	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Beta	8.05E-14	1.85E-14	1.70E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193276	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Beta	8.95E-14	1.94E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193277	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Alpha	6.65E-15	7.72E-15	1.01E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193277	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Beta	6.86E-14	1.71E-14	1.66E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193278	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Alpha	1.23E-14	9.32E-15	1.04E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193278	P6WH Loadout	11/15/16	Gross Alpha/Beta	Gross Beta	6.86E-14	1.74E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193279	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Alpha	8.03E-15	8.34E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193279	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Beta	7.06E-14	1.77E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193280	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Alpha	6.97E-15	8.10E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193280	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Beta	7.19E-14	1.80E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193281	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Alpha	8.21E-15	8.53E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193281	P6WH Loadout	11/16/16	Gross Alpha/Beta	Gross Beta	7.50E-14	1.84E-14	1.77E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193282	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Alpha	1.22E-14	9.24E-15	1.03E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193282	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Beta	7.70E-14	1.81E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193283	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Alpha	5.74E-15	7.63E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193283	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Beta	9.45E-14	1.99E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193284	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Alpha	9.11E-15	8.60E-15	1.05E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193284	P6WH Loadout	11/17/16	Gross Alpha/Beta	Gross Beta	1.06E-13	2.10E-14	1.72E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193285	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Alpha	3.44E-15	6.80E-15	1.02E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193285	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Beta	2.04E-14	1.20E-14	1.68E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193286	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Alpha	1.88E-16	5.86E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193286	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Beta	1.69E-14	1.19E-14	1.74E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193287	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Alpha	2.41E-15	6.58E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193287	P6WH Loadout	11/21/16	Gross Alpha/Beta	Gross Beta	2.72E-14	1.30E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193288	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Alpha	3.52E-15	6.95E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193288	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Beta	2.16E-14	1.23E-14	1.71E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193289	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Alpha	1.34E-15	6.42E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193289	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Beta	3.54E-14	1.43E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193290	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Alpha	5.89E-15	7.84E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193290	P6WH Loadout	11/22/16	Gross Alpha/Beta	Gross Beta	2.00E-14	1.24E-14	1.76E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193291	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Alpha	1.92E-16	5.99E-15	1.08E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193291	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Beta	2.31E-14	1.29E-14	1.78E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193292	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Alpha	1.08E-14	9.34E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193292	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Beta	2.20E-14	1.29E-14	1.81E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193293	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Alpha	7.23E-15	8.40E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193293	P6WH Loadout	11/23/16	Gross Alpha/Beta	Gross Beta	9.43E-15	1.13E-14	1.81E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193294	Destrehan Street	11/15/16	Gross Alpha/Beta	Gross Alpha	7.56E-15	7.44E-15	9.90E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193294	Destrehan Street	11/15/16	Gross Alpha/Beta	Gross Alpha	1.23E-14	8.86E-15	9.90E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193294	Destrehan Street	11/15/16	Gross Alpha/Beta	Gross Beta	6.09E-14	4.76E-14	3.33E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193294	Destrehan Street	11/15/16	Gross Alpha/Beta	Gross Beta	5.94E-14	4.75E-14	3.33E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193295	Destrehan Street	11/16/16	Gross Alpha/Beta	Gross Alpha	1.22E-14	9.14E-15	1.13E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193295	Destrehan Street	11/16/16	Gross Alpha/Beta	Gross Beta	6.60E-14	2.93E-14	4.35E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193296	Destrehan Street	11/17/16	Gross Alpha/Beta	Gross Alpha	2.09E-14	1.18E-14	1.22E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193296	Destrehan Street	11/17/16	Gross Alpha/Beta	Gross Beta	9.66E-14	3.32E-14	4.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193297	Building 101	11/15/16	Gross Alpha/Beta	Gross Alpha	9.78E-15	7.87E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193297	Building 101	11/15/16	Gross Alpha/Beta	Gross Beta	7.20E-14	2.70E-14	3.89E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193298	Building 101	11/16/16	Gross Alpha/Beta	Gross Alpha	1.15E-15	5.12E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193298	Building 101	11/16/16	Gross Alpha/Beta	Gross Beta	1.81E-14	2.49E-14	4.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193299	Building 101	11/17/16	Gross Alpha/Beta	Gross Alpha	5.55E-15	6.67E-15	1.03E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193299	Building 101	11/17/16	Gross Alpha/Beta	Gross Beta	8.20E-14	2.82E-14	3.98E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193300	Building 101	11/21/16	Gross Alpha/Beta	Gross Alpha	2.69E-15	6.58E-15	1.25E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193300	Building 101	11/21/16	Gross Alpha/Beta	Gross Beta	1.95E-14	2.90E-14	4.81E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193301	Building 101	11/22/16	Gross Alpha/Beta	Gross Alpha	5.70E-15	1.01E-14	1.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193301	Building 101	11/22/16	Gross Alpha/Beta	Gross Beta	3.36E-14	4.15E-14	6.81E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193302	Building 101	11/23/16	Gross Alpha/Beta	Gross Alpha	2.23E-15	5.47E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193302	Building 101	11/23/16	Gross Alpha/Beta	Gross Beta	7.74E-15	2.36E-14	3.99E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193308	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Alpha	6.15E-15	7.27E-15	1.04E-14	µCi/mL			SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD193308	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Alpha	3.88E-15	6.51E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193308	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Beta	2.65E-14	1.33E-14	1.73E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193308	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Beta	2.93E-14	1.37E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193309	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Alpha	4.95E-16	5.43E-15	1.09E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193309	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Beta	2.17E-14	1.32E-14	1.81E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193310	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Alpha	4.10E-15	6.88E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193310	P6WH Loadout	11/28/16	Gross Alpha/Beta	Gross Beta	1.89E-14	1.30E-14	1.83E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193311	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Alpha	1.04E-14	8.37E-15	1.02E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193311	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Beta	2.09E-14	1.24E-14	1.68E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193312	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Alpha	6.15E-15	7.27E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193312	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Beta	3.15E-14	1.39E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193313	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Alpha	2.74E-15	6.10E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193313	P6WH Loadout	11/29/16	Gross Alpha/Beta	Gross Beta	1.93E-14	1.25E-14	1.73E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193314	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Alpha	2.73E-15	6.08E-15	1.04E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193314	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Beta	1.92E-14	1.24E-14	1.72E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193315	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Alpha	4.80E-16	5.26E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193315	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Beta	1.96E-14	1.26E-14	1.75E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193316	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Alpha	3.95E-15	6.63E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193316	P6WH Loadout	11/30/16	Gross Alpha/Beta	Gross Beta	3.42E-14	1.44E-14	1.76E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193317	Building 101	11/28/16	Gross Alpha/Beta	Gross Alpha	7.15E-15	1.59E-14	2.72E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193317	Building 101	11/28/16	Gross Alpha/Beta	Gross Beta	4.84E-14	3.23E-14	4.50E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193321	Destrehan Street	11/29/16	Gross Alpha/Beta	Gross Alpha	1.62E-15	5.71E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193321	Destrehan Street	11/29/16	Gross Alpha/Beta	Gross Beta	1.15E-14	1.16E-14	1.74E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193322	Destrehan Street	11/30/16	Gross Alpha/Beta	Gross Alpha	2.67E-15	9.40E-15	1.73E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193322	Destrehan Street	11/30/16	Gross Alpha/Beta	Gross Beta	3.08E-14	2.05E-14	2.87E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193323	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Alpha	5.65E-16	4.56E-15	9.18E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193323	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Alpha	9.61E-15	7.88E-15	9.18E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193323	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Beta	2.08E-14	1.32E-14	1.76E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD193323	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Beta	2.30E-14	1.35E-14	1.76E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193324	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Alpha	1.78E-15	5.36E-15	9.65E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193324	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Beta	1.06E-14	1.26E-14	1.85E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193325	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Alpha	4.12E-15	6.27E-15	9.56E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193325	P6WH Loadout	12/01/16	Gross Alpha/Beta	Gross Beta	3.13E-14	1.49E-14	1.83E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193326	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Alpha	4.98E-15	6.29E-15	8.98E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193326	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Beta	2.94E-14	1.40E-14	1.72E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193327	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Alpha	2.88E-15	5.68E-15	9.35E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193327	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Beta	2.92E-14	1.44E-14	1.79E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193328	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Alpha	7.45E-15	7.29E-15	9.30E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193328	P6WH Loadout	12/05/16	Gross Alpha/Beta	Gross Beta	3.85E-14	1.53E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD193329	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Alpha	7.16E-15	7.01E-15	8.94E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD193329	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Beta	2.03E-14	1.29E-14	1.71E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193330	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Alpha	5.20E-15	6.58E-15	9.39E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193330	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Beta	2.64E-14	1.41E-14	1.80E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD193331	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Alpha	4.05E-15	6.16E-15	9.39E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD193331	P6WH Loadout	12/06/16	Gross Alpha/Beta	Gross Beta	2.79E-14	1.43E-14	1.80E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194121	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Alpha	3.70E-14	2.51E-14	2.62E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194121	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Beta	1.08E-13	4.31E-14	5.00E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD194122	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Alpha	2.15E-14	2.10E-14	2.68E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194122	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Beta	1.13E-13	4.44E-14	5.13E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194123	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Alpha	-1.65E-15	1.16E-14	2.68E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194123	P6WH Loadout	12/08/16	Gross Alpha/Beta	Gross Beta	1.05E-13	4.35E-14	5.13E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194124	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Alpha	1.30E-14	8.82E-15	9.18E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194124	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Beta	7.29E-14	1.86E-14	1.76E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194125	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Alpha	6.48E-15	7.11E-15	9.56E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194125	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Beta	6.33E-14	1.82E-14	1.83E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194126	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Alpha	1.74E-14	9.86E-15	9.10E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194126	P6WH Loadout	12/12/16	Gross Alpha/Beta	Gross Beta	7.01E-14	1.83E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194131	Destrehan Street	12/01/16	Gross Alpha/Beta	Gross Alpha	-5.02E-15	9.65E-15	2.72E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194131	Destrehan Street	12/01/16	Gross Alpha/Beta	Gross Beta	2.47E-15	3.19E-14	5.20E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194132	Destrehan Street	12/05/16	Gross Alpha/Beta	Gross Alpha	7.45E-15	7.29E-15	9.30E-15	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194132	Destrehan Street	12/05/16	Gross Alpha/Beta	Gross Beta	3.99E-14	1.55E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194133	Destrehan Street	12/06/16	Gross Alpha/Beta	Gross Alpha	1.68E-15	5.05E-15	9.10E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194133	Destrehan Street	12/06/16	Gross Alpha/Beta	Gross Beta	2.42E-14	1.35E-14	1.74E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194134	Destrehan Street	12/07/16	Gross Alpha/Beta	Gross Alpha	5.00E-15	6.32E-15	9.02E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194134	Destrehan Street	12/07/16	Gross Alpha/Beta	Gross Beta	2.47E-14	1.35E-14	1.72E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194135	Destrehan Street	12/08/16	Gross Alpha/Beta	Gross Alpha	1.65E-15	1.33E-14	2.68E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194135	Destrehan Street	12/08/16	Gross Alpha/Beta	Gross Beta	3.37E-14	3.54E-14	5.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194136	Destrehan Street	12/12/16	Gross Alpha/Beta	Gross Alpha	1.26E-14	8.52E-15	8.87E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194136	Destrehan Street	12/12/16	Gross Alpha/Beta	Gross Beta	5.94E-14	1.69E-14	1.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194137	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Alpha	1.06E-14	9.02E-15	1.12E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194137	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Alpha	1.17E-14	9.33E-15	1.12E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194137	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Beta	9.47E-14	2.15E-14	1.78E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194137	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Beta	1.06E-13	2.25E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194138	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.74E-15	1.09E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD194138	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Beta	7.52E-14	1.93E-14	1.73E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194139	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Alpha	5.86E-15	7.68E-15	1.12E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194139	P6WH Loadout	12/13/16	Gross Alpha/Beta	Gross Beta	9.54E-14	2.16E-14	1.78E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194140	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Alpha	5.73E-15	7.51E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194140	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Beta	2.53E-14	1.45E-14	1.74E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194141	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Alpha	1.11E-14	8.80E-15	1.06E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194141	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Beta	3.97E-14	1.56E-14	1.68E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194142	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Alpha	5.73E-15	7.51E-15	1.10E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194142	P6WH Loadout	12/14/16	Gross Alpha/Beta	Gross Beta	3.61E-14	1.56E-14	1.74E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194143	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Alpha	0	5.68E-15	1.14E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194143	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Beta	3.07E-14	1.55E-14	1.81E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194144	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Alpha	9.08E-15	8.43E-15	1.09E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD194144	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Beta	2.93E-14	1.48E-14	1.73E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194145	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Alpha	7.10E-15	8.11E-15	1.13E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194145	P6WH Loadout	12/15/16	Gross Alpha/Beta	Gross Beta	3.43E-14	1.58E-14	1.80E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194146	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Alpha	-3.63E-15	7.00E-15	1.74E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194146	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Beta	1.37E-14	1.99E-14	2.77E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194147	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Alpha	0	8.44E-15	1.69E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194147	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Beta	1.44E-14	1.95E-14	2.69E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194148	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Alpha	3.83E-15	1.06E-14	1.83E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD194148	P6WH Loadout	12/19/16	Gross Alpha/Beta	Gross Beta	2.77E-14	2.25E-14	2.91E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD194149	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Alpha	2.09E-15	5.79E-15	9.96E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194149	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Beta	3.75E-14	1.47E-14	1.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194150	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Alpha	8.62E-15	8.00E-15	1.03E-14	µCi/mL	U	T04, T05	SLDS (General Area)-Perimeter Air
SLD194150	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Beta	2.58E-14	1.38E-14	1.64E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194151	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Alpha	4.17E-15	6.50E-15	9.96E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194151	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Alpha	1.25E-14	8.82E-15	9.96E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194151	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Beta	4.60E-14	1.55E-14	1.59E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194151	P6WH Loadout	12/20/16	Gross Alpha/Beta	Gross Beta	4.47E-14	1.54E-14	1.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194152	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Alpha	8.51E-15	7.90E-15	1.02E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194152	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Beta	5.44E-14	1.66E-14	1.62E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194153	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Alpha	5.21E-15	6.83E-15	9.96E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194153	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Beta	5.19E-14	1.61E-14	1.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194154	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Alpha	6.26E-15	7.15E-15	9.96E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194154	P6WH Loadout	12/21/16	Gross Alpha/Beta	Gross Beta	5.13E-14	1.61E-14	1.59E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194155	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Alpha	3.36E-15	6.62E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194155	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Beta	3.11E-14	1.48E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194156	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Alpha	6.72E-15	7.68E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194156	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Beta	2.26E-14	1.39E-14	1.71E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194157	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Alpha	1.01E-14	8.62E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194157	P6WH Loadout	12/22/16	Gross Alpha/Beta	Gross Beta	4.10E-14	1.58E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194158	P6WH Loadout	12/27/16	Gross Alpha/Beta	Gross Alpha	1.12E-15	5.80E-15	1.07E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194158	P6WH Loadout	12/27/16	Gross Alpha/Beta	Gross Beta	5.51E-14	1.73E-14	1.71E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194159	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Alpha	3.33E-15	6.56E-15	1.06E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194159	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Beta	8.76E-14	2.02E-14	1.69E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194160	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Alpha	4.39E-15	6.84E-15	1.05E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194160	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Beta	5.81E-14	1.73E-14	1.67E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194161	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Alpha	8.93E-15	8.28E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194161	P6WH Loadout	12/28/16	Gross Alpha/Beta	Gross Beta	1.06E-13	2.19E-14	1.70E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194162	DESTREHAN ST.	12/13/16	Gross Alpha/Beta	Gross Alpha	2.03E-14	1.10E-14	9.51E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194162	DESTREHAN ST.	12/13/16	Gross Alpha/Beta	Gross Alpha	2.03E-14	1.10E-14	9.51E-15	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194162	DESTREHAN ST.	12/13/16	Gross Alpha/Beta	Gross Beta	8.34E-14	2.45E-14	2.86E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194162	DESTREHAN ST.	12/13/16	Gross Alpha/Beta	Gross Beta	1.02E-13	2.60E-14	2.86E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194163	DESTREHAN ST.	12/14/16	Gross Alpha/Beta	Gross Alpha	4.57E-15	6.48E-15	9.55E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194163	DESTREHAN ST.	12/14/16	Gross Alpha/Beta	Gross Beta	3.06E-14	2.03E-14	2.88E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194164	DESTREHAN ST.	12/15/16	Gross Alpha/Beta	Gross Alpha	1.29E-14	9.57E-15	1.03E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194164	DESTREHAN ST.	12/15/16	Gross Alpha/Beta	Gross Beta	2.12E-14	2.09E-14	3.11E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194165	DESTREHAN ST.	12/19/16	Gross Alpha/Beta	Gross Alpha	9.50E-16	5.11E-15	9.93E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194165	DESTREHAN ST.	12/19/16	Gross Alpha/Beta	Gross Beta	2.20E-14	2.03E-14	2.99E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194166	DESTREHAN ST.	12/20/16	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.03E-15	8.76E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194166	DESTREHAN ST.	12/20/16	Gross Alpha/Beta	Gross Beta	3.74E-14	1.94E-14	2.64E-14	µCi/mL	J	T04, T20	SLDS (General Area)-Perimeter Air
SLD194167	DESTREHAN ST.	12/21/16	Gross Alpha/Beta	Gross Alpha	-2.79E-16	3.91E-15	8.76E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194167	DESTREHAN ST.	12/21/16	Gross Alpha/Beta	Gross Beta	4.95E-14	2.04E-14	2.64E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194168	DESTREHAN ST.	12/22/16	Gross Alpha/Beta	Gross Alpha	2.01E-15	5.16E-15	9.00E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194168	DESTREHAN ST.	12/22/16	Gross Alpha/Beta	Gross Beta	2.22E-14	1.85E-14	2.71E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194169	DESTREHAN ST.	12/27/16	Gross Alpha/Beta	Gross Alpha	-2.73E-16	3.83E-15	8.57E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194169	DESTREHAN ST.	12/27/16	Gross Alpha/Beta	Gross Beta	4.50E-14	1.97E-14	2.58E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD194170	DESTREHAN ST.	12/28/16	Gross Alpha/Beta	Gross Alpha	4.92E-15	5.89E-15	8.12E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194170	DESTREHAN ST.	12/28/16	Gross Alpha/Beta	Gross Beta	5.46E-14	1.96E-14	2.44E-14	µCi/mL	=		SLDS (General Area)-Perimeter Air
SLD194173	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Alpha	8.30E-16	4.47E-15	8.68E-15	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194173	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Alpha	4.15E-15	5.89E-15	8.68E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194173	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Beta	4.33E-15	1.64E-14	2.61E-14	µCi/mL			SLDS (General Area)-Perimeter Air
SLD194173	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Beta	1.43E-14	1.73E-14	2.61E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194174	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Alpha	2.01E-15	5.16E-15	9.00E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194174	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Beta	2.51E-14	1.88E-14	2.71E-14	µCi/mL	UJ	T04, T05	SLDS (General Area)-Perimeter Air
SLD194175	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.05E-15	8.80E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194175	P6WH Loadout	12/29/16	Gross Alpha/Beta	Gross Beta	1.09E-14	1.72E-14	2.65E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194176	DESTREHAN ST.	12/29/16	Gross Alpha/Beta	Gross Alpha	8.68E-16	4.67E-15	9.08E-15	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air
SLD194176	DESTREHAN ST.	12/29/16	Gross Alpha/Beta	Gross Beta	1.42E-14	1.80E-14	2.73E-14	µCi/mL	UJ	T06	SLDS (General Area)-Perimeter Air

VQs:

= Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

F01 Blanks: Sample data were qualified as a result of the method blank.

J01 Laboratory Duplicate: Duplicate RPD/normalized absolute difference (NAD) was outside the control limit.

T02 Radionuclide Quantitation: Analytical uncertainties were not met and/or not reported.

T04 Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T07 Radionuclide Quantitation: Negative analytical result where the absolute value exceeds 2 times the associated MDA.

T20 Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainty 50 to 100 percent of the result.

Table B-4. SLDS Radon-222 Results for CY 2016

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS184872	BA-1	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	HISS Air (Alpha Tracks)-Environmental Monitoring
HIS194325	BA-1	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	HISS/Futura (Alpha Tracks)-Environmental Monitoring
SLD184917	DA-1	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194355	DA-1	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD184917-1	DA-1dup	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194355-1	DA-1dup	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD184918	DA-2	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194356	DA-2	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD184919	DA-3	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194357	DA-3	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD184920	DA-6	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194358	DA-6	01/04/17	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD184921	DI-1	07/07/16	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	
SLD194359	DI-1	01/04/17	Radiological	Rn-222	1.5	0	0.2	pCi/L	J	Y01	
SLD184922	DI-2	07/07/16	Radiological	Rn-222	0.7	0	0.2	pCi/L	J	Y01	
SLD194360	DI-2	01/04/17	Radiological	Rn-222	1.1	0	0.2	pCi/L	J	Y01	

Futura - Futura Coatings Company

HISS - Hazelwood Interim Storage Site

VQs:

J Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

UJ Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Code:

Y01 FUSRAP Only: Not enough supporting documentation to perform validation.

APPENDIX C

STORM-WATER, WASTE-WATER, AND EXCAVATION-WATER DATA

(On the CD-ROM on the Back Cover of this Report)

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Table C-1. First Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2016

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-BK544[f]	01/04/16 - 01/28/16 (Plant 6WH)	144	pCi/L	1,327,317	7.2E-04	3,000	pCi/L	0.06
Gross Beta			62	pCi/L		3.1E-04	N/A		
Th-228			<0.7	pCi/L		1.7E-06	2,000	pCi/L	
Th-230			<0.6	pCi/L		1.5E-06	1,000	pCi/L	
Th-232			<0.5	pCi/L		1.2E-06	300	pCi/L	
Uranium (KPA)			168	pCi/L		8.5E-04	3,000	pCi/L	
Ra-226[c]			<2.6	pCi/L		6.5E-06	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		1.7E-06	30	pCi/L	
TSS			10	mg/L			-		
Gross Alpha (raw water)	SLDS-BK545	02/04/16 - 02/22/16 (Plant 6WH)	292	pCi/L	80,220	8.9E-05	3,000	pCi/L	0.11
Gross Beta			155	pCi/L		4.7E-05	N/A		
Th-228			<0.5	pCi/L		8.0E-08	2,000	pCi/L	
Th-230			1	pCi/L		1.6E-07	1,000	pCi/L	
Th-232			<0.3	pCi/L		5.0E-08	300	pCi/L	
Uranium (KPA)			316	pCi/L		9.6E-05	3,000	pCi/L	
Ra-226[c]			<1.5	pCi/L		2.2E-07	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		8.0E-08	30	pCi/L	
TSS			62	mg/L			-		
Gross Alpha (raw water)	SLDS-BK546	03/07/16 - 03/30/16 (Plant 6WH)	135	pCi/L	67,610	3.4E-05	3,000	pCi/L	0.05
Gross Beta			64	pCi/L		1.6E-05	N/A		
Th-228			<0.5	pCi/L		6.3E-08	2,000	pCi/L	
Th-230			<0.6	pCi/L		7.5E-08	1,000	pCi/L	
Th-232			<0.5	pCi/L		6.2E-08	300	pCi/L	
Uranium (KPA)			146	pCi/L		3.7E-05	3,000	pCi/L	
Ra-226[c]			<1.3	pCi/L		1.6E-07	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		6.3E-08	30	pCi/L	
TSS			23	mg/L			-		

Total Activity Discharged in First Quarter of CY 2016 (Ci)

Th-228	1.8E-06
Th-230	1.7E-06
Th-232	1.3E-06
Uranium (KPA)	9.8E-04
Ra-226	6.9E-06
Ra-228[d]	1.8E-06

Total Activity Discharged through 03/31/16 (Ci)

Th-228	1.8E-06
Th-230	1.7E-06
Th-232	1.3E-06
Uranium (KPA)	9.8E-04
Ra-226	6.9E-06
Ra-228[d]	1.8E-06

Total Volume Discharged in First Quarter of CY 2016 (gallons)

Gallons	1,475,147

Total Volume Discharged through 03/31/16 (gallons)

Gallons	1,475,147

[a] Non-detect sample results are converted to half the DL.

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

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

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

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

[f] On January 4, 2016, the USACE received MSD approval to temporarily increase the daily discharge to 250,000 gallons per day using a 150-micron filter during the large rain event.

Notes:

- No data/No limit

N/A - Not applicable

SOR - sum of ratios

TSS - total suspended solid(s)

Table C-1. Second Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2016

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-BK547	04/05/16 - 04/27/16 (Plant 6WH)	102	pCi/L	165,360	6.4E-05	3,000	pCi/L	0.05
Gross Beta			52	pCi/L		3.3E-05	N/A		
Th-228			0.9	pCi/L		5.3E-07	2,000	pCi/L	
Th-230			2	pCi/L		9.5E-07	1,000	pCi/L	
Th-232			0.8	pCi/L		5.0E-07	300	pCi/L	
Uranium (KPA)			131	pCi/L		8.2E-05	3,000	pCi/L	
Ra-226[c]			2	pCi/L		1.3E-06	10	pCi/L	
Ra-228[d,e]			0.9	pCi/L		5.3E-07	30	pCi/L	
TSS			526	mg/L			-		
Gross Alpha (raw water)	SLDS-BK548	05/02/16 - 05/31/16 (Plant 6WH)	72	pCi/L	358,210	9.8E-05	3,000	pCi/L	0.03
Gross Beta			32	pCi/L		4.4E-05	N/A		
Th-228			<0.6	pCi/L		4.1E-07	2,000	pCi/L	
Th-230			1	pCi/L		1.1E-06	1,000	pCi/L	
Th-232			<0.5	pCi/L		3.7E-07	300	pCi/L	
Uranium (KPA)			88	pCi/L		1.2E-04	3,000	pCi/L	
Ra-226[c]			<1.7	pCi/L		1.1E-06	10	pCi/L	
Ra-228[d,e]			<0.6	pCi/L		4.1E-07	30	pCi/L	
TSS			142	mg/L			-		
Gross Alpha (raw water)	SLDS-BK549	06/06/16 - 06/30/16 (Plant 6WH)	37	pCi/L	248,475	3.5E-05	3,000	pCi/L	0.02
Gross Beta			<20.8	pCi/L		9.8E-06	N/A		
Th-228			<0.7	pCi/L		3.4E-07	2,000	pCi/L	
Th-230			1	pCi/L		7.4E-07	1,000	pCi/L	
Th-232			<0.4	pCi/L		2.0E-07	300	pCi/L	
Uranium (KPA)			37	pCi/L		3.5E-05	3,000	pCi/L	
Ra-226[c]			<1.4	pCi/L		6.8E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		3.4E-07	30	pCi/L	
TSS			120	mg/L			-		

Total Activity Discharged in Second Quarter of CY 2016 (Ci)

Th-228	1.3E-06
Th-230	2.8E-06
Th-232	1.1E-06
Uranium (KPA)	2.4E-04
Ra-226	3.1E-06
Ra-228[d]	1.3E-06

Total Activity Discharged through 06/30/16 (Ci)

Th-228	3.1E-06
Th-230	4.5E-06
Th-232	2.3E-06
Uranium (KPA)	1.2E-03
Ra-226	1.0E-05
Ra-228[d]	3.1E-06

Total Volume Discharged in Second Quarter of CY 2016 (gallons)

Gallons	772,045

Total Volume Discharged through 06/30/16 (gallons)

Gallons	2,247,192

[a] Non-detect sample results are converted to half the DL.

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

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

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

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

Notes:

- No data/No limit

N/A - Not applicable

SOR - sum of ratios

TSS - total suspended solid(s)

Table C-1. Third Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2016

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-BK550	07/03/16 - 07/28/16 (Plant 6WH)	24	pCi/L	320,505	2.9E-05	3,000	pCi/L	0.01
Gross Beta			19	pCi/L		2.3E-05	N/A		
Th-228			<0.8	pCi/L		4.7E-07	2,000	pCi/L	
Th-230			1	pCi/L		7.8E-07	1,000	pCi/L	
Th-232			<0.5	pCi/L		3.0E-07	300	pCi/L	
Uranium (KPA)			33	pCi/L		4.0E-05	3,000	pCi/L	
Ra-226[c]			<1.7	pCi/L		1.0E-06	10	pCi/L	
Ra-228[d,e]			<0.8	pCi/L		4.7E-07	30	pCi/L	
TSS			102	mg/L			-		
Gross Alpha (raw water)	SLDS-BK551[f]	08/01/16 - 08/31/16 (Plant 6WH)	<25.8	pCi/L	789,555	3.9E-05	3,000	pCi/L	0.01
Gross Beta			<30.9	pCi/L		4.6E-05	N/A		
Th-228			<0.6	pCi/L		9.1E-07	2,000	pCi/L	
Th-230			1	pCi/L		3.6E-06	1,000	pCi/L	
Th-232			<0.4	pCi/L		6.3E-07	300	pCi/L	
Uranium (KPA)			23	pCi/L		6.8E-05	3,000	pCi/L	
Ra-226[c]			<1.4	pCi/L		2.1E-06	10	pCi/L	
Ra-228[d,e]			<0.6	pCi/L		9.1E-07	30	pCi/L	
TSS			160	mg/L			-		
Gross Alpha (raw water)	SLDS-BK552[g]	09/07/16 - 09/26/16 (Plant 6WH)	24	pCi/L	842,180	7.6E-05	3,000	pCi/L	0.01
Gross Beta			<20	pCi/L		3.2E-05	N/A		
Th-228			<0.8	pCi/L		1.2E-06	2,000	pCi/L	
Th-230			<0.7	pCi/L		1.0E-06	1,000	pCi/L	
Th-232			<0.6	pCi/L		8.9E-07	300	pCi/L	
Uranium (KPA)			26	pCi/L		8.3E-05	3,000	pCi/L	
Ra-226[c]			<1.7	pCi/L		2.7E-06	10	pCi/L	
Ra-228[d,e]			<0.8	pCi/L		1.2E-06	30	pCi/L	
TSS			125	mg/L			-		

Total Activity Discharged in Third Quarter of CY 2016 (Ci)	
Th-228	2.6E-06
Th-230	5.4E-06
Th-232	1.8E-06
Uranium (KPA)	1.9E-04
Ra-226	5.9E-06
Ra-228[d]	2.6E-06

Total Activity Discharged through 09/30/16 (Ci)	
Th-228	5.7E-06
Th-230	9.9E-06
Th-232	4.2E-06
Uranium (KPA)	1.4E-03
Ra-226	1.6E-05
Ra-228[d]	5.7E-06

Total Volume Discharged in Third Quarter of CY 2016 (gallons)	
Gallons	1,952,240

Total Volume Discharged through 09/30/16 (gallons)	
Gallons	4,199,432

[a] Non-detect sample results are converted to half the DL.

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

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

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

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

[f] On August 12, 2016, the USACE received MSD approval to temporarily increase the daily discharge to 250,000 gallons per day during the large rain event.

[g] On September 12, 2016, the USACE received MSD approval to temporarily increase the daily discharge to 250,000 gallons per day due to the large rainfall over the weekend.

Notes:

- No data/No limit

N/A - Not applicable

SOR - sum of ratios

TSS - total suspended solid(s)

Table C-1. Fourth Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2016

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-BK553	10/06/16 - 10/31/16 (Plant 6WH)	34	pCi/L	177,120	2.3E-05	3,000	pCi/L	0.02
Gross Beta			<20.6	pCi/L		6.9E-06	N/A		
Th-228			<0.6	pCi/L		2.0E-07	2,000	pCi/L	
Th-230			2	pCi/L		1.2E-06	1,000	pCi/L	
Th-232			<0.4	pCi/L		1.3E-07	300	pCi/L	
Uranium (KPA)			38	pCi/L		2.6E-05	3,000	pCi/L	
Ra-226[c]			<2.1	pCi/L		7.0E-07	10	pCi/L	
Ra-228[d,e]			<0.6	pCi/L		2.0E-07	30	pCi/L	
TSS			160	mg/L			-		
Gross Alpha (raw water)	SLDS-BK554[f]	11/03/16 - 11/28/16 (Plant 6WH)	25	pCi/L	313,930	2.9E-05	3,000	pCi/L	0.01
Gross Beta			24	pCi/L		2.9E-05	N/A		
Th-228			0.7	pCi/L		8.3E-07	2,000	pCi/L	
Th-230			2	pCi/L		2.0E-06	1,000	pCi/L	
Th-232			<0.5	pCi/L		3.0E-07	300	pCi/L	
Uranium (KPA)			26	pCi/L		3.1E-05	3,000	pCi/L	
Ra-226[c]			<1.5	pCi/L		9.2E-07	10	pCi/L	
Ra-228[d,e]			0.7	pCi/L		8.3E-07	30	pCi/L	
TSS			329	mg/L			-		
Gross Alpha (raw water)	SLDS-BK555	12/12/16 - 12/29/16 (Plant 6WH)	38	pCi/L	51,618	7.3E-06	3,000	pCi/L	0.02
Gross Beta			41	pCi/L		8.1E-06	N/A		
Th-228			<0.6	pCi/L		6.4E-08	2,000	pCi/L	
Th-230			1	pCi/L		1.2E-07	1,000	pCi/L	
Th-232			<0.4	pCi/L		3.8E-08	300	pCi/L	
Uranium (KPA)			50	pCi/L		9.8E-06	3,000	pCi/L	
Ra-226[c]			<1.6	pCi/L		1.6E-07	10	pCi/L	
Ra-228[d,e]			<0.6	pCi/L		6.4E-08	30	pCi/L	
TSS			410	mg/L			-		

Total Activity Discharged in Fourth Quarter of CY 2016 (Ci)		Total Activity Discharged through 12/31/16 (Ci)	
Th-228	1.1E-06	**Th-228**	6.8E-06
Th-230	3.3E-06	**Th-230**	1.3E-05
Th-232	4.6E-07	**Th-232**	4.6E-06
Uranium (KPA)	6.6E-05	**Uranium (KPA)**	1.5E-03
Ra-226	1.8E-06	**Ra-226**	1.8E-05
Ra-228[d]	1.1E-06	**Ra-228[d]**	6.8E-06

Total Volume Discharged in Fourth Quarter of CY 2016 (gallons)		Total Volume Discharged through 12/31/16 (gallons)	
Gallons	542,668	**Gallons**	4,742,100

[a] Non-detect sample results are converted to half the DL.

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

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

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

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

[f] On November 3, 2016, the USACE received MSD approval to temporarily increase the daily discharge to 150,000 gallons per day.

Notes:

- No data/No limit

N/A - Not applicable

SOR - sum of ratios

TSS - total suspended solid(s)

APPENDIX D

GROUND-WATER FIELD PARAMETER DATA FOR CALENDAR YEAR 2016 AND ANALYTICAL DATA RESULTS FOR CALENDAR YEAR 2016

(On the CD-ROM on the Back Cover of this Report)

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Table D-1. Ground-Water Monitoring First Quarter 2016 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 02/25/16
B16W06D	---	---	---	---	---	---	---	---	---	---	27.60
B16W06S	---	---	---	---	---	---	---	---	---	---	29.30
B16W07D	---	---	---	---	---	---	---	---	---	---	30.14
B16W08D	---	---	---	---	---	---	---	---	---	---	30.13
B16W08S	---	---	---	---	---	---	---	---	---	---	27.64
B16W09D	---	---	---	---	---	---	---	---	---	---	28.30
B16W12S	---	---	---	---	---	---	---	---	---	---	15.69
DW14	---	---	---	---	---	---	---	---	---	---	21.69
DW15	02/26/16	250	6,000	6.39	0.297	234	6.30	15.90	64	31.11	32.00
DW16	---	---	---	---	---	---	---	---	---	---	27.38
DW17	---	---	---	---	---	---	---	---	---	---	25.72
DW18	---	---	---	---	---	---	---	---	---	---	31.46
DW19	---	---	---	---	---	---	---	---	---	---	*
DW21	02/26/16	50	600	6.53	0.228	0	2.16	14.10	-163	10.04	9.26
DW22R	---	---	---	---	---	---	---	---	---	---	**

Table D-1. Ground-Water Monitoring Second Quarter 2016 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 06/07/16
B16W06D	---	---	---	---	---	---	---	---	---	---	21.37
B16W06S	---	---	---	---	---	---	---	---	---	---	23.00
B16W07D	---	---	---	---	---	---	---	---	---	---	23.57
B16W08D	---	---	---	---	---	---	---	---	---	---	23.83
B16W08S	---	---	---	---	---	---	---	---	---	---	20.02
B16W09D	---	---	---	---	---	---	---	---	---	---	19.39
B16W12S	---	---	---	---	---	---	---	---	---	---	14.75
DW14	---	---	---	---	---	---	---	---	---	---	14.41
DW15	---	---	---	---	---	---	---	---	---	---	24.98
DW16	---	---	---	---	---	---	---	---	---	---	20.45
DW17	---	---	---	---	---	---	---	---	---	---	19.16
DW18	---	---	---	---	---	---	---	---	---	---	25.17
DW19	---	---	---	---	---	---	---	---	---	---	**
DW21	---	---	---	---	---	---	---	---	---	---	9.26
DW22R	---	---	---	---	---	---	---	---	---	---	**

Table D-1. Ground-Water Monitoring Third Quarter 2016 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 08/16/16
B16W06D	---	---	---	---	---	---	---	---	---	---	25.48
B16W06S	---	---	---	---	---	---	---	---	---	---	26.74
B16W07D	---	---	---	---	---	---	---	---	---	---	27.85
B16W08D	---	---	---	---	---	---	---	---	---	---	28.05
B16W08S	---	---	---	---	---	---	---	---	---	---	24.31
B16W09D	---	---	---	---	---	---	---	---	---	---	23.66
B16W12S	---	---	---	---	---	---	---	---	---	---	9.53
DW14	---	---	---	---	---	---	---	---	---	---	18.97
DW15	---	---	---	---	---	---	---	---	---	---	29.41
DW16	08/16/16	300	4,500	6.38	0.149	0	1.23	20	-100	24.87	24.87
DW17	---	---	---	---	---	---	---	---	---	---	23.51
DW18	---	---	---	---	---	---	---	---	---	---	28.23
DW19	---	---	---	---	---	---	---	---	---	---	*
DW21	08/16/16	300	4,500	6.54	0.233	0	1.2	21.2	-185	8.8	8.51
DW22R	---	---	---	---	---	---	---	---	---	---	**

Table D-1. Ground-Water Monitoring Fourth Quarter 2016 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 11/09/16
B16W06D	---	---	---	---	---	---	---	---	---	---	28.05
B16W06S	11/10/16	100	1,500	6.62	0.151	0	1.26	17.6	-170	29.61	28.65
B16W07D	---	---	---	---	---	---	---	---	---	---	30.24
B16W08D	11/09/16	280	4,200	6.29	0.193	817	1.4	17.1	-156	30.53	30.53
B16W08S	---	---	---	---	---	---	---	---	---	---	25.6
B16W09D	11/10/16	300	3,600	6.51	0.327	815	1.2	19.9	-183	26.32	25.9
B16W12S	---	---	---	---	---	---	---	---	---	---	15.05
DW14	---	---	---	---	---	---	---	---	---	---	20.63
DW15	11/09/16	245	2,000	6.48	0.269	796	6.56	19.6	148	31.52	31.52
DW16	11/10/16	300	3,600	6.51	0.151	0	1.34	18.5	-102	27.6	27.13
DW17	---	---	---	---	---	---	---	---	---	---	25.88
DW18	11/10/16	300	3,600	6.53	0.173	963	1.6	17.7	-158	32.34	31.76
DW19	---	---	---	---	---	---	---	---	---	---	*
DW21	---	---	---	---	---	---	---	---	---	---	8.89
DW22R	---	---	---	---	---	---	---	---	---	---	**

No ground-water samples were collected at the SLDS during the second quarter of 2016.

* Measurement could not be taken at DW19. It was damaged during remediation activies at Plant 6 and was decommissioned on August 3, 2016.

** Measurements were not taken at DW22. It was damaged in CY2014 and was decommissioned on May 4, 2016.

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

BTOC - below top of casing

DO - dissolved oxygen

NTU - nephelometric turbidity unit

ORP - oxidation reduction potential

Table D-2. CY 2016 Ground-Water Sampling Data for the SLDS

Site: SLDS											
Sample Name	**Station Name**	**Sample Collect Date**	**Analytical Method**	**Analyte**	**Analytical Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SLD191277	B16W06S	06/08/16	SW846 6020	Arsenic	230		1.2	µg/L	=		No
SLD191277	B16W06S	06/08/16	SW846 6020	Cadmium	0.24		0.1	µg/L	=		No
SLD193771-2	B16W06S	11/10/16	SW846 6010B	Arsenic	170		5	µg/L	=		No
SLD193771	B16W06S	11/10/16	SW846 6020	Arsenic	220		4	µg/L	=		No
SLD193771-1	B16W06S	11/10/16	SW846 6020	Arsenic	200		4	µg/L	=		No
SLD193771-2	B16W06S	11/10/16	SW846 6010B	Cadmium	5		5	µg/L	U		No
SLD193771	B16W06S	11/10/16	SW846 6020	Cadmium	0.21		0.2	µg/L	=		No
SLD193771-1	B16W06S	11/10/16	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD193772	B16W08D	11/09/16	SW846 6020	Arsenic	30		4	µg/L	=		No
SLD193772	B16W08D	11/09/16	SW846 6020	Cadmium	0.64		0.2	µg/L	=		No
SLD193772	B16W08D	11/09/16	ML-006	Ra-226	0.301	0.563	1.11	pCi/L	UJ	T06	No
SLD193772	B16W08D	11/09/16	ML-005	Th-228	0.269	0.313	0.502	pCi/L	UJ	T06	No
SLD193772	B16W08D	11/09/16	ML-005	Th-230	0.12	0.224	0.44	pCi/L	UJ	T06	No
SLD193772	B16W08D	11/09/16	ML-005	Th-232	0	0.133	0.358	pCi/L	UJ	T06	No
SLD193772	B16W08D	11/09/16	ML-015	U-234	1	0.498	0.545	pCi/L	J	F01, T04, T20	No
SLD193772	B16W08D	11/09/16	ML-015	U-235	0.04	0.179	0.48	pCi/L	UJ	T06	No
SLD193772	B16W08D	11/09/16	ML-015	U-238	0.678	0.449	0.387	pCi/L	J	F01, T04, T20	No
SLD193773	B16W09D	11/10/16	SW846 6020	Arsenic	37		4	µg/L	=		No
SLD193773	B16W09D	11/10/16	SW846 6020	Cadmium	0.2		0.2	µg/L	=		No
SLD193773	B16W09D	11/10/16	ML-006	R-226	1.37	1.05	1.45	pCi/L	UJ	T04, T05	No
SLD193773	B16W09D	11/10/16	ML-005	Th-228	0.139	0.26	0.51	pCi/L	UJ	T06	No
SLD193773	B16W09D	11/10/16	ML-005	Th-230	0.555	0.402	0.188	pCi/L	J	F01, T04, T20	No
SLD193773	B16W09D	11/10/16	ML-005	Th-232	-0.0346	0.0695	0.415	pCi/L	UJ	T06	No
SLD193773	B16W09D	11/10/16	ML-015	U-234	0.0681	0.137	0.185	pCi/L	UJ	T06	No
SLD193773	B16W09D	11/10/16	ML-015	U-235	0	0	0.228	pCi/L	U		No
SLD193773	B16W09D	11/10/16	ML-015	U-238	-0.0339	0.0681	0.407	pCi/L	UJ	T06	No
SLD191279	DW14	06/08/16	SW846 6020	Arsenic	130		1.2	µg/L	=		No
SLD191279	DW14	06/08/16	SW846 6020	Cadmium	6.7		0.1	µg/L	=		No
SLD191279	DW14	06/08/16	ML-006	Ra-226	1.54	0.985	1.06	pCi/L	J	T04	No
SLD191279	DW14	06/08/16	ML-005	Th-228	0.725	0.503	0.458	pCi/L	J	T04	No

Table D-2. CY 2016 Ground-Water Sampling Data for the SLDS

Site: SLDS											
Sample Name	**Station Name**	**Sample Collect Date**	**Analytical Method**	**Analyte**	**Analytical Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SLD191279	DW14	06/08/16	ML-005	Th-230	0.459	0.382	0.207	pCi/L	J	T04	No
SLD191279	DW14	06/08/16	ML-005	Th-232	0.153	0.217	0.207	pCi/L	UJ	T06	No
SLD191279	DW14	06/08/16	ML-015	U-234	1.06	0.51	0.338	pCi/L	=		No
SLD191279	DW14	06/08/16	ML-015	U-235	0	0	0.174	pCi/L	U		No
SLD191279	DW14	06/08/16	ML-015	U-238	0.724	0.404	0.14	pCi/L	J	T04	No
SLD186142	DW15	02/26/16	SW846 6020	Arsenic	21.00		5.9	µg/L	=		No
SLD186142	DW15	02/26/16	SW846 6020	Cadmium	17		0.5	µg/L	=		No
SLD191276	DW15	06/08/16	SW846 6020	Arsenic	4.5		1.2	µg/L	=		No
SLD191276	DW15	06/08/16	SW846 6020	Cadmium	8		0.1	µg/L	=		No
SLD193774	DW15	11/09/16	SW846 6020	Arsenic	14		4	µg/L	=		No
SLD193774	DW15	11/09/16	SW846 6020	Cadmium	7.6		0.2	µg/L	=		No
SLD191278	DW16	06/07/16	SW846 6020	Arsenic	190		1.2	µg/L	=		No
SLD191278	DW16	06/07/16	SW846 6020	Cadmium	1.6		0.1	µg/L	=		No
SLD192614	DW16	08/16/16	SW846 6020	Arsenic	81		1.2	µg/L	=		No
SLD192614	DW16	08/16/16	SW846 6020	Cadmium	0.83		0.1	µg/L	=		No
SLD192614	DW16	08/16/16	ML-006	Ra-226	2.33	1.27	1.26	pCi/L	J	T04	No
SLD192614	DW16	08/16/16	ML-005	Th-228	0.168	0.223	0.369	pCi/L	UJ	T06	No
SLD192614	DW16	08/16/16	ML-005	Th-230	0.183	0.185	0.124	pCi/L	UJ	T02	No
SLD192614	DW16	08/16/16	ML-005	Th-232	-0.0305	0.0611	0.297	pCi/L	UJ	T06	No
SLD192614	DW16	08/16/16	ML-015	U-234	1.19	0.635	0.432	pCi/L	J	T04	No
SLD192614	DW16	08/16/16	ML-015	U-235	0	0	0.241	pCi/L	U		No
SLD192614	DW16	08/16/16	ML-015	U-238	0.897	0.574	0.603	pCi/L	J	T04	No
SLD193775	DW16	11/10/16	SW846 6020	Arsenic	87		4	µg/L	=		No
SLD193775	DW16	11/10/16	SW846 6020	Cadmium	0.49		0.2	µg/L	=		No
SLD193776	DW18	11/10/16	SW846 6020	Arsenic	100		4	µg/L	=		No
SLD193776	DW18	11/10/16	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD193776	DW18	11/10/16	ML-006	Ra-226	0.228	0.588	1.28	pCi/L	UJ	T06	No
SLD193776	DW18	11/10/16	ML-005	Th-228	0.355	0.327	0.387	pCi/L	UJ	T04, T05	No
SLD193776	DW18	11/10/16	ML-005	Th-230	0.355	0.327	0.387	pCi/L	UJ	T04, T05	No
SLD193776	DW18	11/10/16	ML-005	Th-232	0	0	0.175	pCi/L	U		No

Table D-2. CY 2016 Ground-Water Sampling Data for the SLDS

Site: SLDS											
Sample Name	**Station Name**	**Sample Collect Date**	**Analytical Method**	**Analyte**	**Analytical Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SLD193776	DW18	11/10/16	ML-015	U-234	0.483	0.41	0.446	pCi/L	J	F01, T04, T20	No
SLD193776	DW18	11/10/16	ML-015	U-235	-0.0458	0.0921	0.55	pCi/L	UJ	T06	No
SLD193776	DW18	11/10/16	ML-015	U-238	0.407	0.377	0.444	pCi/L	UJ	T04, T05	No
SLD186143	DW21	02/26/16	SW846 6020	Arsenic	130		5.9	µg/L	=		No
SLD186143	DW21	02/26/16	SW846 6020	Cadmium	22		0.5	µg/L	=		No
SLD191275	DW21	06/07/16	SW846 6020	Arsenic	81		1.2	µg/L	=		No
SLD191275	DW21	06/07/16	SW846 6020	Cadmium	0.74		0.1	µg/L	=		No
SLD191275	DW21	06/07/16	ML-006	Ra-226	0.544	0.518	0.663	pCi/L	U	T04, T05	No
SLD191275	DW21	06/07/16	ML-005	Th-228	-1.177E-05	0.178	0.535	pCi/L	UJ	T06	No
SLD191275	DW21	06/07/16	ML-005	Th-230	0.327	0.337	0.436	pCi/L	UJ	T06	No
SLD191275	DW21	06/07/16	ML-005	Th-232	0.145	0.207	0.197	pCi/L	UJ	T06	No
SLD191275	DW21	06/07/16	ML-015	U-234	0.326	0.263	0.289	pCi/L	J	T04	No
SLD191275	DW21	06/07/16	ML-015	U-235	0	0	0.149	pCi/L	U		No
SLD191275	DW21	06/07/16	ML-015	U-238	0.133	0.155	0.12	pCi/L	UJ	T02	No
SLD192615	DW21	08/16/16	SW846 6020	Arsenic	97		1.2	µg/L	=		No
SLD192615	DW21	08/16/16	SW846 6020	Cadmium	1.4		0.1	µg/L	=		No

VQs:

= Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

F01 Blanks: Sample data were qualified as a result of the method blank.

T02 Radionuclide Quantitation: Analytical uncertainties were not met and/or not reported.

T04 Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainly 50 to 100 percent of the result.

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APPENDIX E

WELL MAINTENANCE CHECKLISTS AND WELL ABANDONMENT REGISTRATION FORMS FOR THE ANNUAL GROUND-WATER MONITORING WELL INSPECTIONS CONDUCTED AT THE ST. LOUIS DOWNTOWN SITE IN CALENDAR YEAR 2016

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CY 2016 WELL MAINTENANCE CHECKLISTS FOR THE ST. LOUIS DOWNTOWN SITE

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Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 0940

Monitoring Well Station Identification: B16W06D ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 29.00, TD – 81.00 (Estimated TD – 81.9)

Soft bottom

Paint lid

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 0950

Monitoring Well Station Identification: B16W06S ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 29.5, TD – 45.25 (Estimated TD – 42.9; formerly a flush mount well, stick up well retrofit added)

Solid bottom

Lubricate lock

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1020

Monitoring Well Station Identification: B16W07D ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☒	☐	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 31.0, TD – 80.85 (Estimated TD – 78.5; formerly a flush mount well, stick up retrofit added)

Solid bottom

Protective casing needs to be scraped and painted.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 0930

Monitoring Well Station Identification: B16W08D ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 31.3, TD – 72.85 (Estimated TD – 70.8; formerly a flush mount well, stick up retrofit added)

Semi-soft bottom

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 0935

Monitoring Well Station Identification: B16W08S ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 27.2, TD – 40.90 (Estimated TD – 38.20; formerly a flush mount well, stick up retrofit added)

Soft bottom

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1135

Monitoring Well Station Identification: B16W09D ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☐	☒	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 26.7, TD – 55.85 (Estimated TD – 55.5)

Semi-soft bottom

Paint lid and remark well ID or add label

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1115

Monitoring Well Station Identification: B16W12S ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 15.8, TD – 19.90 (Estimated TD – 20.1)

Solid bottom

Paint lid and remark well ID or add label

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1125

Monitoring Well Station Identification: DW14 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☐	☒	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 23.5, TD – 38.0 (Estimated TD – 40.0)

Soft bottom

Paint lid and add label or remark well ID

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1105

Monitoring Well Station Identification: DW15 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 32.5, TD – 63.5 (Estimated TD – 64.5)

Solid bottom

Paint lid

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1040

Monitoring Well Station Identification: DW16 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☐	☒	☐
10.	Does the pad move or is it unstable?	☒	☐	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 28.0, TD – 49.55 (Estimated TD – 50.0)

Mud/Sediment on pump but solid bottom

Pad loose and unstable, replace

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1010

Monitoring Well Station Identification: DW17 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☐	☒	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☒	☐	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☐	☒	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☒	☐	☐
12.	Are there signs of erosion around the well or pad?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☐	☒	☐
20.	Is TOC elevation mark clearly visible?	☐	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

WL – 26.5, TD – 41.45 (Estimated TD – 44.5)

Soft bottom

Retrofit to stick up well and redevelop well before taking samples

Sediment appears to be infiltrating the well

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1030

Monitoring Well Station Identification: DW18 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 32.5, TD – 57.95 (Estimated TD – 55.0; formerly flush mount well, stick up retrofit added)

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): N. Gross Date: 03/11/15 Time: 0925

Monitoring Well Station Identification: DW19 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☐	☒	☐
3.	Is well accessible?	☐	☒	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☐	☒
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☒	☐	☐
8.	Is the riser casing dented or damaged?	☐	☐	☒
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☐	☒	☐
10.	Does the pad move or is it unstable?	☐	☐	☒
11.	Are there gaps between pad and well casing?	☐	☐	☒
12.	Are there signs of erosion around the well or pad?	☐	☐	☒
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☒	☐	☐
16.	Is the well secure (shut properly or locked, if applicable)?	☐	☒	☐
17.	Do the locks work properly?	☐	☐	☒
18.	Are the locks rusted?	☐	☐	☒
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☐	☒	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☒	☐	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

Remedial action is currently occurring around the well and the well has been altered. The well has been cut off approximately 2-3 feet below ground level. A pressure cap is in place. The status of the pump and/or tubing is unknown. This well needs to be decommissioned and then replaced post remedial action for the GRAAA. See associated photos for additional information and context.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 03/09/16 Time: 1050

Monitoring Well Station Identification: DW21 ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☐	☒	☐
8.	Is the riser casing dented or damaged?	☐	☒	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☒	☐	☐
10.	Does the pad move or is it unstable?	☐	☒	☐
11.	Are there gaps between pad and well casing?	☐	☒	☐
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☒	☐	☐
17.	Do the locks work properly?	☒	☐	☐
18.	Are the locks rusted?	☐	☒	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☒	☐	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☐	☒	☐

Comments / Observations regarding this well.

WL – 10.2, TD – 22.20 (Estimated TD – 22.7)

Solid bottom

Pad cracked but functional, no action

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): N. Gross Date: 03/11/16 Time: 0910

Monitoring Well Station Identification: DW22R ☐SLAPS* ☒SLDS ☐HISS

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☒	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well covered/surrounded by vegetation?	☐	☒	☐
5.	Is there standing water or debris inside well casing? If so, remove water.	☐	☒	☐
6.	Is the weep hole open? If not, clear blockage.	☐	☐	☒
7.	Is the protective casing dented, damaged, rusted, or covered in other matter (i.e., bird droppings)?	☒	☐	☐
8.	Is the riser casing dented or damaged?	☒	☐	☐
9.	Is the concrete pad intact (free of cracks, chips, etc.)?	☐	☐	☒
10.	Does the pad move or is it unstable?	☐	☐	☒
11.	Are there gaps between pad and well casing?	☐	☐	☒
12.	Are there signs of erosion around the well or pad?	☐	☒	☐
13.	Is riser cap present?	☐	☒	☐
14.	Do the wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☒	☐
15.	Do the flush mount wells in the Mississippi River and Coldwater Creek floodplain have a properly working pressure cap?	☐	☐	☒
16.	Is the well secure (shut properly or locked, if applicable)?	☐	☒	☐
17.	Do the locks work properly?	☐	☐	☒
18.	Are the locks rusted?	☐	☐	☒
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is TOC elevation mark clearly visible?	☐	☒	☐
21.	Has there been a change in land use that impacts the well? If yes, describe in comment section.	☐	☒	☐
22.	Will the well need any type of attention before the next groundwater surface measurement? If yes, describe in comment section.	☒	☐	☐

Comments / Observations regarding this well.

This well has been damaged due to scrap metal operations and is scheduled to be decommissioned this year. The lock and part of the protective casing are gone. There is one bollard left. The bladder pump and associated cap appear to be intact. Rob Rutherford (PSC Metals; 314-231-6077) stated that they are in the process of cleaning up the area around the well.

Numbers 9. – 11. – Unknown. The pad is under an unknown amount of soil at the base of what is left of the protective casing. See associated photos for additional information and context.

* - SLAPS and SLAPS Vicinity Properties (VPs)

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CY 2016 WELL ABANDONMENT REGISTRATION FORMS FOR THE ST. LOUIS DOWNTOWN SITE

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SL1002-0032

December 6, 2016

Ms. Susan Adams
Alternate Contracting Officer's Representative
U.S. Army Corps of Engineers, St. Louis District
FUSRAP Construction Offices
#2 Angelrodt Street
St. Louis, Missouri 63147

RE: Contract No. W912P9-16-D-0009/Task Order No. 0002

Subject: Monitoring Well Abandonment Registration Record for Monitoring Well DW-19 at Mallinckrodt Plant 6, FUSRAP St. Louis Downtown Site, St. Louis, Missouri

Dear Ms. Adams:

As directed by the U.S. Army Corps of Engineers, St. Louis District, HydroGeoLogic, Inc. has abandoned the Monitoring Well Number DW-19 at Mallinckrodt Plant 6, in accordance with the Missouri Department of Natural Resources (MDNR) requirements.

For your records, the associated MDNR Confirmation Letter with the Well Variance Number Approval form for the abandoned monitoring well listed below are provided in the Attachment to this letter.

Well Identification Number	Well Location/Property	Date of Abandonment	MDNR Information		
			Confirmation Letter Date	Well Certification/Reference Number	Well Variance Number
DW-19	Mallinckrodt (Plant 6)	8/3/2016	10/4/2016	B045314	6086

Should you have any comments or questions regarding this correspondence, please contact Mark Cummings, Missouri Well Drillers Permit Number 004502-M, at 636-248-2102.

Sincerely,

A. Neil DeYong
Project Manager
HydroGeoLogic, Inc.

Please Reply To: A. Neil DeYong
Phone: 314-220-4272
Email Address: ndeyong@hgl.com

Attachment: MDNR Well Abandonment Confirmation Letter and Well Variance Number Approval Form (2 pages)

cc:

Vick L. James - USACE (Email)
Darrell Thompson - HGL (Email)
Mark Cummings - HGL (Email)
Lou Patton - USACE (Email)
HGL Project Records

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

P.O. Box 250, Rolla, MO 65402-0250
(573) 368-2165
FAX(573) 368-2317

file(PCD3)
October 04, 2016

US CORP OF ENGINEERS
2 ANGELRODT STREET
ST LOUIS, MO 63147

Re: 00495616

OFFICIAL DOCUMENT

Congratulations! This confirms that your well abandonment information has been reviewed and registered by the Missouri Department of Natural Resources, Missouri Geological Survey.

This letter may be needed in the future as proof of Registration, verifying that your well was plugged in accordance with the Missouri Well Construction rules.

If you have questions regarding this letter please contact the Wellhead Protection Section at 573-368-2165.

Your Well Registration Number: B045314
Well Number: DW-19
Reference Number: 00495616
Site Name: FUSRAP
Site Address: DESTREHAN STREET
Site City: ST LOUIS

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

P.O. Box 250 111 Fairgrounds Rd. Rolla, MO 65402-0250
(573) 368-2165
FAX(573) 368-2317

VARIANCE: Approved **VARIANCE NUMBER:** 6086

WELL OWNER INFORMATION									
NAME:	US CORPS OF ENGINEERS								
ADDRESS 1:	2 ANGELRODT STREET						**FAX:**		
ADDRESS 2:									
CITY:	ST LOUIS	**STATE:**	MO	**ZIP:** 63147			**TELEPHONE:**		

WELL LOCATION											
COUNTY:	ST LOUIS CITY		**LAT.**	38	39	43.2	**LONG.**	90	11	22.6	
1/4	**1/4**	**1/4**		**SEC.** 0			**TWN.** 0	**N**		**RNG.** 0	

CONTRACTOR INFORMATION					
COMPANY NAME:	CB&I FEDERAL SERVICES			**PERMIT NUMBER:**	004502
CONTRACTOR NAME:	MARK CUMMINGS				
ADDRESS:	110 J S MCDONNELL BLVE			**FAX:**	
CITY:	HAZELWOOD	**STATE:**	MO **ZIP:** 63042	**TELEPHONE:**	314-895-2267

VARIANCE INFORMATION

VARIANCE EXPLANATION

APPROVAL GRANTED TO PLUG MONITORING WELL BY GROUTING IN PLACE. REQUIRED: IF A DNR AND/OR EPA PROJECT MANAGER HAS BEEN ASSIGNED TO THIS PROJECT, HIS OR HER CONCURRENCE WITH WELL CONSTRUCTION PARAMETERS MUST ALSO BE GAINED. GROUT FROM TOTAL DEPTH TO WITHIN 2 FEET OF FINISHED SURFACE WITH SLURRY GROUT MATERIAL EMPLACED VIA A TREMIE. GRAVEL OR SOIL MAY BE PLACED FROM 2 FEET TO SURFACE.

RULE NUMBER MODIFIED: 10 CSR 23-4.080

REASON FOR VARIANCE

CONTRACTOR WILL SEPARATE BOTTOM OF SCREEN FROM SCREEN, FILL WITH GROUT AND ATTEMPT TO PULL RISER AND SCREEN. IF RISER PARTS IN WELL CONTRACTOR MAY PLUG IN PLACE.

DATE: 08/03/2016 **BY:** AIRIN HASELWANDER AH

Cc: **Cc:**

CB&I Federal Services LLC
110 James S. McDonnell Boulevard
Hazelwood, Missouri 63042
Tel: +1 314 895 2100
Fax: +1 314 895 2200
www.CBI.com

500394-CFS-LT-USCE-000091

May 25, 2016

Ms. Susan Adams
Alternate Contracting Officer's Representative
U.S. Army Corps of Engineers, St. Louis District
FUSRAP Construction Office
#1 Angelrodt Street
St. Louis, Missouri 63147

Re: Contract No. W9128F-12-D-0003/Task Order No. DJ01

Subject: Well Abandonment Registration Record for Monitor Well DW-22R at PSC Metals Vicinity Property (DT-8), FUSRAP St. Louis Downtown Site, St. Louis, Missouri

Dear Ms. Adams:

As directed by the U.S. Army Corps of Engineers, St. Louis District, CB&I Federal Services LLC has abandoned the following monitor Well in accordance with the Missouri Department of Natural Resources (MDNR) requirements:

Well Identification Number	Well Location/ Property	Date of Abandonment	Missouri Department of Natural Resources Information		
			Confirmation Letter Date	Well Certification/ Reference Numbers	Well Variance Number(s) (as applicable)
DW-22R	PSC Metals (DT-8)	5/4/2016	5/18/2016	B043790/00517175	NA

For your records, the associated MDNR confirmation letter for the abandoned monitor well listed above is contained in the Attachment to this letter. Should you have any comments or questions regarding this correspondence, please contact Mark Cummings, Missouri Well Drillers Permit Number 004502-M, of my staff at 314.565.9362.

Sincerely,

A. Neil DeYong, PMP
Project Manager
CB&I Federal Services LLC

Please Reply to: A. Neil DeYong
Phone: 314.220.4272
E-Mail Address: neil.deyong@CBIFederalServices.com

Attachment: 1- DW-22R Well Abandonment Letter

cc:

Vick L. James - USACE (Email)
Lou Patton - USACE (Email)
Robin Parks - USACE (Email)
Mark Cummings - CB&I (Email)
Darrell Thompson - CB&I (Email)
CB&I Rapid Contract Project Records

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

P.O. Box 250, Rolla, MO 65402-0250
(573) 368-2165
FAX(573) 368-2317

file(PCD3)
May 18, 2016

US ARMY CORP OF ENGINEERS
2 ANGELRODT STREET
ST LOUIS, MO 63147

Re: 00517175

OFFICIAL DOCUMENT

Congratulations! This confirms that your well abandonment information has been reviewed and registered by the Missouri Department of Natural Resources, Missouri Geological Survey.

This letter may be needed in the future as proof of Registration, verifying that your well was plugged in accordance with the Missouri Well Construction rules.

If you have questions regarding this letter please contact the Wellhead Protection Section at 573-368-2165.

Your Well Registration Number: B043790
Well Number: DW-22R
Reference Number: 00517175
Site Name: FUSRAP/SLDS
Site Address: 3620 HALL STREET
Site City: ST LOUIS

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APPENDIX F

DOSE ASSESSMENT ASSUMPTIONS

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DOSE ASSESSMENT ASSUMPTIONS

DOSE FROM THE ST. LOUIS DOWNTOWN SITE 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 m southeast of the Mallinckrodt fenceline (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 m southeast of the external gamma and radon monitoring location and 160 m from the SLDS excavation areas.

Airborne Radioactive Particulates

An EDE of less than 0.1 mrem per year to the receptor was calculated by using activity fractions to determine a source term, and then combining the dose results for Plant 6 and Plant 6 Loadout. The USEPA CAP88-PC modeling code was used to calculate dose to the receptor at 160 m from the SLDS excavation areas and loadout (Leidos 2017). 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 contained in Appendix A.

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 0.5 mrem per year, 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).

$$H_1 = \frac{(0.5)\,\text{mrem/year}}{1} = 0.5\ \text{mrem/year}$$

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

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

$$H_2 = 0.01\ \text{mrem/year}$$

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 m
- h_1 = distance from the source to the TLDs = 1.6 m
- L = average distance from centerline of the line source (H_1) to the end of the line source = 150 m

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

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

$$H_{MEI} = 3.0E\text{-}03 \text{ mrem/year}$$

Airborne Radon Pathway

Like external gamma calculations, only the radon data from station DA-2 were used to determine dose due to radon and progeny. Appendix B presents the radon results at all stations. Station DA-2 ATDs measured annual exposures above background of 0 pCi/L based on 8,760 hours of continuous exposure. Exposure to the receptor from radon (and progeny) was estimated using a dispersion factor (C_2) and the average ATD monitoring data at the site perimeter between the source and the receptor.

In order to calculate the dispersion factor, the radon concentrations were determined to a receptor located at 1 m and 50 m, southeast of the SLDS by inputting a radon release rate of 1 Ci per year, the St. Louis – Lambert International Airport wind file, and a surface area of 3,180 m^2 into the CAP88-PC model. Effective surface area was determined by summing the time-weighted average annual open surface areas for all SLDS excavation areas and loadout. The CAP88-PC input data and the result of the CAP88-PC run are highlighted and presented in Appendix A. The radon dispersion factor (C_2) for the site was calculated as follows:

$$C_2 = \left[\frac{0.00902 \; pCi/L}{0.0383 \; pCi/L} \right] = 0.24$$

The average of ATD monitoring data (S_1) at the site perimeter (Plant 7/DT-10 fenceline) was calculated as follows:

$$S_1 = \left[\frac{(0) \text{ pCi/L}}{1} \right] = 0 \text{ pCi/L}$$

The actual radon exposure dose to the hypothetical maximally exposed individual was calculated as follows:

$$S_{MEI} = S_1 \times F \times DCF \times T \times C_1 \times C_2$$

$$S_{MEI} = 0 \text{ pCi/L} \times 0.0005 \frac{\text{WL}}{\text{pCi/L}} \times 1{,}250 \frac{\text{mrem}}{\text{WLM}} \times \frac{2{,}000 \textit{hours}}{\textit{year}} \times \frac{1 \text{ month}}{170 \text{ hours}} \times 0.24 = 0 \text{ mrem/year}$$

where:

- S_1 = fenceline average of ATD measurements between source and receptor
- S_{MEI} = radon exposure to the hypothetical maximally exposed individual
- F = equilibrium fraction of 0.05 WL per 100 pCi/L (DOE 1998)
- DCF = dose conversion factor (USEPA 1989) = 1,250 mrem per WLM
- T = exposure time for the hypothetical maximally exposed receptor = 2,000 hours per year
- C_1 = occupancy factor constant = 1 month per 170 hours
- C_2 = dispersion factor
- WL = working level (concentration unit)
- WLM = working level month (exposure unit)

Total Effective Dose Equivalent

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

TEDE = <0.1 mrem/year + <0.1 mrem/year + 0 mrem/year = <0.1 mrem/year

where:

CEDE = committed effective dose equivalent

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